UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): August 2, 2019

MannKind Corporation
(Exact name of registrant as specified in its charter)

Delaware	**000-50865**	**13-3607736**
(State or other jurisdiction of incorporation or organization)	**(Commission File Number)**	**(IRS Employer Identification No.)**

30930 Russell Ranch Road, Suite 300	
Westlake Village, California	**91362**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (818) 661-5000

N/A
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. of Form 8-K):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	**MNKD**	**The Nasdaq Stock Market LLC**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 1.01 Entry into a Material Definitive Agreement.

MidCap Credit Facility

On August 6, 2019 (the "Closing Date"), MannKind Corporation ("MannKind") entered into a Credit and Security Agreement (the "MidCap Credit Facility"), by and among MannKind, MannKind LLC, MannKind's wholly owned subsidiary ("MannKind LLC", and together with MannKind, collectively, the "Company"), the lenders party thereto from time to time and MidCap Financial Trust ("MidCap"), as agent.

The MidCap Credit Facility provides a secured term loan facility in an aggregate principal amount of up to $75.0 million. The Company borrowed the first advance of $40.0 million ("Tranche 1") on August 6, 2019. Under the terms of the MidCap Credit Facility, the second advance of $10.0 million ("Tranche 2") will be available to the Company until April 15, 2020, subject to the Company's satisfaction of certain conditions described in the MidCap Credit Facility, including the Company achieving Afrezza Net Revenue (as defined in the MidCap Credit Facility) of at least $30.0 million on a trailing twelve month basis. Under the terms of the MidCap Credit Facility, the third advance of $25.0 million ("Tranche 3") will be available to the Company until June 30, 2021, subject to the satisfaction of certain milestone conditions associated with Treprostinil Technosphere.

Tranche 1 and, if borrowed, Tranche 2 and Tranche 3, each accrue interest at an annual rate equal to LIBOR plus 6.75%, subject to a LIBOR floor of 2.00%. Interest on each term loan advance is due and payable monthly in arrears. Principal on each term loan advance under Tranche 1 and Tranche 2 is payable in 36 equal monthly installments beginning September 1, 2021, until paid in full on August 1, 2024, and principal on each term loan advance under Tranche 3 is payable beginning on the later of (i) September 1, 2021, and (ii) the first day of the first full calendar month immediately following such term loan advance, in an amount equal to the outstanding term loan advance in respect of Tranche 3 divided by the number of full calendar months remaining before August 1, 2024. The Company has the option to prepay the term loans, in whole or in part, subject to early termination fees in an amount equal to 3.00% of principal prepaid if prepayment occurs on or prior to the first anniversary of the Closing Date, 2.00% of principal prepaid if prepayment occurs after the first anniversary of the Closing Date but on or prior to the second anniversary of the Closing Date, and 1.00% of principal prepaid if prepayment occurs after the second anniversary of the Closing Date and prior to or on the third anniversary of the Closing Date. In connection with execution of the MidCap Credit Facility, the Company paid MidCap a $375,000 origination fee.

Upon termination of the MidCap Credit Facility, the Company is required to pay an exit fee equal to 6.00% of the principal amount of all term loans advanced to the Company under the MidCap Credit Facility.

The Company's obligations under the MidCap Credit Facility are secured by a security interest on substantially all of its assets, including intellectual property. Additionally, the Company's future subsidiaries, if any, may be required to become co-borrowers or guarantors under the credit facility.

The MidCap Credit Facility contains customary affirmative covenants and customary negative covenants limiting the Company's ability and the ability of the Company's subsidiaries to, among other things, dispose of assets, undergo a change in control, merge or consolidate, make acquisitions, incur debt, incur liens, pay dividends, repurchase stock and make investments, in each case subject to certain exceptions. The Company must also comply with a financial covenant relating to trailing twelve month minimum Afrezza Net Revenue requirements (as defined in the MidCap Credit Facility), tested on a monthly basis, and a minimum cash covenant of $15.0 million at all times prior to the funding of Tranche 2, and $20.0 million at all times following the funding of Tranche 2 or Tranche 3.

The MidCap Credit Facility also contains customary events of default relating to, among other things, payment defaults, breaches of covenants, a material adverse change, listing of the Company's common stock, bankruptcy and insolvency, cross defaults with certain material indebtedness and certain material contracts, judgments, and inaccuracies of representations and warranties. Upon an event of default, the agent and the lenders may declare all or a portion of the Company's outstanding obligations to be immediately due and payable and exercise other rights and remedies provided for under the MidCap Credit Facility. During the existence of an event of default, interest on the term loans could be increased by 2.00%.

The Company also agreed to issue warrants to purchase shares of MannKind's common stock (the "MidCap Warrants") upon the drawdown of each term loan advance under the MidCap Credit Facility in an aggregate amount equal to 3.25% of the amount drawn, divided by the exercise price per share for that tranche. The exercise price per share is equal to the volume-weighted average closing price of MannKind's common stock for the ten business days immediately preceding the second business day before the issue date. As a result of Tranche 1, the Company issued warrants to purchase an aggregate of 1,171,614 shares of the Company's common stock, at an exercise price equal to $1.11 per share (the "Tranche 1 Warrants"). The MidCap Warrants are immediately exercisable and expire on the earlier to occur of the seventh anniversary of the respective issue date or, in certain circumstances, the closing of a merger, sale or other consolidation transactions in which the consideration is cash, stock of a publicly traded acquirer, or a combination thereof.

The foregoing descriptions of the MidCap Credit Facility and MidCap Warrants do not purport to be complete and are qualified in their entirety by reference to the MidCap Credit Facility and MidCap Warrants, copies of which are attached as Exhibits 99.1 and 4.1, respectively, to this report.

Exchange of 2021 Convertible Notes for 2024 Convertible Notes and the Indenture for the 2024 Convertible Notes

On August 6, 2019, MannKind entered into a privately-negotiated exchange agreement (the "2021 Note Exchange Agreement") with Bruce & Co., Inc., for itself and on behalf of the beneficial owners of the holders of MannKind's outstanding 5.75% Convertible Senior Subordinated Exchange Notes due 2021 (the "Existing 2021 Notes"), pursuant to which MannKind agreed to, among other things, (i) repay $1,470,147 in cash to such holders ($1,500,000 less the amount of interest accruing under the Existing 2021 Notes between August 6, 2019 and August 15, 2019), (ii) issue 4,017,857 shares of MannKind's common stock to such holders (at a conversion price of $1.12 per share) (the "2021 Exchange Shares"), (iii) issue new 5.75% Convertible Senior Subordinated Exchange Notes due 2024 (the "2024 Convertible Notes") to such holders pursuant to the provisions of an indenture (the "Indenture") in an aggregate principal amount of $5,000,000 and (iv) issue two non-interest bearing promissory notes to such holders, each in the amount of $2,630,750, one of which will mature on June 30, 2020 (the "June 2020 Note") and the other of which will mature on December 31, 2020 (the "December 2020 Note", and together with the June 2020 Note, the "2020 Notes"), in exchange for the cancellation of the $18.7 million in principal amount of the Existing 2021 Notes. The 2020 Notes may be prepaid at any time on or prior to their respective maturity dates at the option of MannKind. In addition, MannKind may elect to pay the 2020 Notes at any time on or prior to their respective maturity dates, if certain conditions are met, in shares of MannKind's common stock at a price per share equal to the last reported sale price on the trading day immediately prior to the payment date. The exchange pursuant to the 2021 Note Exchange Agreement was effected on August 6, 2019.

The 2024 Convertible Notes were issued pursuant to an indenture, dated as of August 6, 2019, between MannKind and U.S. Bank National Association, as trustee. The 2024 Convertible Notes are MannKind's general, unsecured obligations, and are subordinated in right of payment to the indebtedness incurred pursuant to the MidCap Credit Facility. The 2024 Convertible Notes rank equally in right of payment with MannKind's other unsecured senior debt. The 2024 Convertible Notes accrue interest at the rate of 5.75% per year on the principal amount, payable semiannually in arrears on February 15 and August 15 of each year, beginning February 15, 2020, with interest accruing from August 6, 2019. Interest on the 2024 Convertible Notes will be payable in cash or, at the option of MannKind if certain conditions are met, in shares of MannKind's common stock at a price per share equal to the last reported sale price on the trading day immediately prior to the interest payment date. The 2024 Convertible Notes will mature on the earlier of (i) November 4, 2024 or (ii) the 91st day after the payment in full of, and termination and discharge of all obligations (other than contingent indemnity obligations) under the MidCap Credit Facility.

The 2024 Convertible Notes will be convertible, at the option of the holder, at any time on or prior to the close of business on the business day immediately preceding the stated maturity date, into shares of MannKind's common stock at a conversion rate of 333.3333 shares per $1,000 principal amount of 2024 Convertible Notes, which is equal to a conversion price of approximately $3.00 per share. The conversion rate will be subject to adjustment under certain circumstances described in the Indenture.

The Indenture includes customary events of default, including:

(1) the Company fails to pay when due the principal of or premium, if any, on any of the 2024 Convertible Notes at maturity, upon repurchase, acceleration or otherwise;

(2) the Company fails to pay an installment of interest on any of the 2024 Convertible Notes for 30 days after the date when due;

(3) the Company fails to deliver when due all shares of the Company's common stock, together with cash instead of fractional shares, and/or other property, if applicable, deliverable upon conversion of the 2024 Convertible Notes, which failure continues for 10 days;

(4) the Company fails to perform or observe any other term, covenant or agreement contained in the 2024 Convertible Notes or the Indenture for a period of 60 days after written notice of such failure, requiring the Company to remedy the same, shall have been given to the Company;

(5) (i) the Company fails to make any payment by the end of the applicable grace period, if any, after the maturity of any indebtedness for borrowed money in an amount in excess of $25,000,000 or (ii) there is an acceleration of any indebtedness for borrowed money in an amount in excess of $25,000,000 because of a default with respect to such indebtedness without such indebtedness having been discharged or such acceleration having been cured, waived, rescinded or annulled, in the case of either (i) or (ii) above, for a period of 30 days after written notice to the Company;

(6) the Company fails to provide a fundamental change company notice; and

(7) certain events of bankruptcy, insolvency or reorganization of the Company.

If certain bankruptcy and insolvency-related events of default occur, the principal of, and accrued and unpaid interest on, all of the then outstanding 2024 Convertible Notes shall automatically become due and payable. If an event of default other than certain bankruptcy and insolvency-related events of defaults occurs and is continuing, the Trustee or the holders of at least 25% in aggregate principal amount of the then-outstanding 2024 Convertible Notes, by written notice to the Trustee, may declare the 2024 Convertible Notes due and payable at their principal amount plus any accrued and unpaid interest, and thereupon the Trustee may, at its discretion, proceed to protect and enforce the rights of the holders by the appropriate judicial proceedings. Notwithstanding the foregoing, the Indenture provides that, to the extent the Company elects, the sole remedy for an event of default relating to certain failures by the Company to comply with certain reporting covenants in the Indenture will, for the first 180 days after such event of default, consist exclusively of the right to receive additional interest on the 2024 Convertible Notes.

If MannKind undergoes certain fundamental changes, except in certain circumstances, each holder of 2024 Convertible Notes will have the option to require MannKind to repurchase all or any portion of that holder's 2024 Convertible Notes. The fundamental change repurchase price will be 100% of the principal amount of the 2024 Convertible Notes to be repurchased plus accrued and unpaid interest, if any.

MannKind may elect at its option to cause all or any portion of the 2024 Convertible Notes to be mandatorily converted in whole or in part at any time prior to the close of business on the business day immediately preceding the maturity date, if the last reported sale price of its common stock equals or exceeds 120% of the conversion price then in effect for at least 10 trading days in any 20 trading day period, ending within five business days prior to the date of the mandatory conversion notice.

The foregoing descriptions of the 2021 Note Exchange Agreement, 2024 Convertible Notes, Indenture, June 2020 Note and December 2020 Note do not purport to be complete and are qualified in their entirety by reference to the 2021 Note Exchange Agreement, 2024 Convertible Notes, Indenture, June 2020 Note and December 2020 Note, copies of which are attached as Exhibits 99.2, 4.2, 4.3, 4.4 and 4.5, respectively, to this report.

Exchange of Mann Group Note

On August 5, 2019, MannKind entered into a privately-negotiated exchange agreement (the "Mann Group Exchange Agreement") with The Mann Group LLC (the "Mann Group"), pursuant to which MannKind agreed to, among other things, (i) repay $3,000,000 in cash to the Mann Group, (ii) issue 7,142,857 shares of MannKind's common stock to the Mann Group (at a conversion price of $1.12 per share) (the "Mann Group Exchange Shares"), (iii) issue a new convertible promissory note (the "Mann Group Convertible Note") to the Mann Group in an aggregate principal amount of $35,000,000 and (iv) issue a new non-convertible promissory note (the "Mann Group Non-Convertible Note") to the Mann Group in an aggregate principal amount of $35,050,750, in exchange for the cancellation of the $70.1 million in principal amount and accrued interest on the amended and restated promissory note dated March 11, 2018 held by the Mann Group.

The Mann Group Convertible Note and Mann Group Non-Convertible Note will each accrue interest at the rate of 7.00% per year on the principal amount, payable quarterly in arrears on the first day of each calendar quarter beginning October 1, 2019.

The Mann Group Convertible Note will mature on November 3, 2024. The principal and any accrued and unpaid interest under the Mann Group Convertible Note may be converted, at the option of the Mann Group, at any time on or prior to the close of business on the business day immediately preceding the stated maturity date, into shares of MannKind's common stock at a conversion rate of 400 shares per $1,000 of principal and/or accrued and unpaid interest, which is equal to a conversion price of $2.50 per share. The conversion rate will be subject to adjustment under certain circumstances described in the Mann Group Convertible Note. Interest on the Mann Group Convertible Note will be payable in kind by adding the amount thereof to the principal amount; provided that with respect to interest accruing from and after January 1, 2021, MannKind may, at its option, elect to pay any such interest on any interest payment date, if certain conditions are met, in shares of MannKind's common stock at a price per shall equal to the last reported sale price on the trading day immediately prior to the payment date.

The Mann Group Non-Convertible Note will mature on the earlier of (i) November 3, 2024 or (ii) the 90th day after the repayment in full, and termination and discharge of all obligations (other than contingent indemnity obligations) under the MidCap Credit Facility. Interest on the Mann Group Non-Convertible Note will be payable in kind by adding the amount thereof to the principal amount; provided that MannKind may, at its option, elect to pay any such interest on any interest payment date, if certain conditions are met, in shares of MannKind's common stock at a price per shall equal to the last reported sale price on the trading day immediately prior to the interest payment date.

The foregoing descriptions of the Mann Group Exchange Agreement, Mann Group Convertible Note and Mann Group Non-Convertible Note do not purport to be complete and are qualified in their entirety by reference to the Mann Group Exchange Agreement, Mann Group Convertible Note and Mann Group Non-Convertible Note, copies of which are attached as Exhibits 99.3, 4.6 and 4.7, respectively, to this report.

Exchange of Deerfield Notes

On August 6, 2019, the Company entered into an Exchange Agreement (the "Deerfield Exchange Agreement") with Deerfield Private Design Fund II, L.P. and Deerfield Private Design International II, L.P. (collectively, "Deerfield") pursuant to which the Company agreed to, among other things, (i) repay $2,000,000 of the aggregate principal amount under the 9.75% Senior Convertible Notes due 2019 held by Deerfield (the "Deerfield Tranche 1 Notes") and pay all accrued and unpaid interest on the Deerfield Tranche 1 Notes then-outstanding, (ii) issue an aggregate of 2,678,571 shares of MannKind's common stock (the "Deerfield Exchange Shares") to Deerfield in exchange for $3,000,000 aggregate principal amount of Deerfield Tranche 1 Notes and (iii) cancel the Deerfield Tranche 1 Notes. The principal amount being repaid and exchanged under the Deerfield Tranche 1 Notes represents the final outstanding principal amount that would otherwise have become due and payable on August 31, 2019.

The foregoing description of the Deerfield Exchange Agreement does not purport to be complete and is qualified in its entirety by reference to the Deerfield Exchange Agreement, a copy of which is attached as Exhibit 99.4 to this report.

Amphastar Amendment

On August 2, 2019, MannKind entered into a Fifth Amendment to Supply Agreement (the "Fifth Amendment") with Amphastar Pharmaceuticals, Inc. pursuant to which the parties agreed to, among other things, extend the term of the supply agreement an additional two years (to December 31, 2026) and restructure the annual purchase commitments as follows:

	As of June 30, 2019	As amended August 2, 2019
2019	€ 2.3 million	€ —
2020	€ 15.9 million	€ 6.6 million
2021	€ 15.9 million	€ 6.6 million
2022	€ 19.8 million	€ 8.5 million
2023	€ 19.8 million	€ 10.9 million
2024	€ 8.6 million	€ 14.6 million
2025	€ —	€ 15.5 million
2026	€ —	€ 19.4 million

In connection with Fifth Amendment, MannKind is obligated to pay amendment fees of $1.5 million by September 15, 2019 and $1.25 million by December 15, 2019.

The foregoing description of the Fifth Amendment does not purport to be complete and is qualified in its entirety by reference to the Fifth Amendment, a copy of which is attached as Exhibit 99.5 to this report.

Item 2.03. Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant

The information in Item 1.01 above is incorporated by reference into this Item 2.03.

Item 3.02 Unregistered Sales of Equity Securities.

The information set forth under Item 1.01 of this report is incorporated by reference into this Item 3.02. MannKind offered the Tranche 1 Warrants, the 2024 Convertible Notes, the 2021 Exchange Shares, the 2020 Notes, the Mann Group Exchange Shares, the Mann Group Convertible Note and the Deerfield Exchange Shares in reliance on the exemption from registration provided by Sections 3(a)(9) and 4(a)(2) of the Securities Act of 1933, as amended, and expects to rely on such exemptions for (i) any issuance of shares of its common stock upon exercise of the Tranche 1 Warrants, (ii) any issuance of shares of its common stock upon conversion of the 2024 Convertible Notes, the 2020 Notes and the Mann Group Convertible Note and (iii) any issuance of shares of its common stock as payments for interest on the 2024 Convertible Notes, the Mann Group Convertible Note and the Mann Group Non-Convertible Note.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
4.1	Form of Warrant to Purchase Stock.
4.2	Form of 5.75% Convertible Senior Subordinated Exchange Notes Due 2024 (included in Exhibit 4.3 as Exhibit A thereto).
4.3	Indenture, dated as of August 6, 2019, by and between MannKind Corporation and U.S. Bank National Association.
4.4	Promissory Note due June 30, 2020 made by MannKind Corporation in favor of Bruce & Co., Inc., dated August 6, 2019.
4.5	Promissory Note due December 31, 2020 made by MannKind Corporation in favor of Bruce & Co., Inc., dated August 6, 2019.
4.6	Convertible Promissory Note made by MannKind Corporation in favor of The Mann Group LLC, dated August 6, 2019.
4.7	Promissory Note made by MannKind Corporation in favor of The Mann Group LLC, dated August 6, 2019.

99.1†	Credit and Security Agreement, dated August 6, 2019, by and among MannKind Corporation, MannKind LLC, the lenders party thereto from time to time and MidCap Financial Trust, as agent.
99.2	Exchange Agreement, dated August 6, 2019, by and between MannKind Corporation and Bruce & Co., Inc.
99.3	Exchange Agreement, dated August 5, 2019, by and between MannKind Corporation and The Mann Group LLC.
99.4	Exchange Agreement, dated August 6, 2019, by and among MannKind Corporation, MannKind LLC, Deerfield Private Design Fund II, L.P. and Deerfield Private Design International II, L.P.
99.5†	Fifth Amendment to Supply Agreement, dated August 2, 3019, by and between MannKind Corporation and Amphastar Pharmaceuticals, Inc.

† Certain portions of this exhibit (indicated by "[***]") have been omitted pursuant to confidential treatment.

Forward-Looking Statements

Statements contained in this report regarding matters that are not historical facts are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements about the financial capacity available under the MidCap Credit Facility, the subsequent tranches and milestones under the MidCap Credit Facility, the anticipated net proceeds to us from the MidCap Credit Facility and our anticipated use of the net proceeds from the MidCap Credit Facility. Words such as "believes," "anticipates," "plans," "expects," "intends," "will," "goal," "potential" and similar expressions are intended to identify forward-looking statements, though not all forward-looking statements necessarily contain these identifying words. These forward-looking statements are based upon management's current expectations, are subject to known and unknown risks, and involve assumptions that may never materialize or may prove to be incorrect. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of various risks and uncertainties, including, without limitation, the risk that the anticipated financial capacity under the new senior debt facility may not be available when expected, or at all, risks associated with the process of developing, marketing and commercializing our products, the Company's ability to achieve and sustain sufficient market acceptance, and the capabilities of our product and service solutions to keep pace with rapidly changing technology and customer requirements. These and other factors are described in greater detail in our filings with the Securities and Exchange Commission, including without limitation our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2019. All forward-looking statements contained in this press release speak only as of the date on which they were made, and we undertake no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

MANNKIND CORPORATION

Dated: August 7, 2019

By: /s/ David Thomson
David Thomson, Ph.D., J.D.
Corporate Vice President, General Counsel and Secretary

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND APPLICABLE STATE SECURITIES LAW, OR SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION CAN BE MADE IN COMPLIANCE WITH RULE 144 OF THE ACT, OR IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE REASONABLY SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS EXEMPT FROM REGISTRATION.

WARRANT TO PURCHASE STOCK

Company:	MannKind Corporation, a Delaware corporation
Number of Shares:	[ ] (Subject to adjustment as hereinafter provided)
Class of Stock:	Common Stock
Warrant Price:	$1.11 per share (Subject to adjustment as hereinafter provided)
Issue Date:	August 6, 2019
Expiration Date:	The earlier to occur of the (i) expiration of this Warrant pursuant to Section 1.6 hereof or (ii) 7th anniversary after the Issue Date
Credit Facilities:	This Warrant is issued in connection with the Credit and Security Agreement, dated as of August 6, 2019, among the Company, the other Borrowers (as defined therein) from time to time party thereto, MidCap Financial Trust, a Delaware statutory trust, as Agent and the lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement").

THIS WARRANT TO PURCHASE STOCK (this "Warrant") CERTIFIES THAT, for good and valuable consideration, including without limitation the mutual promises contained in the Credit Agreement (defined above), [ ] (together with any registered holder from time to time of this Warrant, "Holder") is entitled to purchase the number of fully paid and nonassessable shares of the class and series of capital stock of the Company at the Warrant Price, all as set forth above or herein below and as adjusted pursuant to the terms of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant. As used herein, "Share" or "Shares" shall refer to either (i) the shares of stock issuable upon the exercise or conversion of this Warrant and any shares of capital stock into which such shares may be converted or exchanged, or (ii) the authorized or issued and outstanding shares of capital stock of the Company which are of the same class and series as the shares of stock issuable upon the exercise or conversion of this Warrant, in either case as the specific provisions of this Warrant or the context may require.

ARTICLE 1. EXERCISE.

1.1 Method of Exercise. Holder may at any time and from time to time exercise this Warrant, in whole or in part, by delivering a duly completed and executed Notice of Exercise in substantially the form attached as Appendix 1 to the Company's General Counsel at the principal office of the Company. Unless Holder is exercising the conversion right set forth in Section 1.2, Holder shall also deliver to the Company a certified check, wire transfer (to an account designated by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Conversion Right. In lieu of exercising this Warrant as specified in Section 1.1, Holder may at any time and from time to time after the Issue Date convert this Warrant, in whole or in part, into a number of Shares determined by dividing (a) the aggregate Fair Market Value of the number of Shares or the securities otherwise issuable upon exercise of the portion of this Warrant with respect to which Holder elects to convert this Warrant minus the aggregate Warrant Price of such Shares by (b) the Fair Market Value of one Share (or the securities otherwise issuable upon exercise of this Warrant), and by delivering a duly completed and executed Notice of Exercise in substantially the form attached as Appendix 1 to the Company's General Counsel at the principal office of the Company. The "Fair Market Value" of a Share (or the securities otherwise issuable upon exercise of this Warrant) shall be determined pursuant to Section 1.3.

1.3 Fair Market Value. If the Company's common stock is traded on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a "Trading Market") and the Shares are common stock, the Fair Market Value of each Share shall be the closing price of a Share reported for the business day ending immediately before Holder delivers its Notice of Exercise to the Company. In the event of an exercise in connection with an Acquisition, the Fair Market Value of a Share shall be the value to be received per Share by all holders of such Shares in such transaction. In any other instance, the Fair Market Value of a Share shall be as the Board of Directors of the Company shall determine in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Promptly after Holder exercises or converts this Warrant pursuant to Section 1.1 or 1.2, respectively, and, if applicable, the Company receives payment of the aggregate Warrant Price, the Company shall promptly deliver to Holder certificates for the Shares acquired and, if this Warrant has not been fully exercised or converted and has not expired, a new Warrant of like tenor representing the Shares not so acquired. This Warrant shall be deemed to have been exercised and such certificates deemed issued, and Holder shall become the holder of record of the Shares for all purposes, as of the date of Holder's delivery of the exercise notice pursuant to Section 1.1 or 1.2 and payment of the Warrant Price, if applicable. If an exercise or conversion is to be made in connection with an Acquisition, such exercise may at the election of Holder be conditioned upon the consummation of such transaction, in which case such exercise shall not be deemed to be effective until immediately prior to the consummation of such transaction.

1.5 Replacement of Warrants. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of mutilation on surrender and cancellation of this Warrant, the Company shall, at the expense of Holder, execute and deliver, in lieu of this Warrant, a new warrant of like tenor.

1.6 Treatment of Warrant Upon Acquisition of Company.

1.6.1 "Acquisition". For the purpose of this Warrant, "Acquisition" means (a) any sale, exclusive license, or other disposition of all or substantially all of the assets of the Company, or (b) any reorganization, consolidation, share exchange, take-over, plan of arrangement or merger of or involving the Company with, by or into another person or entity, or sale of outstanding securities of the Company by the holders thereof, in each case where the holders of the Company's securities before the transaction beneficially own less than fifty percent (50%) of the outstanding voting securities of the successor, acquiring or surviving person or entity after the transaction.

1.6.2 Treatment of Warrant Upon Acquisition.

A) Upon the written request of the Company, Holder agrees that, in the event of an Acquisition that (i) is not described in Section 1.6.1(a), (ii) in which the sole consideration is cash, and (iii) in connection with or as a result of which all holders of the Shares are receiving or have the right to receive solely cash in the same proportions in respect of all of their Shares, then either (a) Holder shall exercise its conversion or purchase right under this Warrant and such exercise will be deemed effective immediately prior to the consummation of such Acquisition, or (b) if Holder elects not to exercise or convert the Warrant, this Warrant will expire upon the consummation of such Acquisition, subject to Section 5.8. The Company shall provide Holder with written notice of its request relating to the foregoing (together with such reasonable information as Holder may reasonably request in connection with such contemplated Acquisition giving rise to such notice), which notice is to be delivered to Holder not less than ten (10) business days prior to the closing of the proposed Acquisition.

B) Upon the written request of the Company, Holder agrees that, in the event of an Acquisition that is described in Section 1.6.1(a) and is an "arm's-length" transaction with a third party that is not an Affiliate (as defined below) of the Company (a "True Asset Sale"), Holder may (a) exercise its conversion or purchase right under this Warrant and such exercise will be deemed effective immediately prior to the consummation of such True Asset Sale, (b) permit this Warrant to continue (unless exercised in the interim) until the earlier of the Expiration Date or the dissolution and/or liquidation of the Company following the closing of any such True Asset Sale, subject to Section 5.8, or (c) elect to have the terms of Section 1.6.2(D) below apply. The Company shall provide Holder with written notice of its request relating to the foregoing (together with such reasonable information as Holder may request in connection with such contemplated Acquisition giving rise to such notice), which notice is to be delivered to Holder not less than ten (10) business days prior to the closing of the proposed True Asset Sale.

C) Upon the written request of the Company, Holder agrees that, in the event of an Acquisition (i) in which the consideration is a combination of cash and equity securities of the acquirer listed for trading on a U.S. national securities exchange and which may be freely resold pursuant to a resale registration statement or under Rule 144 of the Act without any restriction or limitation (including without limitation volume and manner of sale restrictions), (ii) in connection with or as a result of which all holders of the Shares are receiving or have the right to receive solely cash and/or such securities in the same proportions in respect of all of their Shares, and (iii) on the record date for which the Fair Market Value of one Share (or other securities issuable upon exercise of this Warrant) is greater than the Warrant Price, Holder may (a) exercise its conversion or purchase right under this Warrant and such exercise will be deemed effective immediately prior to the consummation of such Acquisition, or (b) if Holder elects not to exercise or convert the Warrant, this Warrant will expire upon the consummation of such Acquisition, subject to Section 5.8. The Company shall provide Holder with written notice of its request relating to the foregoing (together with such reasonable information as Holder may reasonably request in connection with such contemplated Acquisition giving rise to such notice), which notice is to be delivered to Holder not less than ten (10) business days prior to the closing of the proposed Acquisition.

D) Upon the closing of any Acquisition other than those particularly described in subsections (A), (B) and (C) above (or in the case of an Acquisition described in Section 1.6.2(B)

above if Holder elects to have the terms of this Section 1.6.2(D) apply), the successor, surviving or acquiring entity shall assume in writing the obligations of this Warrant, including agreements to deliver to Holder in exchange for this Warrant a written instrument issued by the successor, surviving or acquiring entity pursuant to which this Warrant shall thereafter be exercisable for the kind, amount and value of securities, cash, and property as would have been payable for the Shares issuable upon exercise of the unexercised portion of this Warrant had such Shares been outstanding on the record date for the Acquisition and subsequent closing. The Warrant Price and/or number of Shares shall be adjusted accordingly.

E) Conditional Exercise. Notwithstanding any other provision hereof, if an exercise or conversion of this Warrant is to be made in connection with an Acquisition, such exercise may at the election of Holder be conditioned upon the consummation of such transaction, in which case such exercise or conversion shall not be deemed to be effective until immediately prior to the consummation of such transaction.

As used herein "Affiliate" shall mean any person or entity that owns or controls directly or indirectly ten percent (10%) or more of the voting securities of the Company, any person or entity that controls, is controlled by or is under common control with any such person or entity, and each of such person's or entity's officers, directors, members, managers, joint venturers or partners, as applicable (whether as a result of the ownership of voting securities, by contract or otherwise).

ARTICLE 2. ADJUSTMENTS TO THE SHARES.

2.1 Stock Dividends, Subdivisions and Combinations. If the Company declares or pays a dividend on the Shares payable in common stock or other securities, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend occurred. If the Company subdivides the Shares by reclassification, stock split, split-up or otherwise into a greater number of shares or takes any other action which increases the number of shares of any class or series of capital stock into which the Shares are convertible, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding Shares are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares purchasable hereunder shall be proportionately decreased.

2.2 Reclassification, Exchange, Combination or Substitution. Upon any reclassification, exchange, combination, substitution, reorganization, merger, consolidation or other event that results in a change of the number and/or class of the underlying securities as to which purchase rights under this Warrant exist, Holder shall be entitled to receive, upon exercise or conversion of this Warrant, the number, amount and kind of securities, money and property that Holder would have ultimately received upon the completion of such reclassification, exchange, combination, substitution, reorganization, merger, consolidation or other event if this Warrant had been exercised immediately before such reclassification, exchange, combination, substitution, reorganization, merger, consolidation or other event. The Company or its successor shall promptly issue to Holder an amendment to this Warrant setting forth the number and kind of such new securities or other property issuable upon exercise or conversion of this Warrant as a result of such reclassification, exchange, combination, substitution, reorganization, merger, consolidation or other event that results in a change of the number and/or class of securities issuable upon exercise or conversion of this Warrant. The

amendment to this Warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price and to the number of securities or property issuable upon exercise of the amended Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, combinations, substitutions, reorganizations, mergers, consolidations or other events.

2.3 [Reserved].

2.4 [Reserved].

2.5 Fractional Shares. No fractional Shares shall be issuable upon exercise or conversion of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise or conversion of the Warrant, the Company shall eliminate such fractional share interest by paying Holder the amount computed by multiplying the fractional interest by the Fair Market Value of a full Share.

2.6 Certificate as to Adjustments. Upon each adjustment of the Warrant Price or the kind or number of securities issuable under this Warrant pursuant to this Article 2, the Company shall promptly notify Holder in writing, and, at the Company's expense, promptly compute such adjustment, and furnish Holder with a certificate of its Chief Executive Officer, Corporate Secretary or a senior financial officer setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request, furnish Holder a certificate setting forth the Warrant Price and the number and kind of securities issuable under this Warrant in effect upon the date thereof and the series of adjustments leading to such Warrant Price and such number and kind of securities.

ARTICLE 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company represents and warrants and covenants to Holder as follows:

(a) The Company has all requisite legal and corporate power and authority, and has taken all corporate action on the part of itself, its officers, directors and stockholders necessary, to execute, issue and deliver this Warrant, to issue the Shares issuable upon exercise or conversion of this Warrant and the securities issuable upon conversion of the Shares, and to carry out and perform its obligations under this Warrant, and this Warrant constitutes the legally binding and valid obligation of the Company enforceable in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, or similar laws relating to or affecting the enforcement of creditors' rights, or to principles of equity.

(b) This Warrant has been validly issued and is free of restrictions on transfer other than restrictions on transfer set forth herein and under applicable state and federal securities laws. All Shares which may be issued upon the exercise of the purchase or conversion right represented by this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances (including preemptive or other similar rights) except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

(c) The execution, delivery, and performance of this Warrant by the Company will not result in a violation of, be in conflict with, or constitute a default under, with or without the passage of time or giving of notice, any provision of the Company's Amended and Restated Certificate of Incorporation, the Company's by-laws, any provision of any judgment, decree, or order to which the Company is a party, by which it is bound, or to which any of its material assets are subject, any contract, obligation, or commitment to which the Company is a party or by which it is bound, or any statute, rule, or governmental regulation applicable to the Company, or the creation of any lien, charge, or encumbrance upon any assets of the Company.

(d) Company has previously furnished or made available (including by way of filing with the Securities and Exchange Commission ("SEC")) to Holder complete and accurate copies, as amended or supplemented, of its (a) Annual Report on Form 10-K for the fiscal year ended December 31, 2018, and (b) all other reports filed by Company under Section 13 or subsections (a) or (c) of Section 14 of the Securities Exchange Act of 1934 (as amended, the "Exchange Act") with the SEC since December 31, 2018 (such reports are collectively referred to herein as the "Company Reports"). The Company Reports constitute all of the documents required to be filed by Company under Section 13 or subsections (a) or (c) of Section 14 of the Exchange Act with the SEC from December 31, 2018 through the date of this Warrant. The Company Reports complied in all material respects with the requirements of the Exchange Act and the rules and regulations thereunder when filed. As of their respective dates, the Company Reports did not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

3.2 Notice of Certain Events; Information. If the Company proposes at any time (a) to declare any dividend or distribution upon any of its stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to effect any reclassification or recapitalization of any of its stock; (c) to merge or consolidate with or into any other corporation, or sell, lease, license, or convey all or substantially all of its assets, (d) to approve or participate in any Acquisition, (e) to liquidate, dissolve or wind up, or (f) to take any action or to effect any transaction which requires the Company to provide notice to other holders of the Shares, then, in connection with each such event, the Company shall give Holder: (1) at least ten (10) business days prior written notice of the date on which a record will be taken for such dividend or distribution (and specifying the date on which the holders of stock will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a) above; and (2) in the case of the matters referred to in (b), (c), (d), (e) or (f) above, at least ten (10) business days prior written notice of the date when the same will take place (and, if applicable, specifying the date on which the holders of stock will be entitled to exchange their common stock for securities or other property deliverable upon the occurrence of such event). The Company will also provide such information in its possession as is reasonably requested by Holder in a timely manner to enable Holder to comply with Holder's accounting or reporting requirements.

ARTICLE 4. REPRESENTATIONS AND WARRANTIES OF HOLDER. Holder represents and warrants to the Company as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder will be acquired for investment for Holder's account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Act and Holder has no present intention of selling or engaging in any public

distribution of the same except pursuant to a registration or exemption or any transfer contemplated by or permitted under Section 3.3. Holder also represents that Holder has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. Holder has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. Holder further has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Act.

4.5 The Act. Holder understands that this Warrant and the Shares issuable upon exercise or conversion hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Holder's investment intent as expressed herein. Holder understands that this Warrant and the Shares issued upon any exercise or conversion hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available.

ARTICLE 5. MISCELLANEOUS.

5.1 Term. This Warrant is exercisable in whole or in part at any time and from time to time on or before the Expiration Date. The conditions under which the Warrant shall automatically convert on the Expiration Date are set forth in Section 5.8 below.

5.2 Legends. For purposes of this Section 5.2, the term "Holder" shall be deemed to include any holder of the Shares issued or issuable upon the exercise or conversion of this Warrant.

(a) The Shares (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form:

THE SHARES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE

SECURITIES LAWS OF ANY STATE AND, EXCEPT PURSUANT TO THE PROVISIONS OF ARTICLE 5 OF THE WARRANT PURSUANT TO WHICH THE SHARES REPRESENTED HEREBY WERE ISSUED, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS REGISTERED UNDER SAID ACT AND APPLICABLE STATE SECURITIES LAW, OR UNLESS SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION CAN BE MADE IN COMPLIANCE WITH RULE 144 OF THE ACT, OR UNLESS, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE REASONABLY SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS EXEMPT FROM REGISTRATION.

(b) Notwithstanding the foregoing, no certificate or instrument evidencing the Shares shall bear, and the Company hereby agrees to remove, within ten (10) days of any written request (together with such evidence or documentation described in the following provisions) by Holder, pursuant to the following provisions of this Section 5.2(b), or not to affix, as applicable, any restrictive or other legend, notice or provision restricting the sale or transfer of the Shares, in each case provided that Holder has provided reasonable evidence to the Company (including any customary broker's or transferring stockholder's letters but expressly excluding an opinion of counsel other than with respect to clause (D) below) that: (A) a transfer of the Shares, as applicable, has been made pursuant to SEC Rule 144 (assuming the transferor is not an "affiliate" (as defined in SEC Rule 144) of the Company); (B) the Shares are then eligible for transfer pursuant to SEC Rule 144; (C) a transfer of the Shares has been made for no consideration to an affiliate of Holder or any assignee or purchaser of Holder's or its affiliate's rights under the Credit Agreement or any interest or participation therein or has otherwise been made to any affiliate of Holder who is an "accredited investor" as defined in Regulation D promulgated under the Act, and that is otherwise in compliance with all applicable securities laws; or (D) in connection with any other sale or transfer, provided that upon the request of the Company, such Holder provides the Company with an opinion of counsel to such Holder, in a reasonably acceptable form to the Company, to the effect that such sale or transfer may be made without registration under the applicable requirements of the Act and that such a legend, notice or provision is not required by, and is not required in order to establish compliance with any provisions of, the Act. For all purposes of Section 1.4, the Company shall not be deemed to have delivered to Holder Shares unless and until the Company shall have fully complied with all of the terms and conditions of this Section 5.2(b) (if removal has been requested by Holder in compliance with this Section 5.2(b)).

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and, subject to Section 5.2(b), legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to an affiliate of Holder or any assignee or purchaser of Holder's or its affiliate's rights under the Credit Agreement or any interest or participation therein. Additionally, the Company shall also not require an opinion of counsel if there is no material question as to the availability of Rule 144. For purposes of this Section 5.3, the term "Holder" shall be deemed to include any holder of the Shares issued or issuable upon the exercise or conversion of this Warrant.

5.4 Transfer Procedure. Subject to the provisions of Section 5.3 and upon and effective immediately as of providing Company with written notice substantially in the form attached as Appendix 2, Holder and any permitted transferee may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the Shares issuable directly or indirectly, upon conversion of the Shares, if any) to any transferee, provided, however, in connection with any such transfer, Holder or such transferee will give the Company notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and, in the case of transfer to a transferee who is not an affiliate of the Holder, Holder or such transferee promptly thereafter surrenders this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable). The Company may refuse to transfer this Warrant or the Shares to any person who directly competes with the Company, unless, in either case, the stock of the Company is publicly traded.

5.5 Notices. All notices, requests, documents and other communications (collectively, "Notices") from the Company to Holder, or vice versa, shall be in writing and deemed validly delivered effective as of the earliest to occur of (a) when actually received, (b) when transmitted by facsimile or electronic mail (PDF), (c) the first business day after mailing by first-class registered or certified mail, postage prepaid, or after deposit with a reputable overnight courier with all charges paid, in each case other than actual receipt at such mailing, facsimile or electronic mail address as may have been furnished to the Company or Holder, as the case may be. As used in this Warrant, "business days" shall refer to all days other than any Saturday, Sunday or day on which the Company's primary depository bank is closed. All notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

[ ]

With a copy to:

[ ]

Notice to the Company shall be addressed as follows until Holder receives notice of a change in address:

MannKind Corporation
30930 Russell Ranch Road, Suite 300
Westlake Village, CA 91362
Attention: David Thomson, General Counsel
Fax:
E-Mail: dthomson@mannkindcorp.com

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the Company and the Holder.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute in a final non-appealable judgment shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Automatic Conversion upon Expiration. Unless Holder notifies the Company in writing to the contrary prior to such automatic conversion, in the event that, upon the earliest to occur of the Expiration Date or any expiration, involuntary termination or cancellation of this Warrant, including with respect to Section 1.6.2, the Fair Market Value of one Share as determined in accordance with Section 1.3 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed as of immediately before such date to have been converted pursuant to Section 1.2 above as to all Shares for which it shall not previously have been exercised or converted, and the Company shall promptly deliver a certificate representing the Shares issued upon such conversion to the Holder.

5.9 Counterparts. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement.

5.10 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of New York, in each case (except to the extent the General Corporation Law of the State of Delaware applies) without giving effect to its principles regarding conflicts of law (other than Section 5-1401 of the General Obligations Law).

5.11 Headings. The various headings in this Warrant are inserted for convenience only and shall not affect the meaning or interpretation of this Warrant or any provisions hereof.

5.12 Severability. In the event any one or more of the provisions of this Warrant shall for any reason be held invalid, illegal or unenforceable, the remaining provisions of this Warrant shall be unimpaired, and the invalid, illegal or unenforceable provision shall be replaced by a mutually acceptable valid, legal and enforceable provision.

[***Balance of Page Intentionally Left Blank***]

"COMPANY"

MANNKIND CORPORATION

By: _____

Name: _____
(Print)

Title: _____

"HOLDER"

[ ]

By: _____
Name:
Title:

APPENDIX 1

NOTICE OF EXERCISE

1. Holder elects to purchase shares of the Common Stock of MannKind Corporation pursuant to the terms of the attached Warrant, and tenders payment of the purchase price of the shares in full.

[or]

1. Holder elects to convert the attached Warrant into Shares/cash [strike one] in the manner specified in the Warrant. This conversion is exercised for of the Shares covered by the Warrant.

[Strike paragraph that does not apply.]

2. Please issue a certificate or certificates representing the shares in the name specified below:

_____
Holder's Name

_____

_____
(Address)

3. By its execution below and for the benefit of the Company, Holder hereby restates each of the representations and warranties in Article 4 of the Warrant as the date hereof.

HOLDER:

_____

By: _____
Name: _____
Title: _____
(Date): _____

APPENDIX 2

ASSIGNMENT

For value received, [ ] hereby sells, assigns and transfers unto

Name:

Address:

Tax ID:

that certain Warrant to Purchase Stock issued by MannKind Corporation (the "Company"), on [ ] (the "Warrant") together with all rights, title and interest therein.

[ ]

By: _____

Name: _____
(Print)

Title: _____

Date:

By its execution below, and for the benefit of the Company, makes each of the representations and warranties set forth in Article 4 of the Warrant and agrees to all other provisions of the Warrant as of the date hereof.

[NAME OF TRANSFEREE]

By: _____
Name: _____
Title: _____

Exhibit 4.3

MANNKIND CORPORATION

AND

U.S. BANK NATIONAL ASSOCIATION

as Trustee

INDENTURE

Dated as of August 6, 2019

5.75% Convertible Senior Subordinated Exchange Notes Due 2024

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Exhibit A — Form of Note

INDENTURE dated as of August 6, 2019 between MannKind Corporation, a Delaware corporation, as issuer (the "**Company**") and U.S. Bank National Association, as trustee, a national banking association organized under the laws of the United States of America (the "**Trustee**").

W I T N E S S E T H:

WHEREAS, for its lawful corporate purposes, the Company has duly authorized the issue of its 5.75% Convertible Senior Subordinated Exchange Notes Due 2024 (the "**Notes**"), initially in an aggregate principal amount of $5,000,000, and in order to provide the terms and conditions upon which the Notes are to be authenticated, issued and delivered, the Company has duly authorized the execution and delivery of this Indenture; and

WHEREAS, the Form of Note, the certificate of authentication to be borne by each Note, the Form of Notice of Conversion, the Form of Fundamental Change Purchase Notice and the Form of Assignment and Transfer to be borne by the Notes are to be substantially in the forms hereinafter provided; and

WHEREAS, all acts and things necessary to make the Notes, when executed by the Company and authenticated and delivered by the Trustee or a duly authorized authenticating agent, as in this Indenture provided, the valid, binding and legal obligations of the Company, and to constitute these presents a valid agreement according to its terms, have been done and performed, and the execution of this Indenture and the issue hereunder of the Notes have in all respects been duly authorized.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That in order to declare the terms and conditions upon which the Notes are, and are to be, authenticated, issued and delivered, and in consideration of the premises and of the purchase and acceptance of the Notes by the Holders thereof, the Company covenants and agrees with the Trustee for the equal and proportionate benefit of the respective Holders from time to time of the Notes (except as otherwise provided below), as follows:

ARTICLE 1
DEFINITIONS; INTERPRETATIONS

Section 1.01. Definitions. The terms defined in this Section 1.01 (except as herein otherwise expressly provided or unless the context otherwise requires) for all purposes of this Indenture and of any indenture supplemental hereto shall have the respective meanings specified in this Section 1.01. All other terms used in this Indenture that are defined in the Trust Indenture Act or that are by

reference therein defined in the Securities Act (except as herein otherwise expressly provided or unless the context otherwise requires) shall have the meanings assigned to such terms in said Trust Indenture Act and in the Securities Act as in force at the date of the execution of this Indenture. The words "herein," "hereof," "hereunder," and words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision. The terms defined in this Article include the plural as well as the singular. Unless otherwise noted, references to "U.S. Dollars" or "$" shall mean the currency of the United States.

"**Additional Interest**" shall have the meaning specified in Section 12.01(a).

"**Additional Note**" or "**Additional Notes**" shall have the meaning specified in Section 2.10.

"**Affiliate**" of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, "control," when used with respect to any specified Person means the power to direct or cause the direction of the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing.

"**Agent Members**" shall have the meaning specified in Section 2.02(b).

"**Applicable Procedures**" means, with respect to any conversion, transfer, exchange or repurchase of beneficial ownership interests in a Global Note, the rules and procedures of the Depositary, to the extent applicable to such conversion, transfer, exchange or repurchase.

"**Bankruptcy Law**" shall have the meaning specified in Section 6.01.

"**Board of Directors**" means the Board of Directors of the Company or any duly authorized committee of such Board.

"**Board Resolution**" means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors, and to be in full force and effect on the date of such certification.

"**Business Day**" means any day other than a day on which federal or state banking institutions in the Borough of Manhattan, the City of New York, or in the city of the Corporate Trust Office of the Trustee, are authorized or obligated by law, executive order or regulation to close.

"**Capital Stock**" of any Person means any and all shares, interests, rights to purchase, warrants, options, participations or other equivalents of or interests in (however designated) the equity of such Person, but excluding any debt securities convertible into such equity.

"**Cash**" or "**cash**" means such coin or currency of the United States as at any time of payment is legal tender for the payment of public and private debts.

"**Change of Control**" means the occurrence of any of the following events from and after the Issue Date:

(i) the acquisition by any "**person**", including any syndicate or group deemed to be a "person" under Section 13(d)(3) of the Exchange Act is or becomes the "**beneficial owner**" (as defined in Rule 13d-3 under the Exchange Act) of the beneficial ownership, directly or indirectly, through a purchase, merger or other acquisition transaction or series of transactions of shares of the Company's Capital Stock entitling that person to exercise 50% or more of the total voting power of all shares of the Company's Voting Stock, other than (x) any acquisition by the Company, any Subsidiary or any of the Company's employee benefit plans; (y) any acquisition during the lifetime of Mann by Mann or his estate, by any trust where Mann is the trustee or grantor, by any not-for-profit entity where the acquisition is directed by Mann or by any entity wholly-owned by Mann or his estate; *provided* that the total beneficial ownership of all such Persons, together with the Persons in (z), does not exceed 70% or more of the total voting power of all shares of the Company's Voting Stock; and (z) any acquisition by any Person so long as the shares acquired by such Person are acquired directly from one of the Persons listed in (y) and no consideration is paid in connection with such acquisition;

(ii) the Company (A) recapitalizes, reclassifies or changes the Common Stock (other than changes resulting from a subdivision or combination) as a result of which the Common Stock would be converted into, or exchanged for, stock, other securities, other property or assets or (B) exchanges its shares of Common Stock with, consolidates with, or merges with or into, another Person or any Person exchanges its shares of common stock with, consolidates or merges with or into the Company, or (C) conveys, transfers, sells, leases or otherwise disposes of all or substantially all of its properties and assets to another Person, in each case other than (x) any transaction pursuant to which holders of the Company's Capital Stock immediately prior to the transaction have the entitlement to exercise, directly or indirectly, 50% or more of the total voting power of all shares of the Voting Stock of the continuing or surviving entity of such transaction; or (y) any merger solely for the purpose of changing the Company's jurisdiction of incorporation and resulting in a reclassification, conversion or exchange of outstanding shares of Common Stock solely into shares of common stock of the surviving entity traded or quoted on a U.S. national securities exchange, and as a result of such merger the Notes become convertible into such shares; or

(iii) the Company's stockholders approve a plan of liquidation or dissolution.

Notwithstanding anything to the contrary set forth herein, a Change of Control will be deemed not to have occurred if, in the case of a merger or consolidation, at least 90% of the consideration (excluding cash payments for fractional shares and cash payments pursuant to dissenters' appraisal rights) in a transaction or transactions otherwise constituting a Change of Control consists of shares of common stock or American depository receipts traded or quoted on a U.S. national securities exchange, or which will be so traded or quoted when issued or exchanged in connection with the transaction or transactions, and as a result of the transaction or transactions the Notes become convertible solely into such consideration.

"**close of business**" means 5:00 p.m. (New York City time).

"**Commission**" means the Securities and Exchange Commission.

"**Common Stock"** means the shares of common stock of the Company, par value $0.01 per share, as it exists on the date of this Indenture or any other shares of Capital Stock of the Company into which the Common Stock shall be reclassified or changed.

"**Company**" means MannKind Corporation, a corporation duly organized and existing under the laws of the State of Delaware, until a successor Person shall have become such pursuant to the applicable provisions of this Indenture, and thereafter "Company" shall mean such successor Person.

"**Company Conversion Option**" shall have the meaning specified in Section 14.03(a).

"**Company Order**" means a written order of the Company, signed by the Company's Chief Executive Officer, Chief Financial Officer, President, Executive Vice President or any Vice President (whether or not designated by a number or numbers or word or words added before or after the title "Vice President"), Treasurer or Assistant Treasurer or Secretary or any Assistant Secretary, and delivered to the Trustee.

"**Conversion Agent**" means the office or agency designated by the Company pursuant to Section 4.05 where Notes may be presented for conversion.

"**Conversion Date**" shall have the meaning specified in Section 13.02(a).

"**Conversion Price**" per share of Common Stock as of any day means the result obtained by dividing (i) $1,000 by (ii) the then applicable Conversion Rate.

"**Conversion Rate**" means the rate at which shares of Common Stock shall be delivered upon conversion, which rate shall be initially 333.3333 shares of Common Stock for each $1,000 principal amount of Notes, as adjusted from time to time pursuant to the provisions of this Indenture.

"**Corporate Trust Office**" means the office of the Trustee at which, at any particular time, its corporate trust business shall be principally administered, which office at the date hereof is located at 60 Livingston Avenue St. Paul MN 55107-2292, attention: Global Corporate Trust Services - MannKind Administrator.

"**Custodian**" means U.S. Bank National Association, as custodian for The Depository Trust Company, with respect to the Global Notes, or any successor entity thereto.

"**Default**" means any event, act or condition that with notice or lapse of time, or both, would constitute an Event of Default.

"**Defaulted Interest**" means any interest on any Note that is payable, but is not punctually paid or duly provided for, on any February 15 or August 15.

"**Depositary**" means, with respect to the Global Notes, the Person specified in Section 2.05(b) as the Depositary with respect to such Notes, until a successor shall have been appointed and become such pursuant to the applicable provisions of this Indenture, and thereafter, "**Depositary**" shall mean or include such successor.

"**Designated Senior Debt**" means the principal of, premium, if any, interest on, including any interest accruing after the commencement of any bankruptcy or similar proceeding, whether or not a claim for post-petition interest is allowed as a claim in the proceeding, or termination payment with respect to or in connection with, and all fees, costs, expenses and other amounts accrued or due on or under or in respect of, the term loans made and other obligations incurred under that certain Credit and Security Agreement, dated as of August 6, 2019, among the Company, MannKind LLC, as borrowers, MidCap Financial Trust, as Agent and the lenders from time to time party thereto as amended, restated, supplemented or otherwise modified from time to time.

"**DTC**" shall have the meaning specified in Section 2.05(b).

"Equity Conditions" means, with respect to any exercise of the Company Conversion Option or the payment of interest in Interest Shares:

(i) either (1) all shares of Common Stock issuable upon conversion of the Notes (in the case of an exercise of the Company Conversion Option) or all of the Interest Shares (in the case of a payment of interest in Interest Shares) and held by a non-Affiliate of the Company shall be eligible for sale without the need for registration under any applicable federal or state securities laws or (2) a shelf registration statement registering the resale of such shares of Common Stock issuable upon conversion of the Notes or Interest Shares, as applicable, has been filed by the Company and been declared effective by the Commission or is automatically effective and is available for use, and the Company expects such shelf registration statement to remain effective and available for use from the Mandatory Conversion Notice Date or the applicable Interest Payment Date, as the case may be, until thirty (30) days following the Mandatory Conversion Date or the applicable Interest Payment Date, respectively;

(ii) during the applicable Equity Conditions Measuring Period, the Common Stock is listed or traded on an Eligible Market and shall not have been suspended from trading on such Eligible Market (other than suspensions of not more than two Trading Days and occurring prior to the applicable date of determination due to business announcements by the Company) nor shall delisting or suspension by such Eligible Market been threatened or pending either (A) in writing by such exchange or market or (B) by falling below the then effective minimum listing maintenance requirements of such Eligible Market;

(iii) during the applicable Equity Conditions Measuring Period, to the extent any Notes have been delivered to the Company for conversion in accordance with the terms of the Notes, the Company shall have delivered and paid the number of shares of Common Stock and the amount of cash due upon conversion of the Notes to the Holders in accordance with Section 13;

(iv) any applicable shares of Common Stock to be issued upon conversion (in the case of an exercise of the Company Conversion Option) or any applicable Interest Shares (in the case of a payment of interest in Interest Shares) may be issued in full without violating the rules or regulations of the Eligible Market on which the Common Stock delivered upon conversion is then listed or trading; and

(v) the applicable shares of Common Stock to be issued upon conversion (in the case of an exercise of the Company Conversion Option) or any applicable Interest Shares (in the case of a payment of interest in Interest Shares) shall be duly authorized and will be validly issued, fully paid and non-assessable upon issuance in accordance with the terms of this Indenture; and

(vi) no Default or Event of Default shall have occurred and be continuing.

"Equity Conditions Measuring Period" means:

(i) in the case of an exercise of the Company Conversion Option, the period (x) commencing on the date a Mandatory Conversion Notice with respect to such exercise is delivered to Holders and (y) ending on the applicable Mandatory Conversion Date; and

(ii) in the case of a payment of interest in Interest Shares, the period (x) commencing on the Interest Notice Date with respect to such interest payment and (y) ending on the applicable Interest Payment Date.

"**Ex-Dividend Date**" means, in respect of an issuance, a dividend or distribution to holders of Common Stock, the first date on which shares of Common Stock trade on the applicable exchange or in the applicable market, regular way, without the right to receive such issuance, dividend or distribution in question.

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

"**Exchange Settlement Property**" shall have the meaning specified in Section 13.14(b)

"**Expiration Date**" shall have the meaning specified in Section 13.06(e).

"**Expiration Time**" shall have the meaning specified in Section 13.06(e).

"**Event of Default**" shall have the meaning specified in Section 6.01.

"**Financial Institution**" shall have the meaning specified in Section 13.14(a).

"**Form of Assignment and Transfer**" shall mean the "Form of Assignment and Transfer" attached as Attachment 3 to the Form of Note attached hereto as Exhibit A.

"**Form of Fundamental Change Purchase Notice**" shall mean the "Form of Fundamental Change Purchase Notice" attached as Attachment 2 to the Form of Note attached hereto as Exhibit A.

"**Form of Note**" shall mean the "Form of Note" attached hereto as Exhibit A.

"**Form of Notice of Conversion**" shall mean the "Form of Notice of Conversion" attached as Attachment 1 to the Form of Note attached hereto as Exhibit A.

"**Fundamental Change**" means the occurrence of either a Change of Control or a Termination of Trading.

"**Fundamental Change Company Notice**" shall have the meaning specified in Section 15.01(b).

"**Fundamental Change Effective Date**" means the date on which any Fundamental Change becomes effective.

"**Fundamental Change Purchase Date**" shall have the meaning specified in Section 15.01(a).

"**Fundamental Change Purchase Notice**" shall have the meaning specified in Section 15.01(c).

"**Fundamental Change Purchase Price**" of any Note, means 100% of the principal amount of the Note to be repurchased plus unpaid interest, if any, accrued and unpaid to, but excluding, the Fundamental Change Purchase Date; *provided* that if the Fundamental Change Purchase Date is after a Regular Record Date and on or prior to the corresponding Interest Payment Date, the Fundamental Change Purchase Price shall not include any accrued and unpaid interest.

"**Global Note**" shall have the meaning specified in Section 2.02(b).

"**Holder**" or "**Holder of a Note**" means the person in whose name a Note is registered on the Note Registrar's books.

"**Indenture**" means this instrument as originally executed or, if amended or supplemented as herein provided, as so amended or supplemented.

"**Interest Notice Date**" shall have the meaning set forth in Section 2.03(c).

"**Interest Payment Date**" means each February 15 and August 15 of each year, beginning on February 15, 2020; *provided*, *however*, that if any Interest Payment Date falls on a date that is not a Business Day, such payment of interest will be postponed until the next succeeding Business Day, and no interest or other amount will be paid as a result of such postponement.

"**Interest Share Payment Notice**" shall have the meaning set forth in Section 2.03(c).

"**Interest Shares**" shall have the meaning set forth in Section 2.03(c).

"**Issue Date**" of any Note means the date on which the Note was originally issued or deemed issued as set forth on the face of the Note.

"**Last Reported Sale Price**" means on any Business Day or Trading Day, the reported last sale price per share of the Company's Common Stock (or if no last sale price is reported, the average of the bid and ask prices per share or, if more than one in either case, the average of the average bid and the average ask prices per share) on such date reported by the Nasdaq Global Market or, if the Company's Common Stock (or the applicable security) is not quoted on the Nasdaq Global Market, as reported by the principal national securities exchange on which the Company's Common Stock (or such other security) is listed (each, an "**Eligible Market**"), or if no such prices are available, the Last Reported Sale Price per share shall be the fair value of a share of Common Stock (or such other security) as reasonably determined by the Board of Directors (which determination shall be conclusive and shall be evidenced by an Officer's Certificate delivered to the Trustee).

"Mandatory Conversion Date" shall have the meaning specified in Section 14.03(c).

"Mandatory Conversion Notice" shall have the meaning specified in Section 14.03(c).

"Mandatory Conversion Notice Date" shall have the meaning specified in Section 14.03(c).

"Mandatory Conversion Trigger Period" shall have the meaning specified in Section 14.03(a).

"**Mann**" means the individual Alfred E. Mann.

"**Market Disruption Event**" means (1) a failure by the primary exchange or quotation system on which the Common Stock trades or is quoted to open for trading during its regular trading session or (2) the occurrence or existence, prior to 1:00 p.m., New York City time, on any Trading Day for the Common Stock, of an aggregate one half-hour period of any suspension or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the stock exchange or otherwise) in the Common Stock or in any options, contracts or future contracts relating to the Common Stock.

"**Maturity Date**" means the earlier of (i)November 4, 2024, and (ii) the 91st day after the payment in full of, and termination and discharge of all obligations (other than contingent indemnity obligations) under the Designated Senior Debt.

"**Nasdaq Cap**" shall have the meaning set forth in Section 2.03(c).

"**Nonpayment Default**" has the meaning set forth in Section 18.01(b)(ii).

"**Note**" or "**Notes**" shall have the meaning specified in the first "Whereas" clause of this Indenture.

"**Note Register**" shall have the meaning specified in Section 2.05(a).

"**Note Registrar**" shall have the meaning specified in Section 2.05(a).

"**Officer**" means, with respect to the Company, the chairman of the Board of Directors, a chief executive officer, a president, a chief financial officer, chief operating officer, any executive vice president, any senior vice president, any vice president, the treasurer or any assistant treasurer, the controller or any assistant controller or the secretary or any assistant secretary.

"**Officer's Certificate**," means a certificate signed by any Officer. Each such certificate shall include the statements provided for in Section 17.05, if and to the extent required by the provisions thereof.

"**open of business**" means 9:00 a.m. (New York City time).

"**Opinion of Counsel**" means a written opinion, subject to customary exceptions, from legal counsel who is reasonably acceptable to the Trustee that is delivered to the Trustee in accordance with the terms hereof. The counsel may be an employee of or counsel to the Company. Each such opinion shall include the statements provided for in Section 17.05 if and to the extent required by the provisions thereof.

"**Outstanding**," when used with reference to Notes, shall, subject to the provisions of Section 8.04, mean, as of any particular time, all Notes authenticated and delivered by the Trustee under this Indenture, except:

(a) Notes theretofore canceled by the Trustee or accepted by the Trustee for cancellation;

(b) Notes that have been paid pursuant to Section 2.08 or Notes in lieu of which, or in substitution for which, other Notes shall have been authenticated and delivered pursuant to the terms of Section 2.06 unless proof satisfactory to the Trustee is presented that any such Notes are held by protected purchasers in due course; and

(c) Notes converted pursuant to Article 13.

"**Paying Agent**" means the office or agency designated by the Company pursuant to Section 4.05 where Notes may be presented for payment.

"**Payment Blockage Notice**" has the meaning set forth in Section 18.01(b) (ii).

"**Payment Default**" has the meaning set forth in Section 18.01(b)(i).

"**Person**" or "**person**" means any individual, corporation, partnership, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization, government or any agency or political subdivision thereof or any syndicate or group that would be deemed to be a "**person**" under Section 13(d)(3) of the Exchange Act or any other entity.

"**Physical Notes**" means permanent, certificated, non-Global Notes in registered form issued in denominations of $1,000 principal amount and integral multiples thereof.

"**Predecessor Note**" of any particular Note means every previous Note evidencing all or a portion of the same debt as that evidenced by such particular Note; and, for the purposes of this definition, any Note authenticated and delivered under Section 2.06 in lieu of or in exchange for a mutilated, lost, destroyed or stolen Note shall be deemed to evidence the same debt as the mutilated, lost, destroyed or stolen Note that it replaces.

"**Receiver**" shall have the meaning specified in Section 6.01.

"**Reference Property**" shall have the meaning specified in Section 13.10.

"**Regular Record Date**," with respect to any Interest Payment Date, shall mean the February 1 or August 1 (whether or not such day is a Business Day) immediately preceding such Interest Payment Date.

"**Resale Restriction Termination Date**" shall have the meaning specified in Section 2.05(b).

"**Responsible Officer**" means any officer within the corporate trust department of the Trustee, including any vice president, assistant vice president, assistant secretary, assistant treasurer, trust officer or any other officer of the Trustee who customarily performs functions similar to those performed by the Persons who at the time shall be such officers, respectively, or to whom any corporate trust matter is referred because of such Person's knowledge of and familiarity with the particular subject and who shall have direct responsibility for the administration of this Indenture.

"**Restricted Note**" means each Additional Note that is subject to transfer restrictions under the Securities Act (or other applicable securities laws), as determined by the Company.

"**Restricted Securities**" shall have the meaning specified in Section 2.05(b).

"**Rights**" means any common stock or preferred stock purchase right or warrant, as the case may be, that all or substantially all shares of Common Stock may be entitled to receive under a Rights Plan.

"**Rights Plan**" means any common stock or preferred stock rights plan or any similar plan adopted by the Company after the date hereof.

"**Rule 144**" means Rule 144 as promulgated under the Securities Act.

"**Rule 144A**" means Rule 144A as promulgated under the Securities Act.

"**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

"**Special Interest**" shall have the meaning specified in Section 6.02.

"**Spin-Off**" shall have the meaning specified in Section 13.06(c).

"**Subsidiary**" means a corporation or other entity more than 50% of the outstanding Voting Stock of which is owned, directly or indirectly, by the Company or by one or more other Subsidiaries of the Company, or by the Company and one or more other Subsidiaries of the Company.

"**Termination of Trading**" means the occurrence of the Common Stock (or other common stock into which the Notes are convertible) not being listed for trading on a United States national securities exchange nor approved for listing on any United States system of automated dissemination of quotations of securities prices nor traded in over-the-counter securities markets and no American Depositary Shares or similar instruments for the Common Stock are so listed or approved for listing in the United States.

"**Trading Day**" means any day during which trading in the Common Stock generally occurs on the primary exchange or quotation system on which the Common Stock then trades or is quoted and there is no Market Disruption Event, unless the Common Stock is not so traded or quotes, in which case "**Trading Day**" means a Business Day.

"**transfer**" shall have the meaning specified in Section 2.05(b).

"**Trust Indenture Act**" means the Trust Indenture Act of 1939, as amended.

"**Trustee**" means the Person named as the "Trustee" in the first paragraph of this Indenture until a successor Trustee shall have become such pursuant to the applicable provisions of this Indenture, and thereafter "Trustee" shall mean or include each Person who is then a Trustee hereunder.

"**United States**" means the United States of America.

"**Valuation Period**" shall have the meaning specified in Section 13.06(c).

"**Voting Stock**" of a Person means all classes of Capital Stock or other interests (including partnership interests) of such Person then outstanding and normally entitled (without regard to the occurrence of any contingency within the control of such person to satisfy) to vote in the election of directors, managers or trustees thereof.

Section 1.02 . References to Interest. Any reference to the payment of interest on, or in respect of, any Note in this Indenture shall be deemed to include mention of the payment of Special Interest (if applicable) and Additional Interest (if applicable) if, in such context, Special Interest and Additional Interest, as applicable, was, or would be, payable pursuant to Section 6.01 and Section 12.01, respectively. An express mention of the payment of Special Interest (if applicable) or Additional Interest (if applicable) in any provision hereof shall not be construed as excluding Additional Interest or Special Interest, as applicable, in those provisions hereof where such express mention is not made.

ARTICLE 2
ISSUE, DESCRIPTION, EXECUTION, REGISTRATION AND EXCHANGE OF NOTES

Section 2.01. Designation and Amount. The Notes shall be designated as the "5.75% Convertible Senior Subordinated Exchange Notes Due 2024." The aggregate principal amount of Notes that may be authenticated and delivered under this Indenture is initially limited to $5,000,000, subject to Section 2.10, and except for Notes authenticated and delivered upon registration or transfer of, or in exchange for, or in lieu of other Notes pursuant to Section 2.05, Section 2.06 and Section 2.07.

Section 2.02. Form of Notes.

(a) The Notes and the Trustee's certificate of authentication to be borne by such Notes shall be substantially in the respective forms set forth in Exhibit A, which are incorporated in and made a part of this Indenture. All of the Notes shall be issued initially in the form of one or more Physical Notes, registered in such names and authorized in such denominations as a Holder shall request, duly executed by the Company and authenticated by the Trustee as hereinafter provided. The Company shall execute and the Trustee shall, in accordance with this 0 authenticate and deliver initially one or more Physical Notes that (1) shall be registered in such names and authorized in such denominations as each Holder shall request, and (2) shall be delivered by the Trustee to each Holder or pursuant to such Holder's instructions.

(b) Upon request of any Holder, subject to the consent of the Company and the Notes meeting the eligibility requirements of the Depositary, any of such Holder's Notes may be exchanged for one or more Notes in global form (each, a "**Global Note**") pursuant to Section 2.02(f). The transfer and exchange of beneficial interests in a Global Note that does not involve the issuance of a Physical Note shall be effected through the Depositary (but not the Trustee or the Custodian) in accordance with the Indenture (including the restrictions on transfer set forth herein) and the procedures for the Depositary therefor. Members of, or participants in, the Depositary ("**Agent Members**") shall have no rights under this Indenture with respect to any Global Note held on their behalf by the Depositary, or the Trustee as its custodian, or under the Global Note, and the Depositary may be treated by the Company, the Trustee and any agent of the Company or the Trustee as the absolute owner of the Global Note for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Company, the Trustee or any agent of the Company or the Trustee from giving effect to any written certification, proxy or other authorization furnished by the Depositary or impair, as between the Depositary and its Agent Members, the operation of customary practices governing the exercise of the rights of any Holder.

(c) Each Physical Note or Global Note, as applicable, shall represent such principal amount of the outstanding Notes as shall be specified therein and each shall provide that it shall represent the aggregate principal amount of outstanding Notes from time to time endorsed thereon and that the aggregate principal amount of outstanding Notes represented thereby may from time to time be increased or reduced to reflect repurchases, cancellations, conversions, transfers or exchanges permitted thereby.

(d) Any of the Notes may have such letters, numbers or other marks of identification and such notations, legends or endorsements as the officer executing the same may approve (execution thereof to be conclusive evidence of such approval) and as are not inconsistent with the provisions of this Indenture, or as may be required to comply with any law or with any rule or regulation made pursuant thereto or with any rule or regulation of any securities exchange or automated quotation system on which the Notes may be listed or designated for issuance, or to conform to usage or to indicate any special limitations or restrictions to which any particular Notes are subject.

(e) Any Global Note may be endorsed with or have incorporated in the text thereof such legends or recitals or changes not inconsistent with the provisions of this Indenture as may be required by the Custodian or the Depositary, or as may be required to comply with any applicable law or any regulation thereunder or with the rules and regulations of any securities exchange or automated quotation system upon which the Notes may be listed or traded or designated for issuance or to conform with any usage with respect thereto, or to indicate any such special limitations or restrictions to which any particular Notes are subject.

(f) If required by any Holder, the Company shall execute and the Trustee shall, in accordance with this Section 2.02(f), authenticate and deliver one or more Global Notes in exchange for the Physical Notes that (1) shall be registered in the name of the Depositary, (2) shall be delivered by the Trustee to the Depositary or pursuant to the Depositary's instructions, (3) shall be assigned a restricted or unrestricted CUSIP numbers, as applicable, and (4) shall bear the applicable legend as set forth on Exhibit A hereto. The Global Note shall represent such principal amount of the Outstanding Notes as shall be specified therein and shall provide that it shall represent the aggregate principal amount of Outstanding Notes from time to time endorsed thereon and that the aggregate principal amount of Outstanding Notes represented thereby may from time to time be increased or reduced to reflect purchases, conversions, transfers, exchanges or issuances of additional Notes permitted hereby. Any endorsement of the Global Note to reflect the amount of any increase or decrease in the amount of Outstanding Notes represented thereby shall be made by the Trustee or the Custodian, at the direction of the Trustee, in such manner and upon instructions given by the Holder of such Notes in accordance with this Indenture. Payment of principal (including any Fundamental Change Purchase Price) of, and accrued and unpaid interest, if any, on, the Global Note shall be made to the Holder of such Note on the date of payment, unless a record date or other means of determining Holders eligible to receive payment is provided for herein.

The terms and provisions contained in the Form of Note attached as Exhibit A hereto shall constitute, and are hereby expressly made, a part of this Indenture and, to the extent applicable, the Company and the Trustee, by their execution and delivery of this Indenture, expressly agree to such terms and provisions and to be bound thereby.

Section 2.03. Date and Denomination of Notes; Payments of Interest.

(a) The Notes shall be issuable in registered form without coupons in denominations of $1,000 principal amount and multiples thereof.

(b) Each Note shall be dated the date of its authentication and shall bear interest (a) in the case of Notes issued on the date hereof, from August 6, 2019 and (b) in the case of any Additional Notes, from the date of issuance of such Note or from the most recent date to which interest has been paid or duly provided for, to the date the principal amount of such Note is paid or deemed paid, as the case may be. Interest on the Notes shall be computed on the basis of a 360-day year comprised of twelve 30-day months.

(c) Interest shall be payable on each Interest Payment Date in cash ("**Cash Interest**"), however, the Company may, at its option, elect to, pay interest on any Interest Payment Date in validly issued, fully paid and non-assessable shares of Common Stock (as defined below) ("**Interest Shares**") so long as each of the Equity Conditions are satisfied on each day during the Equity Conditions Measuring Period applicable to such Interest Payment Date. If the Company intends to issue Interest Shares, the Company shall deliver a written notice (including via e-mail) to the Trustee (the "**Interest Share Payment Notice**") on or prior to the fifth Trading Day prior to the applicable Interest Payment Date (the date such Interest Share Payment Notice is delivered to the Trustee, the "**Interest Notice Date**"), electing to pay all or any portion of the interest payable on such Interest Payment Date in Interest Shares, which Interest Share Payment Notice shall be irrevocable and shall specify the amount of interest to be paid in Interest Shares, together with an Officer's Certificate certifying that the Equity Conditions with respect to such payment in Interest Shares have been met as of the Interest Notice Date. Notwithstanding anything herein to the contrary, if the Equity Conditions fail to have been met as of the Interest Payment Date, interest shall be payable in cash. Interest to be paid on an Interest Payment Date in Interest Shares shall be paid in a number of validly issued, fully paid and non-assessable shares of Common Stock equal to the quotient of (1) the amount of interest payable on such Interest Payment Date less any interest paid in cash, divided by (2) the Last Reported Sale Price on the Trading Day immediately prior to the Interest Payment Date. If the issuance of Interest Shares would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock to the nearest whole share (with 0.5 being rounded up). When any Interest Shares are to be issued on an Interest Payment Date, the Company shall (i) (A) provided that the Company's stock transfer agent is participating in the DTC Fast Automated Securities Transfer Program, upon the request of the Holder, credit such aggregate number of Interest Shares to which the Holder shall be entitled to the Holder's or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system, or (B) if the stock transfer agent is not participating in the DTC Fast Automated Securities Transfer Program, or upon request of the Holder, issue and deliver to the Trustee no later than the second (2) Business Day after the applicable Interest Payment Date certificates registered in the name of each registered Holder for the number of Interest Shares to which each Holder shall be entitled, (C) deposit such Interest Shares with the Depositary in accordance with the Applicable Procedures, or (D) otherwise deliver the applicable Interest Shares in accordance with procedures reasonably acceptable to the Trustee and the Holder and (ii) pay to the Holders, in cash by wire transfer of immediately available funds, the entire amount of any interest payable in cash.

(d) The Person in whose name any Note (or its Predecessor Note) is registered on the Note Register at the close of business on any Regular Record Date with respect to any Interest Payment Date shall be entitled to receive the interest payable on such Interest Payment Date. Interest payable in cash shall be

payable at the office of the Paying Agent, which shall initially be the Corporate Trust Office of the Trustee as the Company's Paying Agent and Note Registrar. The Company shall pay interest payable in cash on any Physical Notes (i) to the Person entitled thereto having an aggregate principal amount of $2,000,000 or less, by check mailed to such Person at the address set forth in the Note Register and (ii) to the Person entitled thereto having an aggregate principal amount of more than $2,000,000, either by check mailed to such Person or, upon application by such Person to the Note Registrar not later than the relevant Regular Record Date, by wire transfer in immediately available funds to such Person's account within the United States, which application and wire transfer instructions shall remain in effect until such Person notifies, in writing, the Note Registrar to the contrary.

Any Defaulted Interest shall forthwith cease to be payable to the Holder of such Note on the relevant Regular Record Date by virtue of its having been such Holder, and such Defaulted Interest shall be paid by the Company, at its election in each case, as provided in clause (1) or (2) below:

(1) The Company may elect to make payment of any Defaulted Interest to the Persons in whose names the Notes (or their respective Predecessor Notes) are registered at the close of business on a special record date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Note and the date of the proposed payment (which shall be not less than 20 days after the receipt by the Trustee of such notice, unless the Trustee shall consent to an earlier date), and at the same time the Company shall deposit with the Trustee an amount of money equal to the aggregate amount to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit on or prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Company shall fix a special record date for the payment of such Defaulted Interest which shall be not more than fifteen days and not less than ten days prior to the date of the proposed payment, and not less than ten days after the receipt by the Trustee of the notice of the proposed payment. The Company shall promptly notify the Trustee in writing of such special record date and the Trustee, in the name and at the expense of the Company, shall cause notice of the proposed payment of such Defaulted Interest and the special record date therefor to be delivered, or in the case of Physical Notes, mailed, first-class postage prepaid, to each Holder at its address as it appears in the Note Register, not less than ten days prior to such special record date. Notice of the proposed payment of such Defaulted Interest and the special record date therefor having been so mailed, such Defaulted Interest shall be paid to the Persons in whose names the Notes (or their respective Predecessor Notes) are registered at the close of business on such special record date and shall no longer be payable pursuant to the following clause (2) of this Section 2.03.

(2) The Company may make payment of any Defaulted Interest in any other lawful manner not inconsistent with the requirements of any securities exchange or automated quotation system on which the Notes may be listed or designated for issuance, and upon such notice as may be required by such exchange or automated quotation system, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause, such manner of payment shall be deemed practicable by the Trustee.

If the Company makes a distribution of property to holders of Common Stock that would be taxable to them as a dividend for United States federal income tax purposes and the Conversion Rate is increased, the Company may offset any withholding tax applicable to non-United States Holders against cash payments of interest payable on the Notes.

Section 2.04. Execution, Authentication and Delivery of Notes. The Notes shall be signed in the name and on behalf of the Company by the manual or facsimile signature of any Officer.

At any time and from time to time after the date of the execution and delivery of this Indenture, the Company may, in accordance with the terms of this Indenture, deliver additional Notes executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Notes, and the Trustee in accordance with such Company Order shall authenticate and deliver such Notes, without any further action by the Company hereunder.

Only such Notes as shall bear thereon a certificate of authentication substantially in the form set forth on the Form of Note attached as Exhibit A hereto, executed manually by a Responsible Officer of the Trustee (or an authorized officer of an authenticating agent appointed by the Trustee), shall be entitled to the benefits of this Indenture or be valid or obligatory for any purpose. Such certificate of authentication executed by the Trustee (or such an authenticating agent) upon any Note executed by the Company shall be conclusive evidence that the Note so authenticated has been duly authenticated and delivered hereunder and that the Holder is entitled to the benefits of this Indenture.

All Notes shall be dated that date of their authentication.

In case any Officer of the Company who shall have signed any of the Notes shall cease to be such Officer before the Notes so signed shall have been authenticated and delivered by the Trustee, or disposed of by the Company, such Notes nevertheless may be authenticated and delivered or disposed of as though

the Person who signed such Notes had not ceased to be such Officer of the Company; and any Note may be signed on behalf of the Company by such Person as, at the actual date of the execution of such Note, shall be an Officer of the Company, although at the date of the execution of this Indenture any such Person was not such an Officer.

The Trustee shall have the right to decline to authenticate and deliver any Notes under this Indenture if the Trustee, being advised by counsel, determines that such action may not lawfully be taken or if the Trustee in good faith shall determine that such action would expose the Trustee to personal liability.

Section 2.05. Exchange and Registration of Transfer of Notes; Restrictions on Transfer; Depositary; Automatic Exchange. (a) The Company shall cause to be kept at the Corporate Trust Office a register (the register maintained in such office or in any other office or agency of the Company being herein sometimes collectively referred to as the "**Note Register**") in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Notes and of transfers of Notes. The Note Register shall be in written form or in any form capable of being converted into written form within a reasonable period of time. The Trustee is hereby appointed "**Note Registrar**" for the purpose of registering Notes and transfers of Notes as herein provided. The Company may appoint a new Note Registrar without prior notice to Holders. The Company may appoint one or more co-registrars.

Upon surrender for registration of transfer of any Note to the Note Registrar or any co-registrar, and satisfaction of the requirements for such transfer set forth in this Section 2.05, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Notes of any authorized denominations and of a like aggregate principal amount and bearing such restrictive legends as may be required by this Indenture.

Notes may be exchanged for other Notes of any authorized denominations and of a like aggregate principal amount, upon surrender of the Notes to be exchanged at any such office or agency maintained by the Company pursuant to Section 4.05. Whenever any Notes are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Notes that the Holder making the exchange is entitled to receive, bearing registration numbers not contemporaneously outstanding.

All Notes presented or surrendered for registration of transfer or for exchange, purchase or conversion shall (if so required by the Company, the Trustee, the Note Registrar or any co-registrar) be duly endorsed, or be accompanied by a written instrument or instruments of transfer in form satisfactory to the Company and duly executed, by the Holder thereof or its attorney-in-fact duly authorized in writing.

No service charge shall be charged by the Company, the Trustee, the Notes Registrar or any Paying Agent to the Holder for any exchange or registration of transfer of Notes, but the Holder may be required by the Company, the Trustee, the Notes Registrar or any Paying Agent or otherwise to pay a sum sufficient to cover any tax, assessments or other governmental charges that may be imposed in connection therewith as a result of the name of the Holder of the new Notes issued upon such exchange or registration of transfer of Notes being different from the name of the Holder of the old Notes presented or surrendered for such exchange or registration of transfer.

None of the Company, the Trustee, the Note Registrar or any co-registrar shall be required to exchange or register a transfer of any Notes surrendered for conversion or repurchase except for any portion of that Note that is not being repurchased, redeemed or converted, as the case may be.

All Notes issued upon any registration of transfer or exchange of Notes in accordance with this Indenture shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits under this Indenture as the Notes surrendered upon such registration of transfer or exchange. For greater certainty, all Notes issued upon any registration of transfer or exchange of Notes will be issued as evidence of the same continuing indebtedness of the Company under this Indenture and in no circumstances is the Company obligated under the Indenture to repay the principal amount of the exchanged Notes by virtue of the registration of a transfer or exchange.

(b) The Depositary shall be a clearing agency registered under the Exchange Act. The Company initially appoints The Depository Trust Company ("**DTC**") to act as Depositary with respect to any Global Note. To the extent any Global Notes are issued and the DTC acts as the Depositary, such Global Notes shall be issued to the Depositary, registered in the name of Cede & Co., as the nominee of the Depositary, and deposited with the Trustee as custodian for DTC (unless otherwise directed by the DTC or pursuant to the Applicable Procedures). If (i) the Depositary notifies the Company at any time that the Depositary is unwilling or unable to continue as depositary for the Global Notes and a successor depositary is not appointed within 90 days, (ii) the Depositary ceases to be registered as a clearing agency under the Exchange Act and a successor depositary is not appointed within 90 days or (iii) an Event of Default with respect to the Notes has occurred and is continuing and a beneficial owner of any Note requests that its beneficial interest therein be issued as a Physical Note, the Company will execute, and the Trustee, upon receipt of an Officer's Certificate and a Company Order for the authentication and delivery of Notes, shall authenticate and deliver (x) in the case of clause (iii), a Physical Note to such

beneficial owner in a principal amount equal to the principal amount of such Note corresponding to such beneficial owner's beneficial interest and (y) in the case of clauses (i) and (ii), Physical Notes to each beneficial owner of the related Global Notes (or a portion thereof) in an aggregate principal amount equal to the principal amount of such Global Note, in exchange for such Global Note, and upon delivery of the Global Note to the Trustee such Global Note shall be canceled. The transfer and exchange of beneficial interests in a Global Note that does not involve the issuance of a Physical Note shall be effected through the Depositary (but not the Trustee or the Custodian) in accordance with this Indenture (including the restrictions on transfer set forth herein) and the procedures of the Depositary therefor. Members of, or participants in, the Depositary ("**Agent Members**") shall have no rights under this Indenture with respect to any Global Note held on their behalf by the Depositary, or the Trustee as its custodian, or under the Global Note, and the Depositary may be treated by the Company, the Trustee and any agent of the Company or the Trustee as the absolute owner of the Global Note for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Company, the Trustee or any agent of the Company or the Trustee from giving effect to any written certification, proxy or other authorization furnished by the Depositary or impair, as between the Depositary and its Agent Members, the operation of customary practices governing the exercise of the rights of any Holder.

Physical Notes issued in exchange for all or a part of the Global Note pursuant to this Section 2.05(b) shall be registered in such names and in such authorized denominations as the Depositary, pursuant to instructions from its direct or indirect participants or otherwise, shall instruct the Trustee. Upon execution and authentication, the Trustee shall deliver such Physical Notes to the Persons in whose names such Notes are so registered.

Notwithstanding any other provisions of this Indenture (other than the provisions set forth in this Section 2.05(b)), a Global Note may not be transferred as a whole or in part except (i) by the Depositary to a nominee of the Depositary or by a nominee of the Depositary to the Depositary or another nominee of the Depositary or by the Depositary or any such nominee to a successor Depositary or a nominee of such successor Depositary and (ii) for exchange of a Global Note or a portion thereof for one or more Physical Notes in accordance with the terms of this Indenture.

At such time as all interests in a Global Note have been converted, canceled, repurchased or transferred, such Global Note shall be, upon receipt thereof, canceled by the Trustee in accordance with standing procedures and existing instructions between the Depositary and the Custodian. At any time prior to such cancellation, if any interest in a Global Note is exchanged for Physical Notes, converted, canceled, repurchased or transferred to a transferee who receives Physical Notes therefor or any Physical Note is exchanged or transferred

for part of such Global Note, the principal amount of such Global Note shall, in accordance with the standing procedures and instructions existing between the Depositary and the Custodian, be appropriately reduced or increased, as the case may be, and an endorsement shall be made on such Global Note, by the Trustee or the Custodian, at the direction of the Trustee, to reflect such reduction or increase.

None of the Company, the Trustee nor any agent of the Company or the Trustee will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests of a Global Note or maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

The Trustee shall have no obligation or duty to monitor, determine or inquire into compliance with any restriction on transfer imposed under the Indenture or applicable law with respect to any transfer of any Note (including any transfers between or among Depositaries or beneficial owners of interests in any Global Notes) other than to require delivery of such certificates and other documentation or evidence as are expressly required by, and to do so if and when expressly required by the terms of the Indenture, and to examine the same to determine substantial compliance as to form with the express requirements of the Indenture.

(c) Every Additional Note that bears or is required under this Section 2.05(b) to bear the legend set forth in this Section 2.05(b) (together with any Common Stock issued upon conversion of the Additional Notes and required to bear a similar legend, the "**Restricted Securities**") shall be subject to the restrictions on transfer set forth in this Section 2.05(b) (including the legend set forth below), and the holder of each such Restricted Security, by such holder's acceptance thereof, agrees to be bound by all such restrictions on transfer. As used in this Section 2.05(b), the term "**transfer**" encompasses any sale, pledge, transfer or other disposition whatsoever of any Restricted Security.

Until the date (the "**Resale Restriction Termination Date**") that is the later of (i) the date that is one year after the date of issuance of any Restricted Note, or such shorter period of time as permitted by Rule 144 or any successor provision thereto, and (ii) such later date, if any, as may be required by applicable laws, any certificate evidencing such Restricted Note (and all securities issued in exchange therefor or substitution thereof, and all shares of Common Stock, if any, issued upon conversion thereof, if applicable) shall bear a legend in substantially the following form (unless such Restricted Notes or shares of Common Stock, if any, have been transferred pursuant to a registration statement that has become or been declared effective under the Securities Act and that continues to be effective at the time of such transfer, pursuant to the exemption from registration provided by Rule 144 or any similar provision then in force under the Securities Act, or

unless otherwise agreed by the Company in writing, with written notice thereof to the Trustee):

THE SALE OF THIS NOTE HAS NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND ACCORDINGLY, THIS NOTE MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT AS SET FORTH IN THE FOLLOWING SENTENCE. BY ITS ACQUISITION HEREOF, OR OF A BENEFICIAL OWNERSHIP HEREIN, THE ACQUIRER: (I) REPRESENTS THAT IT, AND ANY ACCOUNT FOR WHICH IT IS ACTING, IS A "QUALIFIED INSTITUTIONAL BUYER" (WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT) AND THAT IT EXERCISES SOLE INVESTMENT DISCRETION WITH RESPECT TO EACH SUCH ACCOUNT, AND (II) AGREES (1) THAT IT WILL NOT WITHIN THE LATER OF (X) ONE YEAR AFTER THE DATE OF ISSUANCE OF THIS NOTE AND (Y) 90 DAYS AFTER IT CEASES TO BE AN AFFILIATE (WITHIN THE MEANING OF RULE 144 UNDER THE SECURITIES ACT) OF MANNKIND CORPORATION (THE "COMPANY"), OFFER, RESELL, PLEDGE OR OTHERWISE TRANSFER THE NOTES EVIDENCED HEREBY, THE COMMON STOCK ISSUABLE UPON CONVERSION OF SUCH NOTES OR ANY BENEFICIAL OWNERSHIP HEREIN, EXCEPT: (A) TO THE COMPANY OR ANY SUBSIDIARY THEREOF; (B) UNDER A REGISTRATION STATEMENT THAT HAS BECOME EFFECTIVE UNDER THE SECURITIES ACT; (C) TO A PERSON THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) THAT IS PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF ANOTHER QUALIFIED INSTITUTIONAL BUYER AND TO WHOM NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, ALL IN COMPLIANCE WITH RULE 144A (IF AVAILABLE); OR (D) UNDER ANY OTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, INCLUDING RULE 144, IF AVAILABLE; AND (2) THAT IT WILL, PRIOR TO ANY TRANSFER OF THIS NOTE WITHIN THE LATER OF (X) SIX MONTHS (OR, IF THE COMPANY HAS NOT SATISFIED THE CURRENT PUBLIC INFORMATION REQUIREMENTS OF RULE 144, ONE YEAR) AFTER THE DATE OF ISSUANCE OF THIS NOTE AND (Y) 90 DAYS AFTER IT CEASES TO BE AN AFFILIATE (WITHIN THE MEANING OF RULE 144) OF THE COMPANY, FURNISH TO THE TRUSTEE AND THE COMPANY SUCH CERTIFICATIONS, LEGAL OPINIONS OR OTHER INFORMATION AS THEY MAY REQUIRE AND MAY RELY UPON TO CONFIRM THAT SUCH TRANSFER IS BEING MADE PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS. IN ANY EVENT, NO AFFILIATE OF THE COMPANY

MAY RESELL THIS NOTE OTHER THAN UNDER A REGISTRATION STATEMENT THAT HAS BECOME EFFECTIVE UNDER THE SECURITIES ACT OR PURSUANT TO AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT IN A TRANSACTION THAT RESULTS IN SUCH NOTE NO LONGER BEING "RESTRICTED SECURITIES" (AS DEFINED UNDER RULE 144). NO REPRESENTATION IS MADE AS TO THE AVAILABILITY OF ANY EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT. EACH PURCHASER AND TRANSFEREE OF A NOTE AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF A NOTE WILL BE DEEMED TO HAVE REPRESENTED BY ITS PURCHASE AND HOLDING OF THE NOTE AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THE NOTE THAT (A) ITS PURCHASE AND HOLDING OF THE NOTE AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THE NOTE IS NOT MADE ON BEHALF OF OR WITH "PLAN ASSETS" OF ANY PLAN SUBJECT TO TITLE I OF ERISA, SECTION 4975 OF THE CODE OR ANY SIMILAR LAW OR (B) ITS PURCHASE AND HOLDING OF THE NOTE AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THE NOTE WILL NOT RESULT IN A NON-EXEMPT PROHIBITED TRANSACTION UNDER SECTION 406 OF ERISA, SECTION 4975 OF THE CODE OR ANY SIMILAR LAW.

Any Common Stock issued upon conversion of a Restricted Note prior to the applicable Resale Restriction Termination Date shall bear a similar legend.

No transfer of any Restricted Note prior to the applicable Resale Restriction Termination Date will be registered by the Note Registrar unless the applicable box on the Form of Assignment and Transfer has been checked.

Notwithstanding anything to the contrary contained in this Indenture or any Restricted Note, such Restricted Note (or security issued in exchange or substitution therefor) (i) as to which such restrictions on transfer shall have expired in accordance with their terms, (ii) has been transferred pursuant to a registration statement that has become effective or been declared effective under the Securities Act and that continues to be effective at the time of such transfer or (iii) that has been sold pursuant to the exemption from registration provided by Rule 144 or any similar provision then in force under the Securities Act, may, upon surrender of such Restricted Note for exchange to the Note Registrar in accordance with the provisions of this Section 2.05, be exchanged for a new Note or Notes, of like tenor and aggregate principal amount, which shall not bear the restrictive legend required by this Section 2.05(b). The Company shall be entitled to instruct the Trustee in writing to so surrender any Global Note as to which any of the conditions set forth in clause (i) through (iii) of the immediately preceding sentence have been satisfied, and, upon such instruction, the Trustee shall so surrender such Global Note for exchange; and any new Global Note so exchanged therefor shall not bear the restrictive legend specified in this Section 2.05(c) and shall not be assigned a restricted CUSIP.

(d) The Company may cause the removal of the legends required by Sections 2.05(c) from any Global Note at any time on or after the Resale Restriction Date by: (i) instructing the Trustee to remove the such legends from such Global Note; (ii) providing to the Trustee and the Depositary written notice to change the CUSIP number for the Notes to the applicable unrestricted CUSIP number; and (iii) complying with any Applicable Procedures for delegending or otherwise exchanging such Global Note for a Global Note not bearing the restrictive legend (including DTC's mandatory exchange process, if applicable); whereupon any legends otherwise required by Section 2.05(c) shall be removed from any Global Notes without any further action on the part of the Holders.

Section 2.06. Mutilated, Destroyed, Lost or Stolen Notes. In case any Note shall become mutilated or be destroyed, lost or stolen, the Company in its discretion may execute, and upon its written request the Trustee or an authenticating agent appointed by the Trustee shall authenticate and deliver, a new Note, bearing a number not contemporaneously outstanding, in exchange and substitution for the mutilated Note, or in lieu of and in substitution for the Note so destroyed, lost or stolen. In every case the applicant for a substituted Note shall furnish to the Company, to the Trustee and, if applicable, to the authenticating agent, such security or indemnity as may be required by them to save each of them harmless from any loss, liability, cost or expense caused by or connected with such substitution, and, in every case of destruction, loss or theft, the applicant shall also furnish to the Company, to the Trustee and, if applicable, to the authenticating agent, evidence to their satisfaction of the destruction, loss or theft of such Note and of the ownership thereof.

The Trustee or the authenticating agent, if applicable, may authenticate any such substituted Note and deliver the same upon the receipt of such security or indemnity as the Trustee, the Company and, if applicable, the authenticating agent may require. Upon the issuance of any substitute Note, the Company or the Trustee may require the payment by the Holder of a sum sufficient to cover any tax, assessment or other governmental charge that may be imposed in relation thereto and any other expenses connected therewith. In case any Note that has matured or is about to mature or has been tendered for purchase upon a Fundamental Change or is about to be converted shall become mutilated or be destroyed, lost or stolen, the Company may, in its sole discretion, instead of issuing a substitute Note, pay or authorize the payment of or convert or authorize the conversion of the same (without surrender thereof except in the case of a mutilated Note), as the case may be, if the applicant for such payment or conversion shall furnish to the Company, to the Trustee and, if applicable, to the authenticating agent, such security or indemnity as may be required by them to save each of them harmless for any loss, liability, cost or expense caused by or

connected with such substitution, and, in every case of destruction, loss or theft, evidence satisfactory to the Company, the Trustee and, if applicable, any Paying Agent or Conversion Agent evidence of their satisfaction of the destruction, loss or theft of such Note and of the ownership thereof.

Every substitute Note issued pursuant to the provisions of this Section 2.06 by virtue of the fact that any Note is destroyed, lost or stolen shall constitute an additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Note shall be found at any time, and shall be entitled to all the benefits of (but shall be subject to all the limitations set forth in) this Indenture equally and proportionately with any and all other Notes duly issued hereunder. To the extent permitted by law, all Notes shall be held and owned upon the express condition that the foregoing provisions are exclusive with respect to the replacement or payment or conversion or purchase of mutilated, destroyed, lost or stolen Notes and shall preclude any and all other rights or remedies, notwithstanding any law or statute existing or hereafter enacted to the contrary with respect to the replacement or payment or conversion of negotiable instruments or other securities without their surrender.

For greater certainty, every substitute Note issued pursuant to the provisions of this Section 2.06 by virtue of the fact that any Note is mutilated, destroyed, lost or stolen will be issued as evidence of the same continuing indebtedness of the Company under this Indenture and in no circumstances is the Company obligated under the Indenture to repay the principal amount of the substituted Note by virtue of such mutilation, destruction or loss.

Section 2.07. Temporary Notes. Pending the preparation of Physical Notes, the Company may execute and the Trustee or an authenticating agent appointed by the Trustee shall, upon written request of the Company, authenticate and deliver temporary Notes (printed or lithographed). Temporary Notes shall be issuable in any authorized denomination, and substantially in the form of the Physical Notes but with such omissions, insertions and variations as may be appropriate for temporary Notes, all as may be determined by the Company. Every such temporary Note shall be executed by the Company and authenticated by the Trustee or such authenticating agent upon the same conditions and in substantially the same manner, and with the same effect, as the Physical Notes. Without unreasonable delay, the Company will execute and deliver to the Trustee or such authenticating agent Physical Notes (other than any Global Note) and thereupon any or all temporary Notes (other than any Global Note) may be surrendered in exchange therefor, at each office or agency maintained by the Company pursuant to Section 4.05 and the Trustee or such authenticating agent shall authenticate and deliver in exchange for such temporary Notes an equal aggregate principal amount of Physical Notes. Such exchange shall be made by the Company at its own expense and without any charge therefor. Until so exchanged, the temporary Notes shall in all respects be entitled to the same benefits and subject to the same limitations under this Indenture as the Physical Notes authenticated and delivered hereunder.

For greater certainty, each Note issued pursuant to the provisions of this Section 2.07 in exchange for a temporary Note will be issued as evidence of the same continuing indebtedness of the Company under this Indenture and in no circumstances is the Company obligated under the Indenture to repay the principal amount of the temporary Note by virtue of the exchange.

Section 2.08. Cancellation of Notes Paid, Etc. All Notes surrendered for the purpose of payment, purchase, conversion, exchange or registration of transfer, shall, if surrendered to the Company or any Paying Agent or any Note Registrar or any Conversion Agent, be surrendered to the Trustee and promptly canceled by it, or, if surrendered to the Trustee, shall be promptly canceled by it, and no Notes shall be issued in lieu thereof except as expressly permitted by any of the provisions of this Indenture. The Trustee shall dispose of canceled Notes in accordance with its customary procedures and, after such disposition, shall deliver a written confirmation of such disposition to the Company, at the Company's written request. If the Company shall acquire any of the Notes, such acquisition shall not operate as satisfaction of the indebtedness represented by such Notes unless and until the same are delivered to the Trustee for cancellation.

Section 2.09. CUSIP and ISIN Numbers. The Company in issuing the Notes may use "CUSIP" and "ISIN" numbers (if then generally in use), and, if so, the Trustee shall use "CUSIP" and "ISIN" numbers in all notices issued to Holders of the Notes as a convenience to such Holders; *provided* that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Notes or on such notice and that reliance may be placed only on the other identification numbers printed on the Notes. The Company will promptly notify the Trustee in writing of any change in the "CUSIP" or "ISIN" numbers.

Section 2.10. Additional Notes; Purchases. The Company may, without the consent of the Holders of the Notes and notwithstanding Section 2.01, issue additional Notes hereunder ("**Additional Notes**") which shall have substantially identical terms as the Notes, other than with respect to (i) the date of issuance, (ii) the issue price and principal amount, (iii) the initial date from which interest begins to accrue and (iv) if applicable, the existence of "transfer" restrictions pursuant to the Securities Act; *provided*, further, that, in the case of any Additional Note that is a Global Note, no Additional Notes may be issued with the same "CUSIP" or "ISIN" number as other Notes unless it is so permitted in accordance with applicable law and such Additional Notes are fungible with the Notes for U.S. federal tax and securities law purposes. The Notes issued on the Issue Date and any Additional Notes shall be treated as a single class for all purposes under this Indenture. With respect to any Additional Notes, the

Company shall set forth in an Officer's Certificate, a copy of which shall be delivered to the Trustee, and in a supplemental indenture, the following information: (1) the aggregate principal amount of Notes outstanding immediately prior to the issuance of such Additional Notes; (2) the issue price, if any, the aggregate principal amount of such Additional Notes to be authenticated and delivered pursuant to this Indenture and the issue date of such Additional Notes; (3) the certificate number, in the case of an Additional Note that is a Physical Note, (4) the "CUSIP" or "ISIN" number, as applicable, in the case of an Additional Note that is a Global Note; and (5) whether such Additional Notes will be Restricted Securities.

Section 2.11 Purchases. The Company may also from time to time purchase the Notes in open market purchases or negotiated transactions without prior notice to Holders. Any Notes purchased by the Company shall be deemed to be no longer Outstanding under this Indenture.

ARTICLE 3
SATISFACTION AND DISCHARGE

Section 3.01. Satisfaction and Discharge. This Indenture shall upon request of the Company contained in an Officer's Certificate cease to be of further effect, and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging satisfaction and discharge of this Indenture, when (a) (i) the Company delivers to the Trustee all Outstanding Notes (other than Notes replaced pursuant to Section 2.06) for cancellation; or (ii) the Company has irrevocably deposited with the Trustee or delivered to Holders of Notes, as applicable, after the Notes have become due and payable, whether at the Maturity Date, or any Fundamental Change Purchase Date, or upon conversion or otherwise, cash and/or (in the case of conversion) shares of Common Stock (together with cash in lieu of fractional shares), as applicable, sufficient to pay all of the Outstanding Notes and all other sums payable under this Indenture by the Company; and (b) the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture have been complied with. Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 7.06 shall survive such satisfaction and discharge.

Section 3.02. Deposited Monies To Be Held In Trust. Subject to Section 3.03 hereof, all monies deposited with the Trustee pursuant to Section 3.01 hereof shall be held in trust and applied by it to the payment, either directly or through any Paying Agent (including the Company if acting as its own Paying Agent), to the Holders for the payment or repurchase of which such monies have been deposited with the Trustee, of all sums due and to become due thereon for

principal, premium, if any, and interest. All monies deposited with the Trustee pursuant to Section 3.01 hereof (and held by it or any Paying Agent) for the payment of Notes subsequently converted shall be returned to the Company upon request of the Company.

Section 3.03. Return Of Unclaimed Monies. Subject to applicable escheat laws, the Trustee and the Paying Agent shall pay to the Company upon written request any money held by them for the payment of principal of or accrued and unpaid interest on the Notes that remains unclaimed for two years after the date upon which such payment shall have become due. Notwithstanding the foregoing, the Trustee and Paying Agent shall have the right to withhold payment of such money to the Company until the Trustee or Paying Agent at the expense of the Company mails to each Holder, a notice stating that such money shall be repaid to the Company if unclaimed after a date no less than 30 days from the mailing. After payment to the Company by the Trustee or Paying Agent, all liability of the Trustee and the Paying Agent with respect to such money shall cease, and Holders entitled to the money must look to the Company for payment as general creditors, subject to applicable law.

ARTICLE 4
PARTICULAR COVENANTS OF THE COMPANY

Section 4.01. Payment of Principal and Interest. (a) The Company shall promptly make all payments in respect of the Notes on the dates and in the manner provided in the Notes and this Indenture. A payment of principal or interest shall be considered paid on the date it is due if the Paying Agent holds by 10:00 a.m. (New York City time) on that date money or securities, deposited by or on behalf of the Company sufficient to make the payment. The Company shall, to the fullest extent permitted by law, pay interest in immediately available funds on overdue principal amount and interest at the annual rate borne by the Notes compounded semiannually, which interest shall accrue from the date such overdue amount was originally due to the date payment of such amount, including interest thereon, has been made or duly provided for. All such interest shall be payable on demand.

(b) Payment of the principal of and interest, if any, on the Notes shall be made at the office or agency of the Company maintained for that purpose, which shall initially be at the Trustee's Corporate Trust Office, in such coin or currency of the United States of America as at the time of payment is legal tender for payment of public and private debts; *provided*, *however*, that, subject to Section 2.03, the Company may pay principal and interest in respect of any Physical Note by check or wire transfer payable in such money. Notwithstanding the foregoing, so long as the Notes are registered in the name of a Depositary or its nominee, all payments thereon shall be made by wire transfer of immediately available funds to the account of the Depositary or its nominee.

Section 4.02. Corporate Existence. Subject to Article 10 hereof, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence and rights (charter and statutory); *provided*, *however*, that the Company shall not be required to preserve any such right or franchise if the Company determines that the preservation thereof is no longer desirable in the conduct of the business of the Company and that the loss thereof is not disadvantageous in any material respect to the Holders.

Section 4.03. Rule 144A Information Requirement and Reports. (a) At any time the Company is not subject to Sections 13 or 15(d) of the Exchange Act, the Company shall, so long as any of the Notes or any shares of Common Stock issuable upon conversion thereof shall, at such time, constitute "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act, upon written request, provide to any Holder, beneficial owner or prospective purchaser of such Notes or any shares of Common Stock issued upon conversion of such Notes, the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act to facilitate the resale of such Notes or shares of Common Stock pursuant to Rule 144A under the Securities Act.

(b) The Company shall furnish to the Trustee within 15 calendar days after the Company is required to file any documents or reports with the Commission pursuant to Sections 13 or 15(d) of the Exchange Act (giving effect to all applicable grace periods provided under the Exchange Act including that provided by Rule 12b-25 under the Exchange Act) copies of such documents or reports. Any such document or report that the Company files with the Commission through the Commission's EDGAR system shall be deemed furnished to the Trustee for purposes of this Section 4.03(b) at the time such documents are filed or furnished via the Commission's EDGAR system, *provided* that the Trustee shall have no responsibility for determining whether such filing has taken place, nor shall the Trustee have any liability for the timeliness or content of any filing or report hereunder.

Section 4.04. Compliance Certificate. The Company shall deliver to the Trustee, within 120 days after the end of each fiscal year of the Company (beginning with the fiscal year ending December 31, 2019) an Officer's Certificate stating whether or not, to the knowledge of such officer, the Company is in default in the performance and observance of any of the terms, provisions and conditions of this Indenture and, if the Company shall be in default, specifying all such defaults and the nature and status thereof of which they may have knowledge. Within five Business Days of an Officer of the Company coming to have actual knowledge of a Default or Event of Default, regardless of the date, the Company shall deliver an Officer's Certificate to the Trustee specifying such Default or Event of Default and the nature and status thereof.

Section 4.05. Maintenance of Office or Agency. So long as any Notes remain Outstanding, the Company agrees to maintain an office or agency with respect to such Notes and at such other location or locations as may be designated as provided in this Section 4.05, where (i) Notes may be presented for conversion ("**Conversion Agent**"), (ii) Notes may be presented for payment ("**Paying Agent**"), (iii) Notes may be presented as herein above authorized for registration of transfer and exchange, and (iv) notices and demands to or upon the Company in respect of the Notes and this Indenture may be given or served, such designation to continue with respect to such office or agency until the Company shall, by written notice signed by any officer authorized to sign an Officer's Certificate and delivered to the Trustee, designate some other office or agency for such purposes or any of them. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, notices and demands may be made or served at the Corporate Trust Office of the Trustee, and the Company hereby appoints the Trustee as its agent to receive all such presentations, notices and demands. The Company initially appoints the Corporate Trust Office of the Trustee as Conversion Agent and Paying Agent with respect to the Notes.

Section 4.06. Paying Agents. (a) If the Company shall appoint one or more paying agents for the Notes, other than the Trustee, the Company will cause each such paying agent to execute and deliver to the Trustee an instrument in which such agent shall agree with the Trustee, subject to the provisions of this Section 4.06:

(i) that it will hold all sums held by it as such agent for the payment of the principal of (and premium, if any) or interest on the Notes (whether such sums have been paid to it by the Company or by any other obligor of such Notes) in trust for the benefit of the Persons entitled thereto;

(ii) that it will give the Trustee notice of any failure by the Company to make any payment of the principal of (and premium, if any) or interest on the Notes when the same shall be due and payable;

(iii) that it will, at any time during the continuance of any failure referred to in the preceding paragraph (a)(ii) above, upon the written request of the Trustee, forthwith pay to the Trustee all sums so held in trust by such paying agent; and

(iv) that it will perform all other duties of paying agent as set forth in this Indenture.

(b) If the Company shall act as its own paying agent with respect to any Notes, it will on or before each due date of the principal of (and premium, if any) or interest on the Notes, set aside, segregate and hold in trust for the benefit of the Persons entitled thereto a sum sufficient to pay such principal (and premium, if any) or interest so becoming due on Notes until such sums shall be paid to such Persons or otherwise disposed of as herein provided and will promptly notify the Trustee of such action, or any failure to take such action. The Trustee shall have no liability or responsibility for the action or inaction of any Paying Agent (that is not the Trustee).

(c) Notwithstanding anything in this Section 4.06 to the contrary, (i) the agreement to hold sums in trust as provided in this Section 4.06 is subject to the provisions of Section 3.02 and Section 3.03, and (ii) the Company may at any time, for the purpose of obtaining the satisfaction and discharge of this Indenture or for any other purpose, pay, or direct any paying agent to pay, to the Trustee all sums held in trust by the Company or such paying agent, such sums to be held by the Trustee upon the same terms and conditions as those upon which such sums were held by the Company or such paying agent; and, upon such payment by the Company or any paying agent to the Trustee, the Company or such paying agent shall be released from all further liability with respect to such money.

Section 4.07. Appointment to Fill Vacancy in Office of Trustee. The Company, whenever necessary to avoid or fill a vacancy in the office of Trustee, will appoint, in the manner provided in Section 7.10, a Trustee, so that there shall at all times be a Trustee hereunder.

ARTICLE 5
HOLDERS' LISTS AND REPORTS BY THE COMPANY AND THE TRUSTEE

Section 5.01. Company to Furnish Trustee Names and Addresses of Holders. The Company will furnish or cause to be furnished to the Trustee (a) within 10 days after each Regular Record Date, a list, in such form as the Trustee may reasonably require, of the names and addresses of the Holders as of such regular record date, provided that the Company shall not be obligated to furnish or cause to furnish such list at any time that the list shall not differ in any respect from the most recent list furnished to the Trustee by the Company and (b) at such other times as the Trustee may request in writing within 30 days after the receipt by the Company of any such request, a list of similar form and content as of a date not more than 15 days prior to the time such list is furnished; *provided*, *however*, that, in either case, no such list need be furnished for any Notes for which the Trustee shall be the Note Registrar.

Section 5.02. Preservation Of Information; Communications With Holders.

(a) The Trustee shall preserve, in as current a form as is reasonably practicable, all information as to the names and addresses of the Holders of Notes contained in the most recent list furnished to it as provided in Section 5.01 and as to the names and addresses of Holders of Notes received by the Trustee in its capacity as Note Registrar (if acting in such capacity).

(b) The Trustee may destroy any list furnished to it as provided in Section 5.01 upon receipt of a new list so furnished.

(c) The rights of Holders to communicate with other Holders with respect to their rights under this Indenture or under the Notes, and the corresponding rights and duties of the Trustee, shall be as provided by the Trust Indenture Act.

(d) Every Holder, by receiving and holding the same, agrees with the Company and the Trustee that neither the Company nor the Trustee nor any agent of either of them shall be held accountable by reason of any disclosure of information as to names and addresses of Holders made pursuant hereto or otherwise in accordance with the Trust Indenture Act.

Section 5.03. Reports by the Trustee.

(a) On or before July 1 in each year, commencing July 1, 2020, in which any of the Notes are Outstanding, the Trustee shall transmit by mail, first class postage prepaid or in accordance with Applicable Procedures, to the Holders, as their names and addresses appear upon the Note Register, a brief report dated as of the preceding May 1, if and to the extent required under Section 313(a) of the Trust Indenture Act.

(b) The Trustee shall comply with Section 313(b) and 313(c) of the Trust Indenture Act.

(c) A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with the Company, with each securities exchange upon which any Notes are listed (if so listed) and also with the Securities and Exchange Commission. The Company agrees to notify the Trustee when any Notes become listed on any securities exchange.

ARTICLE 6
DEFAULT AND REMEDIES

Section 6.01. Events of Default. An "**Event of Default**" shall occur when any of the following occurs:

(a) the Company fails to pay when due the principal of or premium, if any, on any of the Notes at the Maturity Date, upon repurchase, acceleration or otherwise; or

(b) the Company fails to pay an installment of interest on any of the Notes for 30 days after the date when due; or

(c) the Company fails to deliver when due all shares of Common Stock, together with cash instead of fractional shares, and/or other property, if applicable, deliverable upon conversion of the Notes pursuant to Article 13, which failure continues for 10 days; or

(d) the Company fails to perform or observe any other term, covenant or agreement contained in the Notes or this Indenture for a period of 60 days after written notice of such failure, requiring the Company to remedy the same, shall have been given to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in aggregate principal amount of the then-Outstanding Notes; or

(e) (i) the Company fails to make any payment by the end of the applicable grace period, if any, after the maturity of any indebtedness for borrowed money in an amount in excess of $25,000,000 or (ii) there is an acceleration of any indebtedness for borrowed money in an amount in excess of $25,000,000 because of a default with respect to such indebtedness without such indebtedness having been discharged or such acceleration having been cured, waived, rescinded or annulled, in the case of either (i) or (ii) above, for a period of 30 days after written notice to the Company by the Trustee or to the Company and the Trustee by Holders of at least 25% in aggregate principal amount of the then-Outstanding Notes; or

(f) the Company fails to provide a Fundamental Change Company Notice in accordance with Section 15.01; or

(g) a court having jurisdiction enters a decree or order under any Bankruptcy Law that: (i) for relief against the Company in an involuntary case or proceeding; or adjudicates the Company bankrupt or insolvent; or (ii) appoints a Receiver of the Company or of any substantial part of its property; or (iii) orders the winding up or liquidation of the Company, and (iv) the decree or order remains unstayed and in effect for a period of 90 days; or

(h) the Company pursuant to or within the meaning of any Bankruptcy Law:

(i) commences as a debtor a voluntary case or proceeding;

(ii) consents to the entry of an order for relief against it in an involuntary case or proceeding or the commencement of any case against it;

(iii) consents to the appointment of a Receiver of it or for all or substantially all of its property;

(iv) makes a general assignment for the benefit of its creditors;

(v) files a petition in bankruptcy or answer or consent seeking reorganization or relief; or

(vi) consents to the filing of such a petition or the appointment of or taking possession by a Receiver.

The term "**Bankruptcy Law**" means Title 11 of the United States Code (or any successor thereto) or any similar federal or state law for the relief of debtors. The term "**Receiver**" means any receiver, trustee, assignee, liquidator, sequestrator or similar official under any Bankruptcy Law.

Section 6.02. Acceleration of Maturity; Rescission and Annulment. If an Event of Default with respect to Outstanding Notes (other than an Event of Default specified Section 6.01(g) or 6.01(h) hereof in respect of the Company) occurs and is continuing, the Trustee or the Holders of at least 25% in aggregate principal amount of the then-Outstanding Notes, by written notice to the Trustee, may declare the Notes due and payable at their principal amount plus any accrued and unpaid interest, and thereupon the Trustee may, at its discretion, proceed to protect and enforce the rights of the Holders by the appropriate judicial proceedings. Such declaration may be rescinded and annulled with the written consent of the Holders of a majority in aggregate principal amount of the then-Outstanding Notes, subject to the provisions of this Indenture.

If an Event of Default specified in Section 6.01(g) or 6.01(h) hereof occurs and is continuing, then all unpaid principal of and accrued and unpaid interest on the Outstanding Notes shall become immediately due and payable, without any declaration or other act on the part of the Trustee or any Holder.

Notwithstanding the foregoing, at the election of the Company, the sole remedy for an Event of Default specified in Section 6.01(d) relating to the failure by the Company to comply with its reporting obligations under Section 4.03 and for any failure to comply with the requirements of Section 314(a)(1) of the Trust Indenture Act, shall (i) for the first 90 days after the occurrence of such an Event of Default, consist exclusively of the right to receive special interest on Notes (the "**Special Interest**") at an annual rate equal to 0.25% of the principal amount of the Outstanding Notes, and (ii) for the next 90 days after the expiration of such 90 day period, consist exclusively of the right to receive Special Interest on the Notes at an annual rate equal to 0.50% of the principal amount of the Outstanding Notes.

The Special Interest shall be paid semi-annually in arrears, with the first semi-annual payment due on the first Interest Payment Date following the date on which the Special Interest began to accrue on any Notes. The Special Interest will accrue on all Outstanding Notes from and including the date on which an Event of Default relating to a failure to comply with the reporting obligations under Section 4.03 or a failure to comply with the requirements of Section 314(a)(1) of the Trust Indenture Act first occurs to but not including the 180th day thereafter (or such earlier date on which the Event of Default relating to such reporting obligations shall have been cured or waived). On such 180th day (or earlier, if such Event of Default is cured or waived pursuant to Section 6.04 prior to such 180th day), such Special Interest will cease to accrue and, if such Event of Default relating to such reporting obligations has not been cured or waived prior to such 180th day the Notes shall be subject to acceleration as provided above in this Section 6.02. The provisions described in this paragraph shall not affect the rights of the Holders in the event of the occurrence of any other Event of Default. In the event the Company does not elect to pay Special Interest upon an Event of Default in accordance with this paragraph, the Notes will be subject to acceleration as provided in this Section 6.02. If the Company elects to pay Special Interest as the sole remedy for an Event of Default specified in Section 6.01(d) relating to the failure by the Company to comply with its obligations under Section 4.03 or any failure to comply with the requirements of Section 314(a)(1) of the Trust Indenture Act, the Company shall notify in writing, in the manner provided for in Section 17.03, the Holders and the Trustee of such election at any time on or before the close of business on the date on which such Event of Default first occurs.

The Holders of a majority in aggregate principal amount of the then-Outstanding Notes by written notice to the Trustee may rescind and annul an acceleration and its consequences if:

(1) all existing Events of Default, other than the nonpayment of principal (including the Fundamental Change Purchase Price, if applicable) of or interest on the Notes which has become due solely because of the acceleration, have been remedied, cured or waived, and

(2) the rescission would not conflict with any judgment or decree of a court of competent jurisdiction;

provided, *however*, that in the event such declaration of acceleration has been made based on the existence of an Event of Default under Section 6.01(e) hereof and such Event of Default has been remedied, cured or waived in accordance with Section 6.01(e) hereof, then, without any further action by the

Holders, such declaration of acceleration shall be rescinded automatically and the consequences of such declaration shall be annulled. No such rescission or annulment shall affect any subsequent Default or impair any right consequent thereon.

Section 6.03. Other Remedies. If an Event of Default with respect to Outstanding Notes occurs and is continuing, the Trustee may pursue any available remedy by proceeding at law or in equity to collect the payment of principal of or interest on the Notes or to enforce the performance of any provision of the Notes. The Trustee may maintain a proceeding even if it does not possess any of the securities or does not produce any of them in the proceeding.

Section 6.04. Waiver of Past Defaults. The Holders, either (a) through the written consent of not less than a majority in aggregate principal amount of the Notes then Outstanding or (b) by the adoption of a resolution, at a meeting of Holders of the Notes then Outstanding at which a quorum is present, by the Holders of at least a majority in aggregate principal amount of the Outstanding Notes represented at such meeting, may, on behalf of the Holders of all of the Notes, waive an existing Default or Event of Default, except a Default or Event of Default:

(1) in the payment of the principal of or premium, if any, or interest on any Note;

(2) in respect of the right to convert any Note in accordance with Article 13; or

(3) in respect of the covenants or provisions hereof which, under Section 9.02 hereof, cannot be modified or amended without the consent of the Holder of each Outstanding Note affected.

Upon any such waiver, such Default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured, for every purpose of this Indenture; *provided*, *however*, that no such waiver shall extend to any subsequent or other Default or impair any right consequent thereon.

Section 6.05. Control by Majority. The Holders, either (a) through the written consent of not less than a majority in aggregate principal amount of the Notes then Outstanding, or (b) by the adoption of a resolution, at a meeting of Holders of the Notes then Outstanding at which a quorum is present, by the Holders of at least a majority in aggregate principal amount of the Outstanding Notes represented at such meeting, shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee, subject to the

provisions of this Indenture. However, the Trustee may refuse to follow any direction that:

(a) conflicts with any law or with this Indenture,

(b) the Trustee determines may be unduly prejudicial to the rights of the Holders not joining therein, or

(c) in the Trustee's reasonable judgment may expose the Trustee to personal liability.

The Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction.

Section 6.06. Limitation On Suit. No Holder of any Note may pursue any remedy with respect to this Indenture or the Notes (including instituting any proceeding, judicial or otherwise, with respect to this Indenture or for the appointment of a receiver or trustee), except, in the case of a Default or Event of Default in the payment of the principal of or premium on, if any, or interest on the Notes unless:

(a) such Holder has previously given written notice to the Trustee of an Event of Default that is continuing;

(b) the Holders of at least 25% in aggregate principal amount of the Notes then Outstanding shall have made a written request to the Trustee, and shall have offered to the Trustee indemnity satisfactory to the Trustee, to pursue the remedy;

(c) no direction inconsistent with such written request has been given to the Trustee by the Holders of a majority in aggregate principal amount of the Notes then Outstanding (or such amount as shall have acted at a meeting pursuant to the provisions of this Indenture);

(d) such Holder or Holders have offered the Trustee security or indemnity satisfactory to the Trustee against any costs, liabilities or expenses incurred in complying with such request; and

(e) the Trustee has failed to comply with the request for 60 days after the receipt of such request and an offer of indemnity.

A Holder of Notes may not use this Indenture to prejudice the rights of another Holder of Notes or to obtain a preference or priority over another Holder of Notes (it being understood that the Trustee does not have an affirmative duty to ascertain whether or not such actions or forbearances are unduly prejudicial to such Holders).

Section 6.07. Unconditional Rights of Holders to Receive Payment and to Convert. In addition to the other rights and remedies set forth in this Article 6, the following shall apply with respect to the Notes under this Indenture.

Notwithstanding any other provision in this Indenture, the Holder of any Note shall have the right, which is absolute and unconditional, to receive payment of the principal amount (including the Fundamental Change Purchase Price, if applicable) and interest in respect of the Notes held by such Holder, on or after the respective due dates expressed in the Notes and this Indenture, and to convert such Note in accordance with Article 13, and to bring suit for the enforcement of any such payment on or after such respective due dates or for the right to convert in accordance with Article 13, and shall not be impaired or affected without the consent of such Holder.

Section 6.08. Collection of Indebtedness and Suits For Enforcement By the Trustee. The Company covenants that if an Event of Default occurs under Section 6.01(a) or Section 6.01(b), then the Company shall, upon demand of the Trustee, pay to it, for the benefit of the Holders of such Notes, the whole amount then due and payable (as expressed therein or as a result of any acceleration effected pursuant to Section 6.02 hereof) on such Notes for principal (including the Fundamental Change Purchase Price, if applicable) and premium, if any, and interest and, to the extent that payment of such interest shall be legally enforceable, interest on any overdue principal (including the Fundamental Change Purchase Price, if applicable) and premium, if any, and on any overdue interest, in each case at the rate borne by the Notes from the required payment date, and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

If the Company fails to pay such amounts forthwith upon such demand, the Trustee, in its own name and as trustee of an express trust, may institute a judicial proceeding for the collection of the sums so due and unpaid, may prosecute such proceeding to judgment or final decree and may enforce the same against the Company and collect the moneys adjudged or decreed to be payable in the manner provided by law out of the property of the Company, wherever situated.

If an Event of Default occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders of Notes by such appropriate judicial proceedings as the Trustee shall deem most effectual to protect and enforce any such rights, whether for the specific enforcement of any covenant or agreement in this Indenture or in aid of the exercise of any power granted herein, or to enforce any other proper remedy.

Section 6.09. Trustee May File Proofs of Claim. In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to the Company or the property of the Company or its creditors, the Trustee (irrespective of whether the principal of the Notes shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand on the Company for the payment of overdue principal or interest) shall be entitled and empowered, by intervention in such proceeding or otherwise, (1) to file and prove a claim for the whole amount of principal (including the Fundamental Change Purchase Price, if applicable) and premium, if any, and interest owing and unpaid in respect of the Notes and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due to the Trustee hereunder) and of the Holders of Notes allowed in such judicial proceeding, and (2) to collect and receive any moneys or other property payable or deliverable on any such claim and to distribute the same; and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceedings is hereby authorized by each Holder of Notes to make such payments to the Trustee and, in the event that the Trustee shall consent to the making of such payments directly to the Holders of Notes, to pay to the Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel and any other amounts due the Trustee under this Indenture.

Nothing contained herein shall be deemed to authorize the Trustee to authorize or consent to or accept, or adopt on behalf of any Holder of a Note, any plan of reorganization, arrangement, adjustment or composition affecting the Notes or the rights of any Holder thereof or to authorize the Trustee to vote in respect of the claim of any Holder of a Note in any such proceeding.

Section 6.10. Restoration of Rights and Remedies. If the Trustee or any Holder of a Note has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case, subject to any determination in such proceeding, the Company, the Trustee and the Holders of Notes shall be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding had been instituted.

Section 6.11. Rights and Remedies Cumulative. Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Notes in Section 2.05(d), no right or remedy conferred in this Indenture upon or reserved to the Trustee or to the Holders of Notes is intended to be

exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

Section 6.12. Delay or Omission Not Waiver. No delay or omission of the Trustee or of any Holder of any Note to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or any acquiescence therein. Every right and remedy given by this Article or by law to the Trustee or to the Holders of Notes may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or by the Holders of Notes, as the case may be.

Section 6.13. Application of Money Collected. Any money and property collected by the Trustee pursuant to this Article 6 shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such money and property on account of principal (including the Fundamental Change Purchase Price, if applicable) or premium, if any, or interest, upon presentation of the Notes and the notation thereon of the payment if only partially paid and upon surrender thereof if fully paid:

FIRST: To the payment of all amounts due the Trustee, including its agents and counsel;

SECOND: To the payment of the amounts then due and unpaid for principal (including the Fundamental Change Purchase Price, if applicable) of and premium, if any, and interest on the Notes and coupons in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind, according to the amounts due and payable on such Notes for principal (including the Fundamental Change Purchase Price, if applicable) and premium, if any, and interest, respectively; and

THIRD: Any remaining amounts shall be repaid to the Company.

Section 6.14. Undertaking For Costs. All parties to this Indenture agree, and each Holder of any Note by such Holder’s acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken, suffered or omitted by it as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys’ fees, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but

the provisions of this Section 6.14 shall not apply to any suit instituted by the Company, to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in aggregate principal amount of the Notes then Outstanding, or to any suit instituted by any Holder of any Note for the enforcement of the payment of the principal (including the Fundamental Change Purchase Price, if applicable) of or premium, if any, or interest on any Note on or after the stated maturity expressed in such Note (or, in the case of exercise of a repurchase right in connection with a Fundamental Change, on or after the Fundamental Change Purchase Date) or for the enforcement of the right to convert any Note in accordance with Article 13.

Section 6.15. Waiver of Stay or Extension Laws. The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim to take the benefit or advantage of, any stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

Section 6.16. Notice of Default. If any Default or any Event of Default occurs and is continuing and if such Default or Event of Default is actually known to a Responsible Officer of the Trustee, the Trustee shall within 90 days of the occurrence of a Default or Event of Default, mail to each Holder notice of all uncured Defaults or Events of Default known to the Trustee, unless such Default or Event of Default has been cured; *provided*, *however*, that, except in the case of a default in the payment of the principal of (including upon repurchase) or premium, if any, or interest on any Note, the Trustee shall be protected in withholding such notice if the Trustee in good faith determines that the withholding of such notice is in the best interest of such Holders.

ARTICLE 7
CONCERNING THE TRUSTEE

Section 7.01. Certain Duties and Responsibilities of Trustee.

(a) The Trustee, prior to the occurrence of an Event of Default and after the curing of all Events of Default that may have occurred, shall undertake to perform with respect to the Notes such duties and only such duties as are specifically set forth in this Indenture, and no implied covenants shall be read into this Indenture against the Trustee. In case an Event of Default has occurred (that has not been cured or waived), the Trustee shall exercise with respect to the Notes

such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise, as a prudent person would exercise or use under the circumstances in the conduct of his or her own affairs.

(b) No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that:

(i) prior to the occurrence of an Event of Default and after the curing or waiving of all such Events of Default that may have occurred:

(A) the duties and obligations of the Trustee shall with respect to the Notes be determined solely by the express provisions of this Indenture, and the Trustee shall not be liable with respect to the Notes except for the performance of such duties and obligations as are specifically set forth in this Indenture and subject to the terms of this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(B) in the absence of negligence or willful misconduct on the part of the Trustee, the Trustee may with respect to the Notes conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions that by any provision hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture;

(ii) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer or Responsible Officers of the Trustee, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;

(iii) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of not less than a majority in principal amount of the Notes at the time Outstanding relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee under this Indenture with respect to the Notes; and

(iv) None of the provisions contained in this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur

personal financial liability in the performance of any of its duties or in the exercise of any of its rights or powers if there is reasonable ground for believing that the repayment of such funds or liability is not reasonably assured to it under the terms of this Indenture or adequate indemnity against such risk is not reasonably assured to it.

Section 7.02. Certain Rights of Trustee. Except as otherwise provided in Section 7.01:

(a) the Trustee may rely conclusively and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, approval, bond, security or other paper or document believed by it to be genuine and to have been signed or presented by the proper party or parties;

(b) any request, direction, order or demand of the Company mentioned herein shall be sufficiently evidenced by a Board Resolution or an instrument signed in the name of the Company by any authorized officer of the Company (unless other evidence in respect thereof is specifically prescribed herein);

(c) the Trustee may consult with counsel and the advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken or suffered or omitted hereunder in good faith and in reliance thereon;

(d) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request, order or direction of any of the Holders pursuant to the provisions of this Indenture, unless such Holders shall have offered the Trustee security or indemnity satisfactory to the Trustee against loss, costs, expenses and liabilities that may be incurred therein or thereby;

(e) the Trustee shall not be liable for any action taken or omitted to be taken by it in good faith and believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture;

(f) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, approval, bond, security, or other papers or documents, unless requested in writing so to do by the Holders of not less than a majority in principal amount of the Outstanding Notes affected thereby (determined as provided in Section 8.04); *provided, however*, that if the payment within a reasonable time to the Trustee of the costs, expenses or liabilities likely to be incurred by it in the making of such investigation is, in the opinion of the Trustee, not reasonably assured to the Trustee by the security afforded to it by the terms of this Indenture, the Trustee may require indemnity satisfactory to it against such costs, expenses or liabilities as a condition to so proceeding. The reasonable expense of every such examination shall be paid by the Company or, if paid by the Trustee, shall be repaid by the Company upon demand;

(g) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents, attorneys or other professionals or consultants and may retain such parties in furtherance of its administration hereunder and the Trustee shall not be responsible for any misconduct or negligence on the part of any such agent, attorney or other professional appointed with due care by it hereunder;

(h) in no event shall the Trustee be responsible or liable for special, indirect, punitive or consequential loss or damage of any kind whatsoever (including, but not limited to, loss of profit) irrespective of whether the Trustee has been advised of the likelihood of such loss or damage and regardless of the form of action;

(i) the rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder, and each agent, custodian and other Person employed to act hereunder;

(j) the Trustee shall not be required to give any bond or surety in respect of the performance of its powers and duties hereunder;

(k) the Trustee may request that the Company deliver a certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture;

(l) under no circumstances shall the Trustee be liable in its individual capacity for the obligations evidenced by the Notes.

(m) The permissive right of the Trustee to do things enumerated in the documents shall not be construed as a duty.

In addition, the Trustee shall not be deemed to have knowledge of any Default or Event of Default except (1) any Event of Default occurring pursuant to Section 6.01(a) and 6.01(b)) or (2) any Default or Event of Default of which the Trustee shall have received written notification in the manner set forth in this Indenture or a Responsible Officer of the Trustee shall have obtained actual knowledge. Delivery of reports, information and documents to the Trustee under Section 4.03 is for informational purposes only and the information and the Trustee's receipt of the foregoing shall not constitute constructive notice of any information contained therein, or determinable from information contained therein including the Company's compliance with any of their covenants thereunder (as to which the Trustee is entitled to rely conclusively on an Officer's Certificate).

Section 7.03. Trustee Not Responsible for Recitals or Issuance or Notes.

(a) The recitals contained herein and in the Notes shall be taken as the statements of the Company, and the Trustee assumes no responsibility for the correctness of the same.

(b) The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Notes;

(c) The Trustee shall not be accountable for the use or application by the Company of any of the Notes or of the proceeds of such Notes, or for the use or application of any moneys paid over by the Trustee in accordance with any provision of this Indenture, or for the use or application of any moneys received by any Paying Agent other than the Trustee, acting in such capacity.

Section 7.04. May Hold Notes. The Trustee or any Paying Agent or Note Registrar, in its individual or any other capacity, may become the owner or pledgee of Notes with the same rights it would have if it were not Trustee, Paying Agent or Note Registrar.

Section 7.05. Moneys Held in Trust. Subject to the provisions of Section 3.03, all moneys received by the Trustee shall, until used or applied as herein provided, be held in trust for the purposes for which they were received, but need not be segregated from other funds except to the extent required by law. The Trustee shall be under no liability for interest on any moneys received by it hereunder except such as it may agree to in writing with the Company to pay thereon.

Section 7.06. Compensation and Reimbursement.

(a) The Company covenants and agrees to pay to the Trustee, and the Trustee shall receive such compensation (which shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust) as the Company and the Trustee may from time to time agree in writing, for all services rendered by it in the execution of the trusts hereby created and in the exercise and performance of any of the powers and duties hereunder of the Trustee, and, except as otherwise expressly provided herein, the Company will pay or reimburse the Trustee upon its request for all reasonable expenses, disbursements and advances incurred or made by the Trustee in accordance with any of the provisions of this Indenture (including the reasonable compensation and the expenses and disbursements of its counsel and of all Persons not regularly in its employ), except any such expense, disbursement or advance as may arise from its negligence or willful misconduct and except as the Company and Trustee may from time to time agree in writing. The Company also covenants to indemnify the Trustee (and its officers, agents, directors and employees) for, and to hold it harmless against, any loss, liability or expense incurred without

negligence or willful misconduct on the part of the Trustee and arising out of or in connection with the acceptance or administration of this trust, including the reasonable costs and expenses of defending itself against any claim of liability in the premises.

(b) The obligations of the Company under this Section 7.06 to compensate and indemnify the Trustee and to pay or reimburse the Trustee for reasonable expenses, disbursements and advances shall constitute additional indebtedness hereunder. Such additional indebtedness shall be secured by a lien prior to that of the Notes upon all property and funds held or collected by the Trustee as such, except funds held in trust for the benefit of the Holders.

(c) The Company covenants and agrees to indemnify the Trustee for, and hold it harmless from and against, any loss, liability, damages, claims, costs or expense including taxes (other than taxes based upon, measured by or determined by the income of the Trustee) reasonably incurred by it arising out of or in connection with the acceptance or administration of the trust or trusts hereunder or the performance of its duties hereunder, including the reasonable costs and expenses of defending itself against any claim (whether asserted by the Company, or any Holder or any other Person) or liability in connection with the exercise or performance of any of its powers or duties hereunder or in connection with enforcing the provisions of this Section, except to the extent any such loss, liability or expense may be attributable to its negligence or willful misconductas determined by a final non-appealable decision of a court of competent jurisdiction.

(d) In addition and without prejudice to the rights provided to the Trustee under any of the provisions of this Indenture, when the Trustee incurs expenses or renders services in connection with an Event of Default specified in Section 6.01(g) or Section 6.01(h), the expenses (including the reasonable charges and expenses of its counsel) and the compensation for the services are intended to constitute expenses of administration under any applicable Federal and State bankruptcy, insolvency or other similar law.

(e) The Company's obligations under this Section 7.06 and the lien referred to in Section 7.06(b) shall survive the resignation or removal of the Trustee, the discharge of the Company's obligations under Article Eleven of this Indenture and/or the termination of this Indenture.

Section 7.07. Reliance on Officer's Certificate and Opinions. Except as otherwise provided in Section 7.01, whenever in the administration of the provisions of this Indenture the Trustee shall deem it reasonably necessary or desirable that a matter be proved or established prior to taking or suffering or omitting to take any action hereunder, such matter (unless other evidence in respect thereof be herein specifically prescribed) may, in the absence of

negligence or willful misconduct on the part of the Trustee, be deemed to be conclusively proved and established by an Officer's Certificate and Opinion of Counsel delivered to the Trustee and such certificate or opinion, in the absence of negligence or willful misconduct on the part of the Trustee, shall be full warrant to the Trustee for any action taken, suffered or omitted to be taken by it under the provisions of this Indenture upon the faith thereof.

Section 7.08. Disqualification; Conflicting Interests. If the Trustee has or shall acquire any "conflicting interest" within the meaning of Section 310(b) of the Trust Indenture Act, the Trustee and the Company shall in all respects comply with the provisions of Section 310(b) of the Trust Indenture Act.

Section 7.09. Corporate Trustee Required; Eligibility. There shall at all times be a Trustee with respect to the Notes issued hereunder which shall at all times be a corporation organized and doing business under the laws of the United States of America or any state or territory thereof or of the District of Columbia, or a corporation or other Person permitted to act as trustee by the Securities and Exchange Commission, authorized under such laws to exercise corporate trust powers, having a combined capital and surplus of at least fifty million U.S. dollars ($50,000,000), and subject to supervision or examination by federal, state, territorial, or District of Columbia authority.

If such corporation or other Person publishes reports of condition at least annually, pursuant to law or to the requirements of the aforesaid supervising or examining authority, then for the purposes of this Section 7.09, the combined capital and surplus of such corporation or other Person shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. The Company may not, nor may any Person directly or indirectly controlling, controlled by, or under common control with the Company, serve as Trustee. In case at any time the Trustee shall cease to be eligible in accordance with the provisions of this Section 7.09, the Trustee shall resign promptly in the manner and with the effect specified in Section 7.10.

Section 7.10. Resignation and Removal; Appointment of Successor.

(a) The Trustee or any successor hereafter appointed may at any time resign with respect to the Notes by giving written notice thereof to the Company. Upon receiving such notice of resignation, the Company shall promptly appoint a successor trustee with respect to the Notes by written instrument, in duplicate, executed by order of the Board of Directors, one copy of which instrument shall be delivered to the resigning Trustee and one copy to the successor trustee. If no successor trustee shall have been so appointed and have accepted appointment within 30 days after the mailing of such notice of resignation, the resigning Trustee, at the expense of the Company, may petition any court of competent jurisdiction for the appointment of a successor trustee with respect to the Notes, or

any Holder who has been a bona fide Holder of Notes for at least six months may on behalf of himself and all others similarly situated, petition any such court for the appointment of a successor trustee. Such court may thereupon after such notice, if any, as it may deem proper and prescribe, appoint a successor trustee.

(b) In case at any time any one of the following shall occur:

(i) the Trustee shall fail to comply with the provisions of Section 7.08 after written request therefor by the Company or by any Holder who has been a bona fide Holder of Notes for at least six months;

(ii) the Trustee shall cease to be eligible in accordance with the provisions of Section 7.09 and shall fail to resign after written request therefor by the Company or by any such Holder; or

(iii) the Trustee shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or commence a voluntary bankruptcy proceeding, or a receiver of the Trustee or of its property shall be appointed or consented to, or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation,

then, in any such case, the Company may remove the Trustee with respect to the Notes and appoint a successor trustee by written instrument, in duplicate, executed by order of the Board of Directors, one copy of which instrument shall be delivered to the Trustee so removed and one copy to the successor trustee, or any Holder who has been a bona fide Holder of Notes for at least six months may, on behalf of that Holder and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor trustee. Such court may thereupon after such notice, if any, as it may deem proper and prescribe, remove the Trustee and appoint a successor trustee.

(c) The Holders of a majority in aggregate principal amount of the Notes at the time Outstanding may at any time remove the Trustee by so notifying the Trustee and the Company in writing and may appoint a successor Trustee with the consent of the Company.

(d) Any resignation or removal of the Trustee and appointment of a successor trustee with respect to the Notes pursuant to any of the provisions of this Section 7.10 shall become effective upon acceptance of appointment by the successor trustee as provided in Section 7.11.

Section 7.11. Acceptance of Appointment By Successor.

(a) In case of the appointment hereunder of a successor trustee with respect to all Notes, every such successor trustee so appointed shall execute,

acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on the request of the Company or the successor trustee, such retiring Trustee shall, upon payment of its charges, execute and deliver an instrument transferring to such successor trustee all the rights, powers, and trusts of the retiring Trustee and shall duly assign, transfer and deliver to such successor trustee all property and money held by such retiring Trustee hereunder. The trustee shall have no liability or responsibility for the action or inaction of any successor Trustee.

(b) In case of the appointment hereunder of a successor trustee with respect to some, but not all of the Notes, the Company, the retiring Trustee and each successor trustee with respect to such Notes shall execute and deliver an indenture supplemental hereto wherein each successor trustee shall accept such appointment and which (i) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Notes to which the appointment of such successor trustee relates, (ii) shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Notes as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee, and (iii) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust, that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or trusts hereunder administered by any other such Trustee and that no Trustee shall be responsible for any act or failure to act on the part of any other Trustee hereunder; and upon the execution and delivery of such supplemental indenture the resignation or removal of the retiring Trustee shall become effective to the extent provided therein, such retiring Trustee shall with respect to the Notes to which the appointment of such successor trustee relates have no further responsibility for the exercise of rights and powers or for the performance of the duties and obligations vested in the Trustee under this Indenture, and each such successor trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Notes to which the appointment of such successor trustee relates; but, on request of the Company or any successor trustee, such retiring Trustee shall duly assign, transfer and deliver to such successor trustee, to the extent contemplated by such supplemental indenture, the property and money held by such retiring Trustee hereunder with respect to the Notes to which the appointment of such successor trustee relates.

(c) Upon request of any such successor trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor trustee all such rights, powers and trusts referred to in paragraph (a) or (b) of this Section 7.11, as the case may be.

(d) No successor trustee shall accept its appointment unless at the time of such acceptance such successor trustee shall be qualified and eligible under this Article 7.

(e) Upon acceptance of appointment by a successor trustee as provided in this Section 7.11, the Company shall transmit notice of the succession of such trustee hereunder by mail, first class postage prepaid or in accordance with the Applicable Procedures, to the Holders, as their names and addresses appear upon the Note Register. If the Company fails to transmit such notice within ten days after acceptance of appointment by the successor trustee, the successor trustee shall cause such notice to be transmitted at the expense of the Company.

Section 7.12. Merger, Conversion, Consolidation or Succession to Business. Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder, provided that such corporation shall be qualified under the provisions of Section 7.08 and eligible under the provisions of Section 7.09, without the execution or filing of any paper or any further act on the part of any of the parties hereto, anything herein to the contrary notwithstanding. In case any Notes shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Notes so authenticated with the same effect as if such successor Trustee had itself authenticated such Notes.

Section 7.13. Preferential Collection of Claims Against the Company. The Trustee shall comply with Section 311(a) of the Trust Indenture Act, excluding any creditor relationship described in Section 311(b) of the Trust Indenture Act. A Trustee who has resigned or been removed shall be subject to Section 311(a) of the Trust Indenture Act to the extent included therein.

ARTICLE 8
CONCERNING THE HOLDERS

Section 8.01. Evidence of Action by Holders. Whenever in this Indenture it is provided that the Holders of a majority or specified percentage in aggregate principal amount of the Notes may take any action (including the making of any

demand or request, the giving of any notice, consent or waiver or the taking of any other action), the fact that at the time of taking any such action the holders of such majority or specified percentage of such Notes have joined therein may be evidenced by any instrument or any number of instruments of similar tenor executed by such Holders of such Notes in person or by agent or proxy appointed in writing.

If the Company shall solicit from the Holders any request, demand, authorization, direction, notice, consent, waiver or other action, the Company may, at its option, as evidenced by an Officer's Certificate, fix in advance a record date for such Notes for the determination of Holders entitled to give such request, demand, authorization, direction, notice, consent, waiver or other action, but the Company shall have no obligation to do so. If such a record date is fixed, such request, demand, authorization, direction, notice, consent, waiver or other action may be given before or after the record date, but only the Holders of record at the close of business on the record date shall be deemed to be Holders for the purposes of determining whether Holders of the requisite proportion of Outstanding Notes have authorized or agreed or consented to such request, demand, authorization, direction, notice, consent, waiver or other action, and for that purpose the Outstanding Notes shall be computed as of the record date; *provided*, *however*, that no such authorization, agreement or consent by such Holders on the record date shall be deemed effective unless it shall become effective pursuant to the provisions of this Indenture not later than six months after the record date.

Section 8.02. Proof of Execution by Holders. Subject to the provisions of Section 7.01, proof of the execution of any instrument by a Holder (such proof will not require notarization) or his agent or proxy and proof of the holding by any Person of any of the Notes shall be sufficient if made in the following manner:

(a) The fact and date of the execution by any such Person of any instrument may be proved in any reasonable manner acceptable to the Trustee.

(b) The ownership of Notes shall be proved by the Note Register or by a certificate of the Note Registrar thereof.

The Trustee may require such additional proof of any matter referred to in this Section 8.02 as it shall deem necessary.

Section 8.03. Who May be Deemed Owners. Prior to the due presentment for registration of transfer of any Note, the Company, the Trustee, any paying agent and any Note Registrar may deem and treat the Person in whose name such Note shall be registered upon the books of the Company as the absolute owner of such Note (whether or not such Note shall be overdue and notwithstanding any

notice of ownership or writing thereon made by anyone other than the Note Registrar) for the purpose of receiving payment of or on account of the principal of, premium, if any, and (subject to Section 2.03) interest on such Note and for all other purposes; and neither the Company nor the Trustee nor any paying agent nor any Note Registrar shall be affected by any notice to the contrary.

Section 8.04. Certain Notes Owned by Company Disregarded. In determining whether the Holders of the requisite aggregate principal amount of Notes have concurred in any direction, consent or waiver under this Indenture, the Notes that are owned by the Company or any other obligor on the Notes or by any Affiliate of the Company or any other obligor on the Notes shall be disregarded and deemed not to be Outstanding for the purpose of any such determination, except that for the purpose of determining whether the Trustee shall be protected in relying on any such direction, consent or waiver, only Notes that the Trustee actually knows are so owned shall be so disregarded. The Notes so owned that have been pledged in good faith may be regarded as Outstanding for the purposes of this Section 8.04, if the pledgee shall establish to the satisfaction of the Trustee the pledgee's right so to act with respect to such Notes and that the pledgee is not a Person directly or indirectly controlling or controlled by or under direct or indirect common control with the Company or any such other obligor. In case of a dispute as to such right, any decision by the Trustee taken upon the advice of counsel shall be full protection to the Trustee.

Section 8.05. Actions Binding on Future Holders. At any time prior to (but not after) the evidencing to the Trustee, as provided in Section 8.01, of the taking of any action by the Holders of the majority or percentage in aggregate principal amount of the Notes specified in this Indenture in connection with such action, any Holder of a Note that is shown by the evidence to be included in the Notes the Holders of which have consented to such action may, by filing written notice with the Trustee, and upon proof of holding as provided in Section 8.02, revoke such action so far as concerns such Note. Except as aforesaid any such action taken by the Holder of any Note shall be conclusive and binding upon such Holder and upon all future Holders and owners of such Note, and of any Note issued in exchange therefor, on registration of transfer thereof or in place thereof, irrespective of whether or not any notation in regard thereto is made upon such Note. Any action taken by the Holders of the majority or percentage in aggregate principal amount of the Notes specified in this Indenture in connection with such action shall be conclusively binding upon the Company, the Trustee and the Holders.

ARTICLE 9
AMENDMENTS; SUPPLEMENTS AND WAIVERS

Section 9.01. Without Consent of Holders. The Company and the Trustee may amend or supplement this Indenture or the Notes without notice to or consent of any Holder of a Note for any of the following purposes:

(a) to add to the covenants of the Company for the benefit of the Holders of Notes;

(b) to surrender any right or power herein conferred upon the Company;

(c) to make provision with respect to the conversion rights of Holders of Notes pursuant to Section 13.10 hereof;

(d) to provide for the assumption of the Company's obligations to the Holders of Notes in the case of a merger, consolidation, conveyance, transfer or lease pursuant to Article 10 hereof;

(e) to increase the Conversion Rate; *provided, however*, that such increase in the Conversion Rate shall not adversely affect the interests of the Holders of Notes in any material respect;

(f) to comply with the requirements of the Commission in order to effect or maintain the qualification of this Indenture under the Trust Indenture Act;

(g) to cure any ambiguity, correct or supplement any provision herein which may be inconsistent with any other provision herein or which is otherwise defective; *provided*, that such action pursuant to this clause (g) does not adversely affect the interests of the Holders of Notes in any material respect;

(h) to add or modify any other provisions which the Company and the Trustee may deem necessary or desirable and which shall not adversely affect the interests of the Holders of Notes in any material respect; or

(i) to provide for the issuance of Additional Notes pursuant to Section 2.10.

After an amendment, supplement or waiver under this Section 9.01 becomes effective, the Company, or, at the written request of the Company, the Trustee, shall mail to the Holders affected thereby a notice briefly describing the amendment, supplement or waiver. Any failure of the Company to mail such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amendment, supplement or waiver.

Section 9.02. With Consent of Holders. Except as provided below in this Section 9.02, this Indenture or the Notes may be amended or supplemented, and noncompliance by the Company in any particular instance with any provision of this Indenture or the Notes may be waived, in each case (i) with the written consent of the Holders of at least a majority in aggregate principal amount of the Notes then Outstanding or (ii) by the adoption of a resolution, at a meeting of Holders of the Notes then Outstanding at which a quorum is present, by the Holders of a majority in aggregate principal amount of the Outstanding Notes represented at such meeting.

Without the written consent or the affirmative vote of each Holder of an affected Note, an amendment, supplement or waiver to this Indenture or the Notes may not:

(a) change the stated maturity of the principal of, or the time of payment of any installment of interest on, any Note;

(b) reduce the principal amount of any Note;

(c) reduce the interest rate or interest on any Note;

(d) change the currency of payment of principal of, premium, if any, or interest on any Note;

(e) impair the right to institute suit for the enforcement of any payment with respect to, or the conversion of, any Note;

(f) except as otherwise permitted by Section 13.10 hereof, adversely affect the right to convert any Note as provided in Article 13 hereof;

(g) adversely affect the right of Holders to require the Company to purchase the Notes in the event of a Fundamental Change;

(h) modify any of the provisions of this Section 9.02, Section 6.04 or Section 6.12, except to increase any percentage contained herein or therein or to provide that certain other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each Note affected thereby; or

(i) reduce the percentage in aggregate principal amount of the Outstanding Notes required for the adoption of a resolution or the quorum required at any meeting of Holders of Notes at which a resolution is adopted.

It shall not be necessary for the consent of Holders of Notes under this Section 9.02 to approve the particular form of any proposed modification, amendment or waiver, but it shall be sufficient if such act shall approve the substance thereof.

After an amendment, supplement or waiver under this Section 9.02 becomes effective, the Company, or, at the written request of the Company, the Trustee, shall mail to the Holders affected thereby a notice briefly describing the amendment, supplement or waiver. Any failure of the Company to mail such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amendment, supplement or waiver.

Section 9.03. Effect of Supplemental Indentures. Upon the execution of any supplemental indenture pursuant to the provisions of this Article 9 or Section 10.01 this Indenture shall be and be deemed to be modified and amended in accordance therewith and the respective rights, limitations of rights, obligations, duties and immunities under this Indenture of the Trustee, the Company and the Holders of Notes affected thereby shall thereafter be determined, exercised and enforced hereunder subject in all respects to such modifications and amendments, and all the terms and conditions of any such supplemental indenture shall be and be deemed to be part of the terms and conditions of this Indenture for any and all purposes.

Section 9.04. Notes Affected by Supplemental Indentures. Notes affected by a supplemental indenture, authenticated and delivered after the execution of such supplemental indenture pursuant to the provisions of this Article 9 or Section 10.01, may bear a notation in form approved by the Company, provided such form meets the requirements of any securities exchange upon which such Notes may be listed, as to any matter provided for in such supplemental indenture. If the Company shall so determine, new securities so modified as to conform, in the opinion of the Board of Directors, to any modification of this Indenture contained in any such supplemental indenture may be prepared by the Company, authenticated by the Trustee and delivered in exchange for the Notes then Outstanding.

Section 9.05. Execution of Supplemental Indentures. Upon the request of the Company, accompanied by its Board Resolutions authorizing the execution of any such supplemental indenture, and upon the filing with the Trustee of evidence of the consent of Holders required to consent thereto as aforesaid (if such consent is required pursuant to this Article), the Trustee shall join with the Company in the execution of such supplemental indenture unless such supplemental indenture affects the Trustee’s own rights, duties or immunities under this Indenture or otherwise, in which case the Trustee may in its discretion but shall not be obligated to enter into such supplemental indenture. The Trustee, subject to the provisions of Section 7.01, shall receive and will be fully protected in relying upon an Officer’s Certificate and an Opinion of Counsel stating that any supplemental indenture executed pursuant to this Article is authorized or permitted by, and conforms to, the terms of this Article 9, constitutes a valid, binding and legal obligation, enforceable against the Company (subject to customary qualifications) and that it is proper for the Trustee under the provisions of this Article 9 to join in the execution thereof.

Promptly after the execution by the Company and the Trustee of any supplemental indenture pursuant to the provisions of this Section, the Company shall transmit by mail, first class postage prepaid, a notice, setting forth in general terms the substance of such supplemental indenture, to the Holders of all Notes affected thereby as their names and addresses appear upon the Note Register. Any failure of the Company to mail such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture.

ARTICLE 10
CONSOLIDATION; MERGER; CONVEYANCE; TRANSFER OR LEASE

Section 10.01. Company May Consolidate, Etc., Only on Certain Terms. The Company may not, without the consent of the Holders, consolidate with, merge into or convey, transfer or lease all or substantially all of the property and assets of the Company and its Subsidiaries, taken as a whole, to another Person unless:

(a) either (1) the Company shall be the resulting or surviving corporation or (2) the Person (if other than the Company) formed by such consolidation or into which the Company is merged, or the Person which acquires by transfer or lease all or substantially all of the property and assets of the Company, shall (i) be a corporation incorporated and existing under the laws of the United States of America or any State thereof or the District of Columbia and (ii) expressly assume, by an indenture supplemental hereto, executed and delivered to the Trustee, in form reasonably satisfactory to the Trustee, the obligations of the Company under the Notes and this Indenture;

(b) after giving effect to such transaction, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing; and

(c) if the Company will not be the resulting or surviving corporation, the Company shall have, at or prior to the effective date of such consolidation, merger, conveyance, transfer or lease, delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that such consolidation, merger, conveyance, transfer or lease complies with this Article 10 and, if a supplemental indenture is required in connection with such transaction, such supplemental indenture complies with this Article 10, and that all conditions precedent herein provided for relating to such transaction have been complied with.

Section 10.02. Successor Substituted. Upon any consolidation of the Company with, or merger of the Company into, any other Person or any conveyance, transfer or lease of all or substantially all of the properties and assets of the Company and its Subsidiaries, taken as a whole, in accordance with Section 10.01, the successor Person formed by such consolidation or into which the Company is merged or to which such conveyance, transfer or lease is made shall succeed to, and be substituted for, and may exercise every right and power of, the Company under this Indenture with the same effect as if such successor Person had been named as the Company herein, and thereafter, except in the case of a lease, and except for obligations the predecessor Person may have under a supplemental indenture, the predecessor Person shall be relieved of all obligations and covenants under the Indenture and the Notes.

ARTICLE 11
IMMUNITY OF INCORPORATORS, STOCKHOLDERS, OFFICERS AND DIRECTORS

Section 11.01. No Recourse. No recourse under or upon any obligation, covenant or agreement of this Indenture, or of the Notes, or for any claim based thereon or otherwise in respect thereof, shall be had against any incorporator, stockholder, officer or director, past, present or future as such, of the Company or of any predecessor or successor corporation, either directly or through the Company or any such predecessor or successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise; it being expressly understood that this Indenture and the obligations issued hereunder are solely corporate obligations, and that no such personal liability whatever shall attach to, or is or shall be incurred by, the incorporators, stockholders, officers or directors as such, of the Company or of any predecessor or successor corporation, or any of them, because of the creation of the indebtedness hereby authorized, or under or by reason of the obligations, covenants or agreements contained in this Indenture or in any of the Notes or implied therefrom; and that any and all such personal liability of every name and nature, either at common law or in equity or by constitution or statute, of, and any and all such rights and claims against, every such incorporator, stockholder, officer or director as such, because of the creation of the indebtedness hereby authorized, or under or by reason of the obligations, covenants or agreements contained in this Indenture or in any of the Notes or implied therefrom, are hereby expressly waived and released as a condition of, and as a consideration for, the execution of this Indenture and the issuance of the Notes.

ARTICLE 12
ADDITIONAL INTEREST

Section 12.01. Additional Interest. (a) The Company will pay additional interest ("**Additional Interest**") on the principal amount of any Restricted Notes if required by, and on the terms set forth in, the supplemental indenture which was executed in connection with the issuance of such Restricted Notes.

(b) Notwithstanding the foregoing, the Company shall not be required to pay Additional Interest on any date if (i) the Company has filed a shelf registration statement for the resale of the Notes and any shares of Common Stock issued upon conversion of the Notes, (ii) such shelf registration statement is effective and usable by Holders of the Notes identified therein as selling security holders for the resale of the Notes and any shares of Common Stock issued upon conversion of the Notes, and (iii) the Holders may register the resale of their Notes under such shelf registration statement on terms customary for the resale of convertible securities offered in reliance on Rule 144A.

(c) Under no circumstances will the combined rate of Additional Interest or Special Interest exceed 1.00% per annum.

(d) The Company shall provide written notice to the Trustee prior to paying any Additional Interest.

ARTICLE 13
CONVERSION OF NOTES

Section 13.01. Conversion Privilege and Conversion Rate. (a) The conversion rights pursuant to this Article 13 shall commence on the Issue Date of the Notes and expire at the close of business on the Business Day immediately preceding the Maturity Date unless previously redeemed or repurchased, subject to the provisions of this Indenture and, in the case of conversion of any Global Note, to any Applicable Procedures. If a Note is submitted or presented for purchase pursuant to Article 15, subject to the last paragraph of Section 13.02(b), such conversion right shall terminate at the close of business on the Business Day prior to the Fundamental Change Purchase Date for such Note (unless the Company shall fail to make the Fundamental Change Purchase Price payment when due in accordance with Article 15, in which case the conversion right shall terminate at the close of business on the Business Day prior to the date such failure is cured and such Note is repurchased).

(b) Provisions of this Indenture that apply to conversion of all of a Note also apply to conversion of a portion of a Note.

(c) A Holder of Notes is not entitled to any rights of a holder of Common Stock until such Holder has converted its Notes into Common Stock, and only to the extent such Notes are deemed to have been converted into Common Stock pursuant to this Article 13.

(d) The Conversion Rate shall be adjusted in certain instances as provided in Section 13.01(e) and Section 13.06.

(e) [Reserved]

(f) By delivering the number of shares of Common Stock issuable on conversion to the Trustee, plus a cash payment for any fractional share, the Company will be deemed to have satisfied its obligation to pay the principal amount of the Notes so converted and its obligation to pay accrued and unpaid interest attributable to the period from the most recent Interest Payment Date through the Conversion Date (which amount will be deemed satisfied and extinguished).

(g) The Company may also elect to convert the Notes pursuant to the exercise of the Company Conversion Option under Section 14.03(a).

Section 13.02. Conversion Procedure. (a) To convert a Physical Note, a Holder must (1) complete and manually sign the Notice of Conversion on the back of the Note, or facsimile of such Notice of Conversion, and deliver such Notice of Conversion to the Conversion Agent, which shall become irrevocable upon receipt by the Conversion Agent, (2) surrender the Note to the Conversion Agent, (3) furnish appropriate endorsements and transfer documents if required by the Note Registrar or the Conversion Agent, (4) pay an amount equal to the interest payable on the next Interest Payment Date to which the Holder is not entitled as required by Section 13.02(c) and (5) pay all transfer or similar taxes, if required pursuant to Section 13.04. Anything herein to the contrary notwithstanding, in the case of Global Notes, Notices of Conversion may be delivered and such Notes may be surrendered for conversion in accordance with clauses (3), (4) and (5) of this Section 13.02(a) and the Applicable Procedures as in effect from time to time. The date on which the Holder satisfies all the requirements set forth in this Section 13.02(a) is the "**Conversion Date**."

(b) Each conversion shall be deemed to have been effected as to any Notes surrendered for conversion on the Conversion Date and the person in whose name the shares of Common Stock shall be issuable upon conversion shall be deemed to be the holder of record of such Common Stock as of the close of business on such Conversion Date, and the Company shall deliver the consideration due in respect of any conversion on the third Business Day immediately following the relevant Conversion Date; *provided*, *however*, that no surrender of a Note on any Conversion Date when the stock transfer books of the

Company shall be closed shall be effective to constitute the person or persons entitled to receive the shares of Common Stock upon conversion as the record holder or holders of such shares of Common Stock on such date, but such surrender shall be effective to constitute the person or persons entitled to receive such shares of Common Stock as the record holder or holders thereof for all purposes at the close of business on the next succeeding day on which such stock transfer books are open. Upon conversion of a Note, such person shall no longer be the Holder of such Note. Except as set forth in this Indenture, no payment or adjustment will be made for dividends or distributions declared or made on shares of Common Stock issued upon conversion of a Note prior to the issuance of such shares.

A Holder that has delivered a Fundamental Change Purchase Notice pursuant to Section 15.01 with respect to a Note may not surrender such Note for conversion until such Holder has withdrawn the Fundamental Change Purchase Notice in accordance with Section 15.01(c).

(c) Holders of Notes surrendered for conversion (in whole or in part) during the period from the close of business on any Regular Record Date to the open of business on the next succeeding Interest Payment Date will receive the semiannual interest payable on the principal amount of such Notes being surrendered for conversion on the corresponding Interest Payment Date notwithstanding the conversion. Upon surrender of any such Notes for conversion, such Notes shall also be accompanied by payment in funds to the Conversion Agent acceptable to the Company of an amount equal to the interest payable on such corresponding Interest Payment Date (but excluding any overdue interest on the principal amount of such Note so converted if any overdue interest exists at the time such Holder surrenders such Note for conversion); *provided*, *however*, that no such payment need be made (i) if the Company has specified a Fundamental Change Purchase Date that is after such Regular Record Date and on or prior to the next succeeding Interest Payment Date, or (ii) if conversion occurs after the last Regular Record Date prior to the Maturity Date. Except as otherwise provided in this Section 13.02(c), no payment or adjustment will be made for accrued interest on a converted Note and any such accrued interest shall be deemed satisfied and extinguished.

(d) Subject to Section 13.02(c), nothing in this Section 13.02 shall affect the right of a Holder in whose name any Note is registered at the close of business on a Regular Record Date to receive the interest payable on such Note on the related Interest Payment Date in accordance with the terms of this Indenture and the Notes. If a Holder converts more than one Note at the same time, the number of shares of Common Stock issuable upon the conversion (and the amount of any cash in lieu of fractional shares pursuant to Section 13.03) shall be based on the aggregate principal amount of all Notes so converted.

(e) In the case of any Note which is converted in part only, upon such conversion the Company shall execute and the Trustee shall authenticate and deliver to the Holder thereof, without service charge, a new Note or Notes of authorized denominations in an aggregate principal amount equal to, and in exchange for, the unconverted portion of the principal amount of such Note. A Note may be converted in part, but only if the principal amount of such part is an integral multiple of $1,000 and the principal amount of such Note to remain Outstanding after such conversion is equal to $1,000 or any integral multiple of $1,000 in excess thereof.

Section 13.03. Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of any Note or Notes. If more than one Note shall be surrendered for conversion at one time by the same Holder, the number of full shares which shall be issued upon conversion thereof shall be computed on the basis of the aggregate principal amount of the Notes (or specified portions thereof) so surrendered. Instead of any fractional share of Common Stock which would otherwise be issued upon conversion of any Note or Notes (or specified portions thereof), the Company shall pay a cash adjustment in respect of such fraction (calculated to the nearest one-100th of a share) in an amount equal to the same fraction of the Last Reported Sale Price of the Common Stock as of the Trading Day preceding the Conversion Date.

Section 13.04. Taxes on Conversion. Except as provided in the next sentence, the Company will pay any and all documentary, stamp or similar issue or transfer tax due and duties on the issuance of shares of Common Stock upon conversion of Notes pursuant hereto. A Holder delivering a Note for conversion shall be liable for and will be required to pay any tax or duty which may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock in a name other than that of the Holder of the Note or Notes to be converted, and no such issue or delivery shall be made unless the Person requesting such issue has paid to the Company the amount of any such tax or duty, or has established to the satisfaction of the Company that such tax or duty has been paid.

Section 13.05. Company to Provide Common Stock. (a) The Company shall, prior to issuance of any Notes hereunder, and from time to time as may be necessary, reserve, out of its authorized but unissued Common Stock, a sufficient number of shares of Common Stock to permit the conversion of all Outstanding Notes into shares of Common Stock.

(b) All shares of Common Stock delivered upon conversion of the Notes shall be newly issued shares, shall be duly authorized, validly issued, fully paid and nonassessable and shall be free from preemptive or similar rights and free of any lien or adverse claim as the result of any action by the Company.

Section 13.06. Adjustment of Conversion Rate. The Conversion Rate shall be adjusted from time to time by the Company as follows:

(a) If the Company issues shares of Common Stock as a dividend or distribution on shares of Common Stock, or effects a share split or share combination, the Conversion Rate will be adjusted based on the following formula:

$$CR = CR_0 \times \frac{OS}{OS_0}$$

where,

CR_0	=	the applicable Conversion Rate in effect immediately prior to the open of business on the Ex-Dividend Date for such dividend or distribution, or immediately prior to the open of business on the effective date of such share split or share combination, as the case may be;
CR	=	the applicable Conversion Rate in effect immediately after the open of business on the Ex-Dividend Date for such dividend or distribution, or immediately after the open of business on the effective date of such share split or share combination, as the case may be;
OS_0	=	the number of shares of Common Stock outstanding immediately prior to such dividend, distribution, share split or share combination, as the case may be; and
OS	=	the number of shares of Common Stock outstanding immediately after giving effect to such dividend, distribution, share split or share combination, as the case may be.

Any adjustments made pursuant to this Section 13.06(a) shall become effective immediately on or after (x) the open of business on the Ex-Dividend Date for such dividend or distribution or (y) the effective date of such split or combination, as applicable. If any dividend or distribution described in this Section 13.06(a) is declared but not so paid or made, the new Conversion Rate shall again be adjusted to the Conversion Rate that would then be in effect if such dividend or distribution had not been declared.

(b) If the Company distributes to all holders of Common Stock any rights or warrants entitling them to purchase, for a period of not more than 45 days after the Ex-Dividend Date for the distribution, shares of Common Stock at a price per share less than the average of the Last Reported Sale Prices of the

Common Stock for the 10 consecutive Trading-Day period ending on the Trading Day immediately preceding the declaration date for such distribution, the Conversion Rate will be adjusted based on the following formula:

$$CR = CR_0 \times \frac{OS_0 + X}{OS_0 + Y}$$

where,

CR_0	=	the Conversion Rate in effect immediately prior to the open of business on the Ex-Dividend Date for such distribution;
CR	=	the new Conversion Rate in effect immediately after the open of business on the Ex-Dividend Date for such distribution;
OS_0	=	the number of shares of Common Stock outstanding immediately prior to the open of business on the Ex-Dividend Date for such distribution;
X	=	the total number of shares of Common Stock issuable pursuant to such rights or warrants; and
Y	=	the number of shares of Common Stock equal to the aggregate price payable to exercise such rights or warrants divided by the average of the Last Reported Sale Prices of the Common Stock over the 10 consecutive Trading-Day period ending on the Trading Day immediately preceding the declaration date for such distribution.

For purposes of this Section 13.06(b), in determining whether any rights or warrants entitle the Holders to subscribe for or purchase shares of Common Stock at less than the average of the Last Reported Sale Prices of the Common Stock for the applicable 10 consecutive Trading-Day period, there shall be taken into account any consideration received by the Company for such rights or warrants and any amount payable on exercise thereof, with the value of such consideration if other than cash, to be determined by the Board of Directors. If any right or warrant described in this Section 13.06(b) is not exercised prior to the expiration of the exercisability thereof, the new Conversion Rate shall be readjusted to the Conversion Rate that would then be in effect if such right or warrant had not been so issued. Any adjustment made pursuant to this Section 13.06(b) shall become effective immediately after the Ex-Dividend Date for the applicable distribution.

(c) If the Company distributes shares of its Capital Stock, evidences of its indebtedness or other assets or property of the Company to all holders of the Common Stock, excluding

(i) dividends or distributions (including share splits) as to which an adjustment is effected in Section 13.06(a) or Section 13.06(b);

(ii) dividends or distributions covered by Section 13.06(d);

(iii) dividends or distributions that constitute Reference Property following an event pursuant to Section 13.10; and

(iv) Spin-Offs to which the provisions set forth below in this Section 13.06(c) shall apply,

then the applicable Conversion Rate will be adjusted based on the following formula:

$$CR = CR_0 \times \frac{SP_0}{SP_0 - FMV}$$

where,

CR_0	=	the applicable Conversion Rate in effect immediately prior to the open of business on the Ex-Dividend Date for such distribution;
CR	=	the applicable Conversion Rate in effect immediately after the open of business on the Ex-Dividend Date for such distribution;
SP_0	=	the average of the Last Reported Sale Prices of the Common Stock over the 10 consecutive Trading-Day period ending on, and including, the Trading Day immediately preceding the Ex-Dividend Date for such distribution; and
FMV	=	the fair market value (as determined in good faith by the Board of Directors) of the shares of Capital Stock, evidences of indebtedness, assets or property distributed with respect to each outstanding share of Common Stock as of the open of business on the Ex-Dividend Date for such distribution.

If the then fair market value of the portion of the shares of Capital Stock, evidences of indebtedness or other assets or property so distributed applicable to one share of Common Stock is equal to or greater than the average of the Last Reported Sales Prices of the Common Stock over the 10 consecutive Trading-Day period ending on the Trading Day immediately preceding the Ex-Dividend Date for such distribution, in lieu of the foregoing adjustment, adequate provisions

shall be made so that each Holder of a Note shall have the right to receive on conversion in respect of each Note held by such Holder, in addition to any amounts to which such Holder is entitled to receive, the amount and kind of securities and assets such Holder would have received had such Holder already owned a number of shares of Common Stock equal to the applicable Conversion Rate immediately prior to the open of business on the Ex-Dividend Date for the distribution of the securities or assets.

With respect to an adjustment pursuant to this Section 13.06(c) where there has been a payment of a dividend or other distribution on the Common Stock of shares of the Capital Stock of any class or series, or similar equity interest, of or relating to a Subsidiary or other business unit that are, or, when issued, will be, traded or quoted on any national or regional securities exchange or other market (a "**Spin-Off**"), the applicable Conversion Rate will instead be adjusted based on the following formula:

$$CR = CR_0 \times \frac{FMV + MP_0}{MP_0}$$

where,

CR_0	=	the applicable Conversion Rate in effect immediately prior to the tenth Trading Day immediately following the effective date for such Spin-Off;
CR	=	the applicable Conversion Rate in effect immediately after the open of business on the tenth Trading Day immediately following the effective date for such Spin-Off;
FMV	=	the average of the Last Reported Sale Prices of the Capital Stock or similar equity interest distributed to holders of Common Stock applicable to one share of Common Stock over the first 10 consecutive Trading-Day period immediately following the effective date for such Spin-Off (such period, the **"Valuation Period"**); and
MP_0	=	the average of the Last Reported Sale Prices of Common Stock over the Valuation Period.

Such adjustment shall occur immediately after the tenth Trading Day immediately following, and including, the effective date of such Spin-Off; *provided* that, for purposes of determining the Conversion Rate in respect of any conversion during the 10 Trading Days following the effective date of any Spin-Off, references within this Section 13.06(c) related to "Spin-Offs" to 10 Trading Days shall be deemed replaced with such lesser number of Trading Days as have elapsed between the effective date of such Spin-Off and the relevant Conversion Date.

If any such dividend or distribution described in this Section 13.06(c) is declared but not paid or made, the new Conversion Rate shall be readjusted to be the Conversion Rate that would then be in effect if such dividend or distribution had not been declared.

(d) If any cash dividend or distribution is made to all holders of Common Stock, the Conversion Rate will be adjusted based on the following formula:

$$CR = CR_0 \times \frac{SP_0}{SP_0 - C}$$

where,

CR_0	=	the applicable Conversion Rate in effect immediately prior to the open of business on the Ex-Dividend Date for such distribution;
CR	=	the applicable Conversion Rate in effect immediately after the open of business on the Ex-Dividend Date for such distribution;
SP_0	=	the average of the Last Reported Sale Prices of the Common Stock over the 10 consecutive Trading-Day period ending on, and including, the Trading Day immediately preceding the Ex-Dividend Date for such distribution; and
C	=	the amount in cash per share of Common Stock the Company distributes to holders of Common Stock.

An adjustment to the Conversion Rate made pursuant to this Section 13.06(d) shall become effective immediately after the open of business on the Ex-Dividend Date for the applicable dividend or distribution. If any dividend or distribution described in this Section 13.06(d) is declared but not so paid or made, the new Conversion Rate shall be readjusted to the Conversion Rate that would then be in effect if such dividend or distribution had not been declared.

If the amount in cash per share of Common Stock so paid or distributed is equal to or greater than the average of the Last Reported Sales Prices of the Common Stock over the 10 consecutive Trading-Day period ending on the Trading Day immediately preceding the Ex-Dividend Date for such cash dividend or distribution, in lieu of the foregoing adjustment, adequate provisions shall be made so that each Holder of a Note shall have the right to receive on conversion in respect of each Note held by such Holder, in addition to any amounts to which

such Holder is entitled to receive, the amount in cash such Holder would have received had such Holder already owned a number of shares of Common Stock equal to the applicable Conversion Rate immediately prior to the record date for such cash dividend or distribution.

(e) If the Company or any of its Subsidiaries makes a payment in respect of a tender or exchange offer for Common Stock (other than tender offers or exchange offers not subject to Rule 13e-4 of the Exchange Act or odd lot tender offers), to the extent that the cash and value of any other consideration included in the payment per share of Common Stock exceeds the Last Reported Sale Price of the Common Stock on the Trading Day next succeeding the last date on which tenders or exchanges may be made pursuant to such tender or exchange offer (the "**Expiration Date**"), the Conversion Rate shall be increased based on the following formula:

$$CR = CR_0 \times \frac{AC + (SP \times OS)}{OS_0 \times SP}$$

where,

CR_0	=	the applicable Conversion Rate in effect immediately prior to the open of business on the Trading Day next succeeding the Expiration Date;
CR	=	the applicable Conversion Rate in effect immediately after the open of business on the Trading Day next succeeding the Expiration Date;
AC	=	the aggregate value of all cash and any other consideration (as determined by the Board of Directors) paid or payable for shares purchased in such tender offer or exchange offer;
OS_0	=	the number of shares of Common Stock outstanding immediately prior to time (the **"Expiration Time"**) such tender or exchange offer expires (prior to giving effect to such tender offer or exchange offer);
OS	=	the number of shares of Common Stock outstanding immediately after the expiration time (after giving effect to such tender offer or exchange offer); and
SP	=	the average of the Last Reported Sale Prices of Common Stock over the 10 consecutive Trading-Day period commencing on, and including, the Trading Day next succeeding the Expiration Date.

The adjustment to the Conversion Rate under this Section 13.06(e) shall become effective immediately following the tenth Trading Day next succeeding the date such tender offer or exchange offer expires; *provided* that, for purposes of determining the Conversion Rate, in respect of any conversion during the 10 Trading Days following the date that any tender or exchange offer expires, references within this Section 13.06(e) to 10 Trading Days shall be deemed replaced with such lesser number of Trading Days as have elapsed between the date such tender or exchange offer expires and the relevant Conversion Date. If the Company or one of its Subsidiaries is obligated to purchase Common Stock pursuant to any such tender or exchange offer but are permanently prevented by applicable law from effecting any such purchase or all such purchases are rescinded, the new Conversion Rate shall be readjusted to be the Conversion Rate that would be in effect if such tender or exchange offer had not been made.

(f) Notwithstanding the foregoing, if a Conversion Rate adjustment becomes effective on any Ex-Dividend Date pursuant to Section 13.06(a) through Section 13.06(e), and a Holder that has converted its Notes on or after such Ex-Dividend Date and on or prior to the related record date would be treated as the record holder of the Common Stock as of the related Conversion Date based on an adjusted Conversion Rate for such Ex-Dividend Date, then, notwithstanding Section 13.06(a) through Section 13.06(e), the Conversion Rate adjustment relating to such Ex-Dividend Date will not be made for such converting Holder. Instead, such Holder shall be treated as if such Holder were the record owner of the Common Stock on an unadjusted basis and participate in the related dividend, distribution or other event giving rise to such adjustment.

Section 13.07. When No Adjustment is Required. (a) No adjustment in the Conversion Rate shall be required unless such adjustment would require an increase or decrease of at least 1% in the Conversion Rate as last adjusted; *provided*, *however*, that any adjustments which would be required to be made but for this Section 13.07(a) shall be carried forward and taken into account in any subsequent adjustment and any carry forward amount shall be paid to the Holder upon conversion regardless of the 1% threshold. All calculations under this Article 13 shall be made to the nearest cent or to the nearest one-hundredth of a share.

(b) Without limiting the foregoing provisions of Section 13.06, no adjustment will be made thereunder, nor shall an adjustment be made to the ability of a Holder to convert, for any distribution described therein if the Holder will otherwise participate in the distribution without conversion of such Holder's Notes as if such Holder held a number of shares of Common Stock equal to the applicable Conversion Rate, multiplied by the principal amount (expressed in thousands) of Notes held by such Holder, without having to convert its Notes. Further, if the application of the foregoing formulas in Section 13.06 would result in a decrease in the Conversion Rate, no adjustment to the Conversion Rate will be made (except on account of share combinations).

(c) No adjustment to the Conversion Rate will be made unless as specifically set forth in Section 13.06 and Section 13.01(e). Without limiting the foregoing, no adjustment to the Conversion Rate need be made:

(i) upon the issuance of any shares of Common Stock pursuant to any present or future plan providing for the reinvestment of dividends or interest payable on securities of the Company and the investment of additional optional amounts in shares of Common Stock under any plan;

(ii) upon the issuance of any shares of Common Stock or options or rights to purchase shares of Common Stock pursuant to any present or future employee, director or consultant benefit plan or program or employee stock purchase plan of, or assumed by, the Company or any of its Subsidiaries;

(iii) upon the issuance of any shares of Common Stock pursuant to any option, warrant, right, or exercisable, exchangeable or convertible security not described in clause (ii) above and outstanding as of the Issue Date;

(iv) for a change in the par value of the Common Stock; or

(v) for accrued and unpaid interest (including any Special Interest and Additional Interest, if applicable).

Section 13.08. Notice of Adjustment. Whenever the Conversion Rate or conversion privilege is required to be adjusted pursuant to this Indenture, the Company shall promptly mail to Holders a notice of the adjustment and file with the Trustee an Officer's Certificate briefly stating the facts requiring the adjustment, the adjusted Conversion Rate and the manner of computing it. Failure to mail such notice or any defect therein shall not affect the validity of any such adjustment. Unless and until the Trustee shall receive an Officer's Certificate setting forth an adjustment of the Conversion Rate, the Trustee may assume without inquiry that the Conversion Rate has not been adjusted and that the last Conversion Rate of which it has knowledge remains in effect.

Section 13.09. Notice of Certain Transactions. In the event that there is a dissolution or liquidation of the Company, the Company shall mail to Holders and file with the Trustee a notice stating the proposed effective date. The Company shall mail such notice at least 20 days before such proposed effective date. Failure to mail such notice or any defect therein shall not affect the validity of any transaction referred to in this Section 13.09.

Section 13.10. Effect of Reclassification, Consolidation, Merger or Sale On Conversion Privilege. If any of the following events occur:

(a) any recapitalization, reclassification or change of the outstanding shares of Common Stock (other than a changes resulting from a subdivision or combination),

(b) any consolidation, merger, or combination involving the Company with another corporation, or

(c) any sale, conveyance or lease to any other corporation of all or substantially all of the property and assets of the Company,

(d) any statutory share exchange,

in each case as a result of which holders of Common Stock shall be entitled to receive stock, other securities or other property or assets (including cash or any combination thereof) (the "**Reference Property**") with respect to or in exchange for such Common Stock, the Holders of the Notes then Outstanding will be entitled thereafter to convert those Notes into the kind and amount of shares of stock, other securities or other property or assets (including cash or any combination thereof) which they would have owned or been entitled to receive upon such transaction had such notes been converted into Common Stock immediately prior to such transaction. In the event holders of Common Stock have the opportunity to elect the form of consideration to be received in such transaction, the reference property will be deemed to be the weighted average of the types and amounts of consideration received by the holders of Common Stock that affirmatively make such election. The Company shall notify the Holders of the weighted average as soon as practicable after such determination is made. The Company may not become a party to any such transaction unless its terms are consistent with the preceding. None of the foregoing provisions shall affect the right of a Holder of Notes to convert its Notes into shares of Common Stock prior to the effective date of such transaction.

The above provisions of this Section 13.10 shall similarly apply to successive recapitalizations, reclassifications, mergers, consolidations, statutory share exchanges, combinations, sales and conveyances.

If this Section 13.10 applies to any event or occurrence, Section 13.06 hereof shall not apply.

The Company shall not become a party to any such transaction unless its terms are consistent with the foregoing. None of the foregoing provisions shall affect the right of a Holder to convert the Notes as set forth in Section 13.01 prior to the effective time of such transaction.

Section 13.11. Trustee's Disclaimer. (a) The Trustee shall have no duty to determine, or liability in connection therewith, when an adjustment under this Article 13 should be made, how it should be made or what such adjustment should be, but may accept as conclusive evidence of that fact or the correctness of any such adjustment, and shall be protected in relying upon, an Officer's Certificate, including the Officer's Certificate with respect thereto which the Company is obligated to file with the Trustee pursuant to Section 13.08. Unless and until the Trustee receives such Officer's Certificate delivered pursuant to Section 13.08, the Trustee may assume without inquiry that no such adjustment has been made and the last Conversion Rate of which the Trustee has knowledge remains in effect. The Trustee makes no representation as to the validity or value of any securities or assets issued upon conversion of Notes, and the Trustee shall not be responsible for the Company's failure to comply with any provisions of this Article 13.

(b) The Trustee shall not be under any responsibility to determine the correctness of any provisions contained in any supplemental indenture executed pursuant to Section 13.10, but may accept as conclusive evidence of the correctness thereof, and shall be fully protected in relying upon, the Officer's Certificate and Opinion of Counsel, with respect thereto which the Company are obligated to file with the Trustee pursuant to Section 13.10 and Section 10.01, respectively.

Section 13.12. Voluntary Increase; Nasdaq Compliance. Subject to Section 9.01(e), the Company from time to time may increase the Conversion Rate, to the extent permitted by law and subject to any applicable stockholder approval requirements pursuant to the listing standards of the Nasdaq Stock Market or such other United States securities exchange on which the Common Stock is traded, by any amount for any period of at least 20 days. The Company may make such increase in the Conversion Rate (in addition to others provided in this Indenture) as the Board of Directors deems advisable to avoid or diminish any income tax to holders of Common Stock resulting from a dividend or distribution of stock, or rights to acquire stock, or similar event, and the Company provides 15 days' prior written notice of any increase in the Conversion Rate to the Trustee and the Holders: *provided*, *however*, that in no event may the Company increase the Conversion Rate such that it causes the Conversion Price to be less than the par value of a share of Common Stock.

The Company may not take any voluntary actions that would result in an adjustment to the Conversion Rate pursuant to Section 13.06 without complying, if applicable, with the stockholder approval rules of the NASDAQ Global Market and any similar rule of any stock exchange on which the Common Stock is listed at the relevant time. In accordance with such listing standards, this restriction shall apply at any time when the Notes are Outstanding, regardless of whether the Company then has a class of securities listed on the NASDAQ Global Market.

Section 13.13. Rights Plan. To the extent that the Company has a Rights Plan in effect upon conversion of the Notes into Common Stock, the Holder will receive upon conversion of the Notes in respect of which the Company has elected to deliver Common Stock, if applicable, the Rights under the Rights Plan, unless prior to any conversion, the Rights have separated from the Common Stock, in which case, and only in such case, the Conversion Rate will be adjusted at the time of separation as if the Company distributed to all holders of Common Stock shares of the Company's Capital Stock, evidences of indebtedness or assets as described in Section 13.06(c) above, subject to readjustment in the event of the expiration, termination or redemption of such Rights. In lieu of any such adjustment, the Company may amend such applicable Rights Plan to provide that upon conversion of the Notes the Holders will receive, in addition to the Common Stock issuable upon such conversion, the Rights which would have attached to such Common Stock if the Rights had not become separated from the Common Stock under such applicable Rights Plan.

Section 13.14. Exchange in Lieu of Conversion. (a) Notwithstanding anything in this Indenture to the contrary, when a Holder surrenders Notes for conversion, the Company may, at its election, direct the Conversion Agent to surrender, on or prior to the second Business Day immediately following the Conversion Date (assuming for purposes of this Section 13.14 that the date such Holder surrenders such Notes for conversion is the Conversion Date for such Notes), such Notes to a financial institution designated by the Company (a "**Financial Institution**") for exchange in lieu of conversion.

(b) In order to accept any such Notes surrendered for conversion, the Financial Institution must agree to deliver, in exchange for such Notes, shares of Common Stock (and cash in lieu of fractional shares) equal to the consideration due upon conversion under Section 13.01(a) (the "**Exchange Settlement Property**").

(c) By the close of business on the second Business Day immediately following the Conversion Date, the Company must notify the Holder surrendering Notes for conversion that it has directed the Financial Institution to make an exchange in lieu of conversion and the Financial Institution shall be required to notify the Conversion Agent whether it will deliver the Exchange Settlement Property upon exchange.

(d) If the Financial Institution accepts any such Notes, it shall deliver the Exchange Settlement Property to the Conversion Agent and the Conversion Agent shall deliver such Exchange Settlement Property to the applicable Holder no later than the third Business Day following the Conversion Date. Any Notes exchanged by the Financial Institution shall remain Outstanding, subject to Applicable Procedures.

(e) If the Financial Institution agrees to accept any Notes for exchange but does not timely deliver the related consideration, or if the Financial Institution does not accept the Notes for exchange, the Company shall deliver such conversion consideration as if the Company had not made an exchange election.

The Company's designation of the Financial Institution to which the Notes may be submitted for exchange does not require the Financial Institution to accept any Notes. The Company shall not pay any consideration to, or otherwise enter into any agreement with, the financial institution designated as the Financial Institution for or with respect to such designation.

ARTICLE 14
REDEMPTION; COMPANY CONVERSION OPTION

Section 14.01. No Sinking Fund. No sinking fund is provided for the Notes.

Section 14.02 No Right To Redeem the Notes. The Company may not redeem the Notes.

Section 14.03 Company Conversion Option.

(a) The Company may elect at its option to cause all or any portion of the Notes to be mandatorily converted in whole or in part (the "**Company Conversion Option**") at any time prior to the close of business on the Business Day immediately preceding the Maturity Date, if the Last Reported Sale Price of the Common Stock equals or exceeds 120% of the Conversion Price then in effect for at least 10 Trading Days in any 20 Trading Day period (any such period, a "**Mandatory Conversion Trigger Period**"), ending within five Business Days prior to the Mandatory Conversion Notice Date. For the avoidance of doubt, the Company may exercise its right to cause more than one Company Conversion Option during the term of the Indenture so long as it complies with the other requirements of this Section 14.03.

(b) Notwithstanding the foregoing, the Company may only exercise the Company Conversion Option pursuant to Section 14.03(a) if, as evidenced by an Officer's Certificate, each of the Equity Conditions are satisfied on each day during the Equity Conditions Measuring Period.

(c) In order to exercise the Company Conversion Option pursuant to Section 14.03(a), the Company or, at the written request and expense of the Company, the Trustee on behalf of the Company, shall deliver to each Holder a notice (a "**Mandatory Conversion Notice**") of exercise of the Company Conversion Option within five Business Days after the end of the applicable

Mandatory Conversion Trigger Period (the date such Mandatory Conversion Notice is sent to the Holders in the manner herein provided, the "**Mandatory Conversion Notice Date**"). The Company will select the date on which the Notes will be converted pursuant to the Company Conversion Option, which shall be not more than 30 Trading Days but not less than 3 Trading Days after the Mandatory Conversion Notice Date (such date, the "**Mandatory Conversion Date**"). The Company shall also deliver a copy of such Mandatory Conversion Notice to the Trustee concurrently with the delivery thereof to the Holders to the extent that the Trustee does not deliver such Mandatory Conversion Notice on behalf of the Company. If such Mandatory Conversion Notice is to be given by the Trustee, the Company shall prepare and provide the form and content of such Mandatory Conversion Notice to the Trustee. The Mandatory Conversion Notice, if sent in the manner herein provided, shall be conclusively presumed to have been duly given, whether or not any Holder receives such Mandatory Conversion Notice.

(e) The Mandatory Conversion Notice shall state:

(i) the Mandatory Conversion Notice Date;

(ii) the Mandatory Conversion Trigger Period;

(iii) the aggregate principal amount of Notes to be mandatorily converted;

(iv) the CUSIP or similar number or numbers of the Notes being converted, in the case of a Global Note;

(v) the certificate numbers of the Notes to be mandatorily converted, in the case of Physical Notes;

(vi) the Mandatory Conversion Date;

(vii) the Conversion Rate then in effect;

(viii) that on and after the Mandatory Conversion Date interest on the Notes to be converted will cease to accrue; and

(ix) the name and address of each Paying Agent and Conversion Agent and the place or places where such Notes are to be surrendered for conversion.

(f) If fewer than all of the Notes are to be mandatorily converted, the Mandatory Conversion Notice shall identify the Notes to be mandatorily converted (including the certificate number or numbers, if any). In case any Note is to be mandatorily converted in part only, the Mandatory Conversion Notice shall state the portion of the principal amount thereof to be mandatorily converted

and shall state that, on and after the Mandatory Conversion Date, upon surrender of such Note, a new Note or Notes in principal amount equal to the unconverted portion thereof will be issued.

(g) If the Company opts to mandatorily convert fewer than all of the outstanding Notes, the Trustee shall select the Notes to be mandatorily converted (such that the principal amount of a Holder's Note not to be converted equals $1,000 or an integral multiple of $1,000 in excess thereof) by lot, on a pro rata basis or by another method the Trustee deems fair and appropriate, in all cases in which such Notes are in the form of Global Notes in accordance with the Applicable Procedures. To the extent any Note or portion thereof selected for a Company Conversion Option is submitted for voluntary conversion pursuant to Section 13.01, the portion of such Note submitted for voluntary conversion shall be deemed (so far as may be possible) to be from the portion selected for the Company Conversion Option (with any remaining portion being voluntarily converted pursuant to Section 13.01 hereof).

(h) Each Holder of a Note, by the Holder's acceptance thereof, agrees to take the following actions prior to the Mandatory Conversion Date in respect of the portion of its Notes subject to a Company Conversion Option: (i) if a Physical Note, surrender the mandatorily converted Note, or portion thereof, to the Conversion Agent (or in respect of a Global Note, take any actions required for the surrender of a beneficial interest in such Note pursuant to the Applicable Procedures), (ii) furnish appropriate endorsements and transfer documents if required by the Registrar, the Conversion Agent or the Applicable Procedures, (iii) pay any transfer or other tax, if required by Section 13.01, (iv) if the Note is a Global Note, complete and deliver to the Depositary any required instructions pursuant to the Applicable Procedures and (v) any other action necessary to effectuate the Company Conversion Option as may be reasonably requested by the Company. In the event that a Holder does not take any of the actions set forth in the immediately preceding sentence prior to the Mandatory Conversion Date, each Holder of a Note, by such Holder's acceptance thereof, authorizes and directs the Company to take any action on such Holder's behalf to effectuate the Company Conversion Option and appoints the Company such Holder's attorney-in-fact for any and all such purposes.

Upon presentation of any Note converted in part only, the Company shall execute, and the Trustee shall authenticate and make available for delivery to the Holder thereof, at the expense of the Company, a new Note or Notes, of authorized denominations, in principal amount equal to the unconverted portion of the Note or Notes so presented (subject to the Applicable Procedures in the case of Global Notes).

(i) With respect to any Notes subject to the Company Conversion Option, the Company will deliver to the Holders of such Notes, on the third

Business Day immediately following the Mandatory Conversion Date for such Notes, (i) a number of shares of Common Stock equal to the product of (A)(x) the aggregate principal amount of such Notes to be converted *divided by* (y) $1,000 and (B) the Conversion Rate in effect on such Conversion Date, rounded down to the nearest whole number, and (ii) an amount of cash equal to the product of (A) the fraction of a share of Common Stock eliminated by such rounding and (B) the Last Reported Sale Price of the Common Stock on such Mandatory Conversion Date (or if such Mandatory Conversion Date is not a Trading Day, the immediately preceding Trading Day). Upon the Mandatory Conversion Date, unless the Company defaults in delivering or paying the amounts due pursuant to the foregoing sentence, interest on the Notes or portion of Notes so called for the Company Conversion Option shall cease to accrue and, except as provided in Section 6.08, such Notes shall cease to be entitled to any benefit or security under this Indenture, and the Holders thereof shall have no right in respect of such Notes except the right to receive the shares of Common Stock and cash, if any, to which they are entitled pursuant to this Section 14.03. Upon a conversion pursuant to this Section 14.03, the Person in whose name such shares of Common Stock will be registered will become the holder of record of such shares of Common Stock at the Close of Business on the Mandatory Conversion Date for such Note.

If any of the provisions of this Section 10.12 are inconsistent with applicable law at the time of such Company Conversion Option, such law shall govern.

ARTICLE 15
REPURCHASE OF NOTES

Section 15.01. Repurchase of Notes at Option of the Holder Upon a Fundamental Change. (a) If a Fundamental Change occurs prior to the Maturity Date, each Holder of a Note shall have the right, at the option of the Holder, to require the Company to repurchase all or any portion of the Notes of such Holder equal to $1,000 principal amount (or an integral multiple thereof) at the Fundamental Change Purchase Price, on the date specified by the Company that is not less than 20 days and not more than 35 days after the date of the Fundamental Change Company Notice pursuant to Section 15.01(b) (the "**Fundamental Change Purchase Date**"). If the Fundamental Change Purchase Date is after a Regular Record Date and on or prior to the corresponding Interest Payment Date, the Company shall pay accrued and unpaid interest to the Holder of a Note of record at the close of business on such Regular Record Date, subject to Applicable Procedures.

(b) On or before the tenth day after the Fundamental Change Effective Date, the Company, or, at the request of the Company, the Trustee, shall mail a written notice of the occurrence of the Fundamental Change, and of the

repurchase right arising therefrom, to the Trustee, Paying Agent and to each Holder (and to beneficial owners as required by applicable law) (the "**Fundamental Change Company Notice**"). Simultaneously with providing such Fundamental Change Company Notice, the Company shall publish a notice containing the information that is required in the Fundamental Change Company Notice in a newspaper of general circulation in The City of New York or publish information on a website of the Company or through such other public medium the Company may use at that time. The Fundamental Change Company Notice shall set forth the Holder's right to require the Company to purchase the Notes and specify:

(i) the events causing such Fundamental Change;

(ii) the date of such Fundamental Change;

(iii) the last date by which the Fundamental Repurchase Notice must be delivered to elect the repurchase option pursuant to this Section 15.01;

(iv) the Fundamental Change Purchase Price;

(v) the Fundamental Change Purchase Date;

(vi) the name and address of each Paying Agent and Conversion Agent, if applicable;

(vii) that the Notes with respect to which a Fundamental Change Notice has been delivered by a Holder may be converted only if the Holder withdraws the Fundamental Change Purchase Notice in accordance with the terms of this Indenture; and

(viii) the procedures that the Holder must follow to require the Company to repurchase its Notes under this Section 15.01.

At the Company's request, the Trustee shall give such Fundamental Change Company Notice in the Company's name and at the Company's expense; *provided* that, unless otherwise agreed by the Trustee, the Company makes such request at least five (5) Business Days prior to the date by which such Fundamental Change Company Notice must be given to the Holders in accordance with this Section 15.01; *provided*, *further*, that the text of such Fundamental Change Company Notice shall be prepared by the Company. If any of the Notes is in the form of a Global Note, then the Company shall modify such notice to the extent necessary to accord with the Applicable Procedures relating to the purchase of Global Notes. The Trustee shall not be obligated on behalf of the Company to publish a notice containing the information that is required in the Fundamental Change Company Notice in a newspaper of general circulation in The City of New York or publish information on a website of the Company or through such other public medium the Company may use at that time.

No failure of the Company to give the foregoing notices or defect therein shall limit any Holder's right to exercise its right to cause the Company to repurchase such Holder's Notes pursuant to this Section 15.01.

(c) A Holder may exercise its rights specified in this Section 15.01 upon delivery of (1) the Note to be repurchased, duly endorsed for transfer, together with (2) a written purchase notice and the form entitled "Fundamental Change Purchase Notice" on the reverse of the Note duly completed and which may be delivered by letter, overnight courier, hand delivery, facsimile transmission or in any other written form onto the Paying Agent (in the case of Notes held in book-entry form, in accordance with DTC's Applicable Procedures) of the exercise of such rights (a "**Fundamental Change Purchase Notice**") to the Paying Agent at any time on or before the close of business on the Fundamental Change Purchase Date, subject to extension to comply with applicable law.

(i) The Fundamental Change Purchase Notice shall state: (A) the certificate number (if such Note is held in certificated form) of the Note which the Holder will deliver to be repurchased (or, if the Note is held in global form, any other items required to comply with the Applicable Procedures), (B) the portion of the principal amount of the Note which the Holder will deliver to be repurchased and (C) that such Note shall be repurchased as of the Fundamental Change Purchase Date pursuant to the terms and conditions specified in the Notes and in this Indenture.

(ii) The delivery of a Note for which a Fundamental Change Purchase Notice has been timely delivered to any Paying Agent, on or before the Business Day immediately preceding the Fundamental Change Purchase Date (together with all necessary endorsements) at the office of such Paying Agent shall be a condition to the receipt by the Holder of the Fundamental Change Purchase Price therefor (or, if the Note is held in global form, any items required to comply with the Applicable Procedures).

(iii) The Company shall only be obliged to purchase, pursuant to this Section 15.01, a portion of a Note if the principal amount of such portion is $1,000 or an integral multiple of $1,000 (provisions of this Indenture that apply to the purchase of all of a Note also apply to the purchase of such portion of such Note).

(iv) A Paying Agent shall promptly notify the Company of the receipt by it of any Fundamental Change Purchase Notice.

(v) Anything herein to the contrary notwithstanding, in the case of Global Notes, any Fundamental Change Purchase Notice may be delivered and such Notes may be surrendered or delivered for purchase in accordance with the Applicable Procedures as in effect from time to time.

(vi) A Holder may withdraw any Fundamental Change Purchase Notice in whole or in part by written notice of withdrawal delivered to the Paying Agent or in accordance with DTC's Applicable Procedures prior to the close of business on the Business Day prior to the Fundamental Change Purchase Date. Such notice of withdrawal shall state: (A) the principal amount of the withdrawn Note , (B) the certificate number (if such Note is held in certificated form) of the withdrawn Note (or, if the Note is held in global form, any other items required to comply with the Applicable Procedures), and (C) the principal amount, if any, which remains subject to the Fundamental Change Purchase Notice.

(d) The Company shall deposit cash at the time and in the manner as provided in Section 15.03, sufficient (as determined by the Company) to pay the aggregate Fundamental Change Purchase Price of all Notes to be purchased pursuant to this Section 15.01.

Section 15.02. Effect of Fundamental Change Purchase Notice. Upon receipt by any Paying Agent of a properly completed Fundamental Change Purchase Notice from a Holder, the Holder of the Note in respect of which such Fundamental Change Purchase Notice was given shall thereafter be entitled to receive the Fundamental Change Purchase Price with respect to such Note. Such Fundamental Change Purchase Price shall be paid to such Holder promptly following the later of (1) the Fundamental Change Purchase Date (provided that the conditions in Section 15.01 have been satisfied) and (2) the time of book-entry transfer or delivery of such Note to a Paying Agent by the Holder thereof in the manner required by Section 15.01(c), subject to extension to comply with applicable law.

Section 15.03. Deposit of Fundamental Change Purchase Price. (a) On or before the applicable Fundamental Change Purchase Date, the Company shall deposit with the Paying Agent (or if the Company or an Affiliate of the Company is acting as the Paying Agent, shall segregate and hold in trust as provided in Section 7.06) an amount of money (in immediately available funds if deposited on or after such Fundamental Change Purchase Date), sufficient (as determined by the Company) to pay the aggregate Fundamental Change Purchase Price of all the Notes or portions thereof that are to be purchased as of the Fundamental Change Purchase Date. Payment by the Paying Agent of the Fundamental Change Purchase Price following receipt of the Fundamental Change Purchase Price from the Company shall be made promptly following the later of the Fundamental Change Purchase Date or the time of book-entry transfer or delivery of such Notes.

(b) If the Paying Agent holds, on the Fundamental Change Purchase Date, in accordance with the terms hereof, money or securities sufficient to pay the Fundamental Change Purchase Price of any Note for which a Fundamental Change Purchase Notice has been tendered then, immediately following the applicable Fundamental Change Purchase Date, whether or not book-entry transfer of the Note is made or whether or not the Note is delivered to the Paying Agent, each such Note shall cease to be Outstanding, interest, including additional interest, if any, shall cease to accrue, and all other rights of the Holder in respect of the Note shall terminate (other than the right to receive the Fundamental Change Purchase Price upon delivery or transfer of the Note as aforesaid).

(c) If a Fundamental Change Purchase Date falls after a Regular Record Date and on or before the related Interest Payment Date, then interest on the Notes payable on such Interest Payment Date will be payable to the Holders in whose names the Notes are registered at the close of business on such Regular Record Date.

Section 15.04. Repayment to the Company. To the extent that the aggregate amount of cash deposited by the Company pursuant to Section 15.03 exceeds the aggregate Fundamental Change Purchase Price of the Notes or portions thereof that the Company is obligated to purchase, then promptly after the Fundamental Change Purchase Date the Paying Agent shall return any such excess cash to the Company.

Section 15.05. Notes Purchased In Part. Any Note that is to be purchased only in part shall be surrendered at the office of a Paying Agent, and promptly after the Fundamental Change Purchase Date, the Company shall execute and the Trustee shall authenticate and deliver to the Holder of such Note, without service charge, a new Note or Notes, of such authorized denomination or denominations as may be requested by such Holder (which must be equal to $1,000 principal amount or any integral thereof), in aggregate principal amount equal to, and in exchange for, the portion of the principal amount of the Note so surrendered that is not purchased.

Section 15.06. Compliance With Securities Laws Upon Purchase of Notes. In connection with any offer to purchase of Notes under Section 15.01, the Company shall (a) comply with Rule 13e-4 and Rule 14e-1 (or any successor to either such Rule), and any other tender offer rules, if applicable, under the Exchange Act, (b) file the related Schedule TO (or any successor or similar schedule, form or report) if required under the Exchange Act, and (c) otherwise comply with all applicable federal and state securities laws in connection with such offer to purchase or purchase of Notes, all so as to permit the rights of the

Holders and obligations of the Company under Section 15.01 through Section 15.05 to be exercised in the time and in the manner specified therein. To the extent that compliance with any such laws, rules and regulations would result in a conflict with any of the terms hereof, this Indenture is hereby modified to the extent required for the Company to comply with such laws, rules and regulations.

ARTICLE 16
MEETING OF HOLDERS OF NOTES

Section 16.01. Purposes For Which Meetings May Be Called. A meeting of Holders of Notes may be called at any time and from time to time pursuant to this Article 16 to make, give or take any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be made, given or taken by Holders of Notes.

Notwithstanding anything contained in this Article 16, the Trustee may, during the pendency of a Default or an Event of Default, call a meeting of Holders of Notes in accordance with its standard practices.

Section 16.02. Call Notice and Place of Meetings. (a) The Trustee may at any time call a meeting of Holders of Notes for any purpose specified in Section 16.01 hereof, to be held at such time and at such place in The City of New York. Notice of every meeting of Holders of Notes, setting forth the time and the place of such meeting, in general terms the action proposed to be taken at such meeting and the percentage of the principal amount of the then-Outstanding Notes which shall constitute a quorum at such meeting, shall be given, in the manner provided in the Indenture, not less than 21 nor more than 180 days prior to the date fixed for the meeting.

(b) In case at any time the Company, pursuant to a resolution of the Board of Directors, or the Holders of at least 10% in principal amount of the Notes then Outstanding shall have requested the Trustee to call a meeting of the Holders of Notes for any purpose specified in Section 16.01 hereof, by written request setting forth in reasonable detail the action proposed to be taken at the meeting, and the Trustee shall not have made the first publication of the notice of such meeting within 21 days after receipt of such request or shall not thereafter proceed to cause the meeting to be held as provided herein, then the Company or the Holders of Notes in the amount specified, as the case may be, may determine the time and the place in The City of New York for such meeting and may call such meeting for such purposes by giving notice thereof as provided in Section 16.02(a).

Section 16.03. Persons Entitled to Vote at Meetings. To be entitled to vote at any meeting of Holders of Notes, a Person shall be (a) a Holder of one or

more Outstanding Notes or (b) a Person appointed by an instrument in writing as proxy for a Holder or Holders of one or more Outstanding Notes by such Holder or Holders. The only Persons who shall be entitled to be present or to speak at any meeting of Holders shall be the Persons entitled to vote at such meeting and their counsel, any representatives of the Trustee and its counsel and any representatives of the Company and its counsel.

Section 16.04. Quorum; Action. The Persons entitled to vote a majority in principal amount of the then-Outstanding Notes shall constitute a quorum. In the absence of a quorum within 30 minutes of the time appointed for any such meeting, the meeting shall, if convened at the request of Holders of Notes, be dissolved. In any other case, the meeting may be adjourned for a period of not less than 10 days as determined by the chairman of the meeting prior to the adjournment of such meeting. In the absence of a quorum at any such adjourned meeting, such adjourned meeting may be further adjourned for a period of not less than 10 days as determined by the chairman of the meeting prior to the adjournment of such adjourned meeting. Notice of the reconvening of any adjourned meeting shall be given as provided in Section 16.02(a) hereof, except that such notice need be given only once and not less than five days prior to the date on which the meeting is scheduled to be reconvened.

At a meeting or an adjourned meeting duly reconvened and at which a quorum is present as aforesaid, any resolution and all matters (except as limited by the third paragraph of Section 9.02 hereof) shall be effectively passed and decided if passed or decided by the Persons entitled to vote not less than a majority in principal amount of Notes then Outstanding represented and voting at such meeting.

Any resolution passed or decisions taken at any meeting of Holders of Notes duly held in accordance with this Section 16.04 shall be binding on all the Holders of Notes, whether or not present or represented at the meeting.

Section 16.05. Determination of Voting Rights; Conduct and Adjournment of Meetings. (a) Notwithstanding any other provisions of this Indenture, the Trustee may make such reasonable regulations as it may deem advisable for any meeting of Holders of Notes in regard to proof of the holding of Notes and of the appointment of proxies and in regard to the appointment and duties of inspectors of votes, the submission and examination of proxies, certificates and other evidence of the right to vote, and such other matters concerning the conduct of the meeting as it shall deem appropriate.

(b) The Trustee shall, by an instrument in writing, appoint a temporary chairman (which may be the Trustee) of the meeting, unless the meeting shall have been called by the Company or by Holders of Notes as provided in Section 16.02 hereof, in which case the Company or the Holders of Notes calling the

meeting, as the case may be, shall in like manner appoint a temporary chairman. A permanent chairman and a permanent secretary of the meeting shall be elected by vote of the Persons entitled to vote a majority in principal amount of the Outstanding Notes represented at the meeting.

(c) At any meeting, each Holder of a Note or proxy shall be entitled to one vote for each $1,000 principal amount of Notes held or represented by him; *provided*, *however*, that no vote shall be cast or counted at any meeting in respect of any Note challenged as not Outstanding and ruled by the chairman of the meeting to be not Outstanding. The chairman of the meeting shall have no right to vote, except as a Holder of a Note or proxy.

(d) Any meeting of Holders of Notes duly called pursuant to Section 16.02 hereof at which a quorum is present may be adjourned from time to time by Persons entitled to vote a majority in principal amount of the then-Outstanding Notes represented at the meeting, and the meeting may be held as so adjourned without further notice.

Section 16.06. Counting Votes and Recording Action of Meetings. The vote upon any resolution submitted to any meeting of Holders of Notes shall be by written ballots on which shall be subscribed the signatures of the Holders of Notes or of their representatives by proxy and the principal amounts and serial numbers of the Outstanding Notes held or represented by them. The permanent chairman of the meeting shall appoint two inspectors of votes who shall count all votes cast at the meeting for or against any resolution and who shall make and file with the secretary of the meeting their verified written reports in duplicate of all votes cast at the meeting. A record, at least in duplicate, of the proceedings of each meeting of Holders of Notes shall be prepared by the secretary of the meeting and there shall be attached to said record the original reports of the inspectors of votes on any vote by ballot taken thereat and affidavits by one or more Persons having knowledge of the facts setting forth a copy of the notice of the meeting and showing that said notice was given as provided in Section 16.02 hereof and, if applicable, Section 16.04 hereof. Each copy shall be signed and verified by the affidavits of the permanent chairman and secretary of the meeting and one such copy shall be delivered to the Company and another to the Trustee to be preserved by the Trustee, the latter to have attached thereto the ballots voted at the meeting. Any record so signed and verified shall be conclusive evidence of the matters therein stated.

ARTICLE 17
MISCELLANEOUS PROVISIONS

Section 17.01. Provisions Binding on Company's Successors. All the covenants, stipulations, promises and agreements of the Company contained in this Indenture shall bind its successors and assigns whether so expressed or not.

Section 17.02. Official Acts by Successor. Any act or proceeding by any provision of this Indenture authorized or required to be done or performed by any board, committee or officer of the Company shall and may be done and performed with like force and effect by the like board, committee or officer of any corporation or other entity that shall at the time be the lawful sole successor of the Company.

Section 17.03. Notices. Except as otherwise expressly provided herein, any notice, request or demand that by any provision of this Indenture is required or permitted to be given, made or served by the Trustee or by the Holders or by any other Person pursuant to this Indenture to or on the Company may be given or served by being deposited in first class mail, postage prepaid, addressed (until another address is filed in writing by the Company with the Trustee), as follows: 30930 Russell Ranch Road, Suite 300, Westlake Village, CA 91362. Any notice, election, request or demand by the Company or any Holder or by any other Person pursuant to this Indenture to or upon the Trustee shall be deemed to have been sufficiently given or made, for all purposes, if given or made in writing at the Corporate Trust Office of the Trustee or sent electronically in PDF format. Except as otherwise expressly provided herein, any notice or communication to a Holder of a Physical Note may be given or served by being deposited in first class mail, postage prepaid, addressed at the Holder's address as it appears in the Note Register or sent electronically in PDF format to such address provided by the Holder to the Trustee from time to time and reflected in the Note Register; *provided* that notices given to Holders of Global Notes may be given by electronic transmission to the facilities of the Depositary.

Section 17.04. Governing Law. THIS INDENTURE AND EACH NOTE SHALL BE DEEMED TO BE A CONTRACT MADE UNDER THE LAWS OF NEW YORK, AND FOR ALL PURPOSES SHALL BE CONSTRUED IN ACCORDANCE WITH THE LAWS OF NEW YORK, WITHOUT REGARD TO CONFLICTS OF LAWS PRINCIPLES THEREOF.

Section 17.05. Evidence of Compliance with Conditions Precedent; Certificates and Opinions of Counsel to Trustee. Upon any application or demand by the Company to the Trustee to take any action under any of the provisions of this Indenture, the Company shall furnish to the Trustee an Officer's Certificate and an Opinion of Counsel stating that such action is permitted by the terms of this Indenture; *provided* that no such Opinion of Counsel shall be required in connection with the issuance of Notes on the Issue Date.

Each Officer's Certificate and Opinion of Counsel provided for by or on behalf of the Company in this Indenture and delivered to the Trustee with respect to compliance with this Indenture (other than the Officer's Certificates provided for in Section 4.04) shall include (a) a statement that the Person making such certification is familiar with the requested action and this Indenture; (b) a brief statement as to the nature and scope of the examination or investigation upon which the statement contained in such certificate is based; (c) a statement that, in the judgment of such person, he or she has made such examination or investigation as is necessary to enable him or her to express an informed judgment as to whether or not such action is permitted by this Indenture; and (d) a statement as to whether or not, in the judgment of such Person, such action is permitted by this Indenture.

Notwithstanding anything to the contrary in this Section 17.05, if any provision in this Indenture specifically provides that the Trustee shall or may receive an Opinion of Counsel in connection with any action to be taken by the Trustee or the Company hereunder, the Trustee shall be entitled to, or entitled to request, such Opinion of Counsel.

Section 17.06. Legal Holidays. In any case where any Interest Payment Date, Fundamental Change Purchase Date, Conversion Date or Maturity Date is not a Business Day, then any action to be taken on such date need not be taken on such date, but may be taken on the next succeeding Business Day with the same force and effect as if taken on such date, and no interest shall accrue for the period from and after such date.

Section 17.07. No Security Interest Created. Nothing in this Indenture or in the Notes, expressed or implied, shall be construed to constitute a security interest under the Uniform Commercial Code or similar legislation, as now or hereafter enacted and in effect, in any jurisdiction.

Section 17.08. Benefits of Indenture. Nothing in this Indenture or in the Notes, expressed or implied, shall give to any Person, other than the parties hereto, any Paying Agent, any Conversion Agent, any authenticating agent, any Note Registrar and their successors hereunder or the Holders of the Notes, any benefit or any legal or equitable right, remedy or claim under this Indenture.

Section 17.09. Table of Contents, Headings, Etc. The table of contents and the titles and headings of the articles and sections of this Indenture have been inserted for convenience of reference only, are not to be considered a part hereof, and shall in no way modify or restrict any of the terms or provisions hereof.

Section 17.10. Execution in Counterparts. This Indenture may be executed in any number of counterparts, each of which shall be an original, but such counterparts shall together constitute but one and the same instrument. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture and signature pages for all purposes.

Section 17.11. Severability. In the event any provision of this Indenture or in the Notes shall be invalid, illegal or unenforceable, then (to the extent permitted by law) the validity, legality or enforceability of the remaining provisions shall not in any way be affected or impaired.

Section 17.12. Waiver of Jury Trial. EACH OF THE COMPANY AND THE TRUSTEE HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS INDENTURE, THE NOTES OR THE TRANSACTION CONTEMPLATED HEREBY.

Section 17.13. Consent to Jurisdiction. (a) The Company hereby irrevocably and unconditionally submits, for itself and its property, to the nonexclusive jurisdiction of any New York State court or federal court of the United States sitting in the State and City of New York, County and Borough of Manhattan, and any appellate court from any thereof, in any action or proceeding arising out of or relating to this Indenture or the Notes, or for recognition or enforcement of any judgment, and each of the parties hereto hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such state court sitting in the State and City of New York, County and Borough of Manhattan or, to the extent permitted by law, in such federal court sitting in the State and City of New York, County and Borough of Manhattan. Each of the parties hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

(b) The Company hereby irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection which it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Indenture or the Notes in any New York State or federal court. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

Section 17.14. Force Majeure. In no event shall the Trustee be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including, without limitation, strikes, work stoppages, accidents, acts of war or terrorism, civil or military disturbances, nuclear or natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the Trustee shall use reasonable efforts that are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances.

Section 17.15. Calculations. Except as explicitly stated herein, the Company shall be responsible for making all calculations required pursuant to this Indenture and the Notes, including, without limitation, calculations with respect to determinations of the Conversion Price and Conversion Rate applicable to the Notes. The Company shall make all such calculations in good faith and, absent manifest error, the Company's calculations shall be binding on the Holders. The Company shall provide a written schedule of such calculations to the Trustee, and the Trustee shall be entitled to conclusively rely upon the accuracy of the Company's calculations without responsibility for independent verification thereof. The Trustee shall forward a copy of such calculations to any Holder upon such Holder's written request.

Section 17.16. U.S.A. Patriot Act. The parties hereto acknowledge that in accordance with Section 326 of the U.S.A. Patriot Act, the Trustee, like all financial institutions and in order to help fight the funding of terrorism and money laundering, is required to obtain, verify, and record information that identifies each person or legal entity that establishes a relationship or opens an account with the Trustee. The parties to this Indenture agree that they will provide the Trustee with such information as it may request in order for the Trustee to satisfy the requirements of the U.S.A. Patriot Act.

ARTICLE 18
SUBORDINATION

Section 18.01. Subordination.

(a) The Company covenants and agrees, and each Holder, by accepting a Note, likewise covenants and agrees, that all payments on the Notes, including the payment of principal, Fundamental Change Purchase Price and interest (including Special Interest and Additional Interest) on the Notes, will be subordinated to the prior payment in full in cash (or other payment satisfactory to the holders of Designated Senior Debt) of all of the Designated Senior Debt and the subordination is for the benefit of and enforceable by the holders of the Designated Senior Debt.

(b) Upon any distribution of the Company's assets upon any dissolution, winding up, liquidation, reorganization, bankruptcy, assignment for the benefit of holders or any other marshaling of assets, or similar proceeding, the payment of the principal, Fundamental Change Purchase Price and interest (including Special Interest and Additional Interest) on, the Notes will be subordinated in right of payment to the prior payment in full in cash (or other payment satisfactory to the holders of Designated Senior Debt) of all of the Designated Senior Debt. The Company shall promptly notify holders of Designated Senior Debt if payment of the Notes is accelerated because of an Event of Default or if a Fundamental Change occurs.

Notwithstanding the foregoing, the right of Holders to receive any distributions, which (x) are provided for by a plan of reorganization or readjustment authorized by an order or decree of a court of competent jurisdiction in a reorganization proceeding under any applicable Bankruptcy Law relating to the Company and consented to by the holders of the Designated Senior Debt and (y) take the form of the Company's equity interests or the Company's indebtedness that is subordinated in right of payment to Designated Senior Debt then outstanding to at least the same extent of the Notes, shall not be subordinated to the prior payment of any Designated Senior Debt or otherwise subject to the subordination provisions of this Section 18.01, and none of the Holders will be obligated to pay over any such distributions to any holder of Designated Senior Debt. The Company may not make any payment on the Notes if:

(i) at the time any default in the payment of principal, premium, interest or other amounts due on Designated Senior Debt when due, whether at maturity, upon redemption or mandatory repurchase, acceleration, or otherwise, and the default has not been cured or waived (a "**Payment Default**"); or

(ii) a default, other than a payment default, on any Designated Senior Debt occurs and is continuing that permits holders of Designated Senior Debt to accelerate its maturity, and the Trustee receives a notice of such default (a "**Payment Blockage Notice**") from a holder of Designated Senior Debt electing to effect a payment blockage under this Indenture (a "**Nonpayment Default**").

The Company may resume payments and distributions on the Notes:

(i) in case of a Payment Default, upon the date on which such default is cured or waived or ceases to exist; and

(ii) in case of a Nonpayment Default, the earlier of (A) the date on which such Nonpayment Default is cured or waived, (B) 91 days after the date the Designated Senior Debt is paid in full in cash (or other payment satisfactory to the holders of the Designated Senior Debt), (C) 179 days after the date on which the Payment Blockage Notice is received by the Trustee, if the maturity of the Designated Senior Debt has not been accelerated and there is no Payment Default, or (D) the date the Payment Blockage Notice has been rescinded.

No Nonpayment Default that existed or was continuing on the date of delivery of any Payment Blockage Notice shall be the basis for any later Payment Blockage Notice unless such default shall have been cured or waived for a period of not less than 90 consecutive days.

(c) If the Trustee or any Holder receives any payment or distribution of the Company's assets in contravention of the subordination provisions of this Section 18.01 before all Designated Senior Debt is paid in full in cash or other payment satisfactory to holders of Designated Senior Debt, then such payment or distribution will be held for the benefit of holders of Designated Senior Debt or their representatives and paid over to them to the extent necessary to make payment in full in cash or payment satisfactory to the holders of Designated Senior Debt of all unpaid Designated Senior Debt.

The Trustee shall not be deemed to owe any fiduciary duty to the holders of Designated Senior Debt and shall not be liable to any such holders if the Trustee shall in good faith mistakenly pay over or distribute to Holders or to the Company or to any other person cash, property or securities to which any holders of Designated Senior Debt shall be entitled by virtue of this Article or otherwise. With respect to the holders of Designated Senior Debt, the Trustee undertakes to perform or to observe only such of its covenants or obligations as are specifically set forth in this Article and no implied covenants or obligations with respect to holders of Designated Senior Debt shall be read into this Indenture against the Trustee.

Nothing in this Section 18.01 shall prohibit the conversion or exchange of any or all of the Notes into or for shares of Common Stock, including cash payments in lieu of fractional shares of common stock, or the issuance of Interest Shares.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed as of the date first written above.

MANNKIND CORPORATION, as Issuer

By: /s/ Steven Binder
Name: Steven Binder
Title: Chief Financial Officer

U.S. Bank National Association, as Trustee

By: /s/ Richard Prokosch
Name: Richard Prokosch
Title: Vice President

EXHIBIT A

[FORM OF FACE OF NOTE]

[INCLUDE IF A GLOBAL NOTE]

[UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION ("DTC"), TO THE COMPANY OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE, OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE, OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.]

[INCLUDE IF A RESTRICTED SECURITY]

THE SALE OF THIS NOTE HAS NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND ACCORDINGLY, THIS NOTE MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT AS SET FORTH IN THE FOLLOWING SENTENCE. BY ITS ACQUISITION HEREOF, OR OF A BENEFICIAL OWNERSHIP HEREIN, THE ACQUIRER: (I) REPRESENTS THAT IT, AND ANY ACCOUNT FOR WHICH IT IS ACTING, IS A "QUALIFIED INSTITUTIONAL BUYER" (WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT) AND THAT IT EXERCISES SOLE INVESTMENT DISCRETION WITH RESPECT TO EACH SUCH ACCOUNT, AND (II) AGREES (1) THAT IT WILL NOT WITHIN THE LATER OF (X) ONE YEAR AFTER THE DATE OF ISSUANCE OF THIS NOTE AND (Y) 90 DAYS AFTER IT CEASES TO BE AN AFFILIATE (WITHIN THE MEANING OF RULE 144 UNDER THE SECURITIES ACT) OF MANNKIND CORPORATION (THE "COMPANY"), OFFER, RESELL, PLEDGE OR OTHERWISE TRANSFER THE NOTES EVIDENCED HEREBY, THE COMMON STOCK ISSUABLE UPON CONVERSION OF SUCH NOTES OR ANY BENEFICIAL OWNERSHIP HEREIN, EXCEPT: (A) TO THE COMPANY OR ANY SUBSIDIARY THEREOF; (B) UNDER A REGISTRATION STATEMENT THAT HAS BECOME EFFECTIVE UNDER THE SECURITIES ACT; (C) TO A PERSON THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) THAT IS PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF ANOTHER QUALIFIED

INSTITUTIONAL BUYER AND TO WHOM NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, ALL IN COMPLIANCE WITH RULE 144A (IF AVAILABLE); OR (D) UNDER ANY OTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, INCLUDING RULE 144, IF AVAILABLE; AND (2) THAT IT WILL, PRIOR TO ANY TRANSFER OF THIS NOTE WITHIN THE LATER OF (X) SIX MONTHS (OR, IF THE COMPANY HAS NOT SATISFIED THE CURRENT PUBLIC INFORMATION REQUIREMENTS OF RULE 144, ONE YEAR) AFTER THE DATE OF ISSUANCE OF THIS NOTE AND (Y) 90 DAYS AFTER IT CEASES TO BE AN AFFILIATE (WITHIN THE MEANING OF RULE 144) OF THE COMPANY, FURNISH TO THE TRUSTEE AND THE COMPANY SUCH CERTIFICATIONS, LEGAL OPINIONS OR OTHER INFORMATION AS THEY MAY REQUIRE AND MAY RELY UPON TO CONFIRM THAT SUCH TRANSFER IS BEING MADE PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS. IN ANY EVENT, NO AFFILIATE OF THE COMPANY MAY RESELL THIS NOTE OTHER THAN UNDER A REGISTRATION STATEMENT THAT HAS BECOME EFFECTIVE UNDER THE SECURITIES ACT OR PURSUANT TO AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT IN A TRANSACTION THAT RESULTS IN SUCH NOTE NO LONGER BEING “RESTRICTED SECURITIES” (AS DEFINED UNDER RULE 144). NO REPRESENTATION IS MADE AS TO THE AVAILABILITY OF ANY EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT. EACH PURCHASER AND TRANSFEREE OF A NOTE AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF A NOTE WILL BE DEEMED TO HAVE REPRESENTED BY ITS PURCHASE AND HOLDING OF THE NOTE AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THE NOTE THAT (A) ITS PURCHASE AND HOLDING OF THE NOTE AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THE NOTE IS NOT MADE ON BEHALF OF OR WITH “PLAN ASSETS” OF ANY PLAN SUBJECT TO TITLE I OF ERISA, SECTION 4975 OF THE CODE OR ANY SIMILAR LAW OR (B) ITS PURCHASE AND HOLDING OF THE NOTE AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THE NOTE WILL NOT RESULT IN A NON-EXEMPT PROHIBITED TRANSACTION UNDER SECTION 406 OF ERISA, SECTION 4975 OF THE CODE OR ANY SIMILAR LAW.

MANNKIND CORPORATION

5.75% Convertible Senior Subordinated Exchange Notes Due 2024

No. $

CUSIP No.

ISIN No.

MannKind Corporation, a corporation duly organized and validly existing under the laws of the state of Delaware (herein called the "**Company**," which term includes any successor corporation or other entity under the Indenture referred to on the reverse hereof), for value received hereby promises to pay to CEDE & CO., or registered assigns, the principal sum of $[ ] (which amount may from time to time be increased or decreased to such other principal amounts as permitted by the Indenture by adjustments made on the records of the Trustee or the Custodian of the Depositary as set forth in Schedule A hereto, in accordance with the rules and procedures of the Depositary) on the Maturity Date (as defined in the Indenture), and interest thereon as set forth below.

This Note shall bear interest at the rate of 5.75% per year from the date of issuance of such Note or from the most recent date to which interest has been paid or duly provided for, to the date the principal amount of such Note is paid or deemed paid, as the case may be. Interest is payable semi-annually in arrears on each February 15 and August 15 (or if any such day is not a Business Day, the immediately following Business Day), commencing February 15, 2020, to the holder of record on February 1 or August 1 (whether or not such day is a Business Day) immediately preceding such Interest Payment Date (Regular Record Date).

Interest on the Notes shall be computed on the basis of a 360-day year comprised of twelve 30-day months

Interest not paid when due and any interest on principal or interest not paid when due will be paid to Holders on a special record date, which will be the 15th day preceding the day fixed by the Company for the payment of such interest, whether or not such day is a Business Day. At least 15 days before a special record date, the Company will send to each Holder and to the Trustee a notice that sets forth the special record date, the payment date and the amount of interest to be paid.

Payment of the principal of, and accrued and unpaid interest on, this Note shall be made at the office or agency of the Company maintained for that purpose in such lawful money of the United States of America as at the time of payment shall be legal tender for the payment of public and private debts; *provided*,

however, that interest on any Physical Notes (i) to the Person entitled thereto having an aggregate principal amount of $2,000,000 or less, by check mailed to such Person at the address set forth in the Note Register and (ii) to the Person entitled thereto having an aggregate principal amount of more than $2,000,000, either by check mailed to such Person or, upon application by such Person to the Note Registrar not later than the relevant Regular Record Date, by wire transfer in immediately available funds to such Person's account within the United States, which application and wire transfer instructions shall remain in effect until such Person notifies, in writing, the Note Registrar to the contrary.

Reference is made to the further provisions of this Note set forth on the reverse hereof, including, without limitation, provisions giving the Holder of this Note the right to convert this Note into shares of Common Stock (together with cash in lieu of fractional shares) on the terms and subject to the limitations set forth in the Indenture. Such further provisions shall for all purposes have the same effect as though fully set forth at this place.

THIS NOTE SHALL BE DEEMED TO BE A CONTRACT MADE UNDER THE LAWS OF NEW YORK, AND FOR ALL PURPOSES SHALL BE CONSTRUED IN ACCORDANCE WITH THE LAWS OF NEW YORK, WITHOUT REGARD TO CONFLICTS OF LAWS PRINCIPLES THEREOF.

This Note shall not be valid or become obligatory for any purpose until the certificate of authentication hereon shall have been manually signed by the Trustee or a duly authorized authenticating agent under the Indenture.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the Company has caused this Note to be duly executed.

MANNKIND CORPORATION

By: _____
Name:
Title:

Dated:

TRUSTEE'S CERTIFICATE OF AUTHENTICATION U.S. Bank National Association,
as Trustee, certifies that this is one of the Notes described in the within-named Indenture.

By: _____
Authorized Signatory

[FORM OF REVERSE OF NOTE]

MANNKIND CORPORATION
5.75% Convertible Senior Subordinated Exchange Notes Due 2024

This Note is one of a duly authorized issue of the Notes of the Company, designated as its 5.75% Convertible Senior Subordinated Exchange Notes Due 2024 (herein called the "**Notes**"), all issued or to be issued under and pursuant to an Indenture dated as of August 6, 2019 (herein called the "**Indenture**"), between the Company and U.S. Bank National Association (herein called the "**Trustee**"), to which Indenture and all indentures supplemental thereto reference is hereby made for a description of the rights, limitations of rights, obligations, duties and immunities thereunder of the Trustee, the Company and the Holders of the Notes. Additional Notes may be issued in an unlimited aggregate principal amount, subject to certain conditions specified in the Indenture.

All payments on the Notes, including the payment of principal, Fundamental Change Purchase Price, interest (including Special Interest and Additional Interest) on the Notes, will be subordinated to the prior payment in full in cash (or other payment satisfactory to the holders of Designated Senior Debt) of all of the Designated Senior Debt and the subordination is for the benefit of and enforceable by the holders of the Designated Senior Debt.

In case an Event of Default, as defined in the Indenture, shall have occurred and be continuing, the principal of and accrued and unpaid interest, if any, on all Notes may be declared, by either the Trustee or Holders of not less than 25% in aggregate principal amount of Notes then outstanding, and upon said declaration shall become, due and payable, in the manner, with the effect and subject to the conditions and certain exceptions set forth in the Indenture.

Subject to the terms and conditions of the Indenture, the Company will make all payments and deliveries in respect of the Fundamental Change Purchase Price and the principal amount on the Maturity Date, as the case may be, to the Holder who surrenders a Note to a Paying Agent to collect such payments in respect of the Note. The Company will pay cash amounts in money of the United States that at the time of payment is legal tender for payment of public and private debts.

The Indenture contains provisions permitting the Company and the Trustee in certain circumstances, without the consent of the Holders of the Notes, and in other circumstances, with the consent of the Holders of not less than a majority in aggregate principal amount of the Notes at the time outstanding, evidenced as in the Indenture provided, to execute supplemental indentures modifying the terms of the Indenture and the Notes as described therein. It is also provided in the Indenture that, subject to certain exceptions, the Holders of a

majority in aggregate principal amount of the Notes at the time outstanding may on behalf of the Holders of all of the Notes waive any past Default or Event of Default under the Indenture and its consequences.

No reference herein to the Indenture and no provision of this Note or of the Indenture shall alter or impair the obligation of the Company, which is absolute and unconditional, to pay the principal of and accrued and unpaid interest, if any, on this Note at the place, at the respective times, at the rate and in the lawful money herein prescribed or to satisfy its obligation to convert the Notes.

The Notes are issuable in registered form without coupons in denominations of $1,000 principal amount and multiples thereof. At the office or agency of the Company referred to on the face hereof, and in the manner and subject to the limitations provided in the Indenture, Notes may be exchanged for a like aggregate principal amount of Notes of other authorized denominations, without payment of any service charge but, if required by the Company or Trustee, with payment of a sum sufficient to cover any tax, assessments or other governmental charges that may be imposed in connection therewith as a result of the name of the Holders of the new Notes issued upon such exchange of Notes being different from the name of the Holder of the old Notes surrendered for such exchange.

Upon the occurrence of a Fundamental Change, the Company will offer to purchase any and all of the Notes. The Holder has the right, at such Holder’s option, to accept such offer and require the Company to purchase for cash all of such Holder’s Notes or any portion thereof (in principal amounts of $1,000 or multiples thereof) on the Fundamental Change Purchase Date at a price equal to the Fundamental Change Purchase Price.

Subject to the provisions of the Indenture, the Holder hereof has the right, at its option, prior to the close of business on the Business Day immediately preceding the Maturity Date, to convert any Notes or portion thereof that is $1,000 or a multiple thereof, into shares of Common Stock (together with cash in lieu of fractional shares) at a Conversion Rate specified in the Indenture, as adjusted from time to time as provided in the Indenture.

Terms used in this Note and defined in the Indenture are used herein as therein defined.

ABBREVIATIONS

The following abbreviations, when used in the inscription of the face of this Note, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM = as tenants in common

UNIF GIFT MIN ACT = Uniform Gifts to Minors Act

CUST = Custodian

TEN ENT = as tenants by the entireties

JT TEN = joint tenants with right of survivorship and not as tenants in common Additional abbreviations may also be used though not in the above list.

SCHEDULE A

MANNKIND CORPORATION
5.75% Convertible Senior Subordinated Exchange Notes Due 2024

The initial principal amount of this Note is $5,000,000. The following increases or decreases in this Note have been made:

Date of Exchange	Amount of decrease in Principal Amount of this Note	Amount of increase in Principal Amount of this Note	Principal Amount of this Note following such decrease or increase	Signature of authorized signatory of Trustee or Custodian

ATTACHMENT 1

[FORM OF NOTICE OF CONVERSION]
5.75% Convertible Senior Subordinated Exchange Notes Due 2024

To: MannKind Corporation

The undersigned registered owner of this Note hereby exercises the option to convert this Note, or the portion hereof (that is $1,000 principal amount or a multiple thereof) below designated, and the Company, at its election, may deliver shares of Common Stock (together with cash in lieu of fractional shares) in accordance with the terms of the Indenture referred to in this Note, and directs that any shares of Common Stock issuable and deliverable upon such conversion, and any Notes representing any unconverted principal amount hereof, be issued and delivered to the registered Holder hereof unless a different name has been indicated below. If any shares of Common Stock or any portion of this Note not converted are to be issued in the name of a Person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto. Any amount required to be paid to the undersigned on account of interest accompanies this Note.

Dated: _____ _____

_____
Signature(s)

_____
Signature Guarantee

Signature(s) must be guaranteed by an eligible Guarantor Institution (banks, stock brokers, savings and loan associations and credit unions) with membership in an approved signature guarantee medallion program pursuant to Securities and Exchange Commission Rule 17Ad-15 if shares of Common Stock are to be issued, or Notes to be delivered, other than to and in the name of the registered Holder.

Fill in for registration of shares if to be issued, and Notes if to be delivered, other than to and in the name of the registered Holder:

(Name)

(Street Address)

(City, State and Zip Code)
Please print name and address

Principal amount to be converted (if less than all):
$,000

NOTICE: The above signature(s) of the Holder(s) hereof must correspond with the name as written upon the face of the Note in every particular without alteration or enlargement or any change whatever.

Social Security or Other Taxpayer
Identification Number

ATTACHMENT 2

[FORM OF FUNDAMENTAL CHANGE PURCHASE NOTICE]
5.75% Convertible Senior Subordinated Exchange Notes Due 2024

To: MannKind Corporation

The undersigned registered owner of this Note hereby acknowledges receipt of a notice from MannKind Corporation (the "**Company**") as to the occurrence of a Fundamental Change with respect to the Company, offering to purchase the Notes and specifying the Fundamental Change Purchase Date. The undersigned registered owner of this Note hereby accepts the Company's offer to purchase the Notes and instructs the Company to pay to the registered Holder hereof in accordance with the applicable provisions of the Indenture referred to in this Note (1) the entire principal amount of this Note, or the portion thereof (that is $1,000 principal amount or a multiple thereof) below designated, and (2) if such Fundamental Change Purchase Date does not fall during the period after a Regular Record Date and on or prior to the corresponding Interest Payment Date, accrued and unpaid interest thereon to, but excluding, such Fundamental Change Purchase Date.

In the case of Physical Notes, the certificate numbers of the Notes to be purchased are as set forth below:

Dated: _____

_____
Signature(s)

_____
Social Security or Other Taxpayer
Identification Number

Principal amount to be repaid (if less than all): $,000

NOTICE: The above signature(s) of the Holder(s) hereof must correspond with the name as written upon the face of the Note in every particular without alteration or enlargement or any change whatever.

ATTACHMENT 3

[FORM OF ASSIGNMENT AND TRANSFER]

For value received hereby sell(s), assign(s) and transfer(s) unto (Please insert social security or Taxpayer Identification Number of assignee) the within Note, and hereby irrevocably constitutes and appoints attorney to transfer the said Note on the books of the Company, with full power of substitution in the premises.

In connection with any transfer of the within Note occurring prior to the Resale Restriction Termination Date, as defined in the Indenture governing such Note, the undersigned confirms that such Note is being transferred:

☐ To MannKind Corporation or a subsidiary thereof; or

☐ Pursuant to the registration statement that has become or been declared effective under the Securities Act of 1933, as amended; or

☐ Pursuant to and in compliance with Rule 144A under the Securities Act of 1933, as amended; or

☐ Pursuant to and in compliance with Rule 144 under the Securities Act of 1933, as amended; or

☐ Pursuant to another available exemption from registration under the Securities Act of 1933, as amended.

Dated: _____

_____

Signature(s)

_____

Signature Guarantee

Signature(s) must be guaranteed by an eligible Guarantor Institution (banks, stock brokers, savings and loan associations and credit unions) with membership in an approved signature guarantee medallion program pursuant to Securities and Exchange Commission Rule 17Ad-15 if Notes are to be delivered, other than to and in the name of the registered Holder.

NOTICE: The signature on the assignment must correspond with the name as written upon the face of the Note in every particular without alteration or enlargement or any change whatever.

THE SECURITY REPRESENTED BY THIS CERTIFICATE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, OR APPLICABLE STATE SECURITIES LAWS. THIS SECURITY MAY NOT BE SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER SAID ACT, OR PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER SAID ACT INCLUDING, WITHOUT LIMITATION, PURSUANT TO RULE 144 UNDER SAID ACT, OR PURSUANT TO A PRIVATE SALE EFFECTED UNDER SECTION 4(A)(7) OF THE SECURITIES ACT OR APPLICABLE FORMAL OR INFORMAL SEC INTERPRETATION OR GUIDANCE, SUCH AS A SO-CALLED "4(A)(1) AND A HALF" SALE. NOTWITHSTANDING THE FOREGOING, THE SECURITY MAY BE PLEDGED (BUT NOT TRANSFERRED) IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING SECURED BY THE SECURITY. PRIOR TO THE REGISTRATION OF ANY TRANSFER PURSUANT TO AN EXEMPTION FROM REGISTRATION OTHER THAN RULE 144, BORROWER RESERVES THE RIGHT TO REQUIRE THE DELIVERY OF SUCH LEGAL OPINIONS, CERTIFICATIONS OR OTHER EVIDENCE AS MAY REASONABLY BE REQUIRED IN ORDER TO DETERMINE THAT THE PROPOSED TRANSFER IS BEING MADE IN COMPLIANCE WITH THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS.

THIS INSTRUMENT AND THE INDEBTEDNESS, RIGHTS AND OBLIGATIONS EVIDENCED HEREBY AND ANY LIENS OR OTHER SECURITY INTERESTS SECURING SUCH RIGHTS AND OBLIGATIONS ARE SUBORDINATE IN THE MANNER AND TO THE EXTENT SET FORTH IN THAT CERTAIN SUBORDINATION AGREEMENT (AS AMENDED, RESTATED, SUPPLEMENTED OR MODIFIED FROM TIME TO TIME, THE "SUBORDINATION AGREEMENT") DATED AS OF AUGUST 6, 2019, BY AND AMONG THE SUBORDINATING CREDITORS IDENTIFIED THEREIN AND MIDCAP FINANCIAL TRUST IN ITS CAPACITY AS AGENT FOR CERTAIN LENDERS (TOGETHER WITH ITS SUCCESSORS AND ASSIGNS, "SENIOR CREDITOR AGENT"), TO CERTAIN INDEBTEDNESS, RIGHTS, AND OBLIGATIONS OF MANKIND CORPORATION AND MANNKIND LLC TO SENIOR CREDITOR AGENT AND SENIOR LENDERS (AS DEFINED THEREIN) AND LIENS AND SECURITY INTERESTS OF SENIOR CREDITOR AGENT SECURING THE SAME ALL AS DESCRIBED IN THE SUBORDINATION AGREEMENT; AND EACH HOLDER AND TRANSFEREE OF THIS INSTRUMENT, BY ITS ACCEPTANCE HEREOF, IRREVOCABLY AGREES TO BE BOUND BY THE PROVISIONS OF THE SUBORDINATION AGREEMENT

PROMISSORY NOTE

$2,630,750 Issue Date: August 6, 2019

Westlake Village, California

THIS PROMISSORY NOTE (this "***Note***"), dated as of August 6, 2019, is issued pursuant to the certain Exchange Agreement, dated as of August 6, 2019, by and between **MANNKIND CORPORATION**, a Delaware corporation ("***Borrower***"), and **BRUCE FUND, INC.** ("***Lender***").

FOR VALUE RECEIVED, Borrower hereby promises to pay to Lender, in lawful money of the United States of America and in immediately available funds, the principal sum of up to Two Million Six Hundred Thirty Thousand Seven Hundred fifty Dollars ($2,630,750), due and payable on the Maturity Date.

1. Maturity; Repayment.

1.1 Maturity. The outstanding principal amount of this Note shall be due and payable on June 30, 2020; *provided* that if such date is not a Business Day, the outstanding principal amount of this Note, together with all accrued and unpaid interest thereon, shall be payable on the Business Day immediately succeeding such date (the "***Maturity Date***").

1.2 Repayment. Borrower shall pay this Note in lawful money of the United States of America and in immediately available funds or, at its option, in validly issued, fully paid and non-assessable shares of Common Stock (the "***New Shares***"), so long as each of the Equity Conditions are satisfied on each day during the Equity Conditions

Measuring Period applicable to such Payment Date. In respect of payments to be made in New Shares, Borrower shall deliver a written notice (which may be provided via e-mail) (such notice, a "***Payment Notice***") to Lender on or prior to the fifth Trading Day prior to the applicable payment date (such payment date, a "***Payment Date***"), which Payment Notice shall be irrevocable and shall specify the amount of this Note (the "***Payment Amount***") to be paid in New Shares, together with an officer's certificate certifying that the Equity Conditions with respect to such payment in New Shares have been met as of the applicable Payment Date. Notwithstanding anything herein to the contrary, if the Equity Conditions fail to have been met as of the applicable Payment Date, the applicable Payment Amount shall be payable in cash.

Any payments of this Note to paid with New Shares, shall be paid in a number of validly issued, fully paid and non-assessable shares of Common Stock equal to the quotient of (1) the Payment Amount payable on such Payment Date less any such payment paid in cash, divided by (2) the Last Reported Sale Price on the Trading Day immediately prior to the applicable Payment Date. If the issuance of New Shares would result in the issuance of a fraction of a share of Common Stock, Borrower shall round such fraction of a share of Common Stock to the nearest whole share (with 0.5 being rounded up). When any New Shares are to be issued, Borrower shall (i) (A) provided that Borrower's stock transfer agent is participating in the DTC Fast Automated Securities Transfer Program, upon the request of Lender, credit such aggregate number of New Shares to which Lender shall be entitled to Lender or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system, or (B) if the stock transfer agent is not participating in the DTC Fast Automated Securities Transfer Program, or upon request of Lender, issue and deliver to Lender no later than the second (2) Business Day after the applicable Payment Date certificates registered in the name of Lender for the number of New Shares to which Lender shall be entitled, (C) deposit such New Shares with the Depositary in accordance with the Applicable Procedures (as defined in the Indenture), or (D) otherwise deliver the applicable New Shares in accordance with procedures reasonably acceptable to the Lender.

2. Interest Rate. This Note shall be non-interest bearing.

3. Prepayment. This Note may be prepaid in whole or in part without penalty or premium.

4. Principal Amount. As of the date hereof, the principal amount of this Note is Two Million Six Hundred Thirty Thousand Seven Hundred Fifty Dollars ($2,630,750). At the time of prepayment of this Note, Lender shall make or cause to be made, an appropriate notation on Exhibit A attached hereto reflecting the amount of such prepayment. The outstanding amount of this Note set forth on Exhibit A shall be prima facie evidence of the principal amount thereof outstanding, but the failure to record, or any error in so recording, shall not limit or otherwise affect the obligations of Borrower to make payments of principal of or interest on this Note when due.

5. Representations and Warranties. Borrower hereby represents and warrants to Lender as follows:

5.1 Borrower has the requisite power and authority to enter into this Note and to consummate the transactions contemplated hereby. The execution and delivery of this Note by Borrower and the consummation by Borrower of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of Borrower. This Note has been duly executed and delivered by Borrower and constitutes the legal, valid and binding agreement of Borrower enforceable against Borrower in accordance with its terms, except as may be limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally and (ii) equitable principles of general applicability relating to the availability of specific performance, injunctive relief or other equitable remedies.

5.2 No consent, approval, authorization, order, license, registration or qualification of or with any Governmental Entity is required for the execution and delivery by Borrower of this Note or the transactions contemplated hereby, except such consents, approvals, authorizations, orders, licenses, registrations or qualifications as have been obtained, or which, if not obtained, would not, individually or in the aggregate, have a material adverse effect on the ability of Borrower to perform its obligations hereunder or consummate the transactions contemplated hereby on a timely basis. As used in this Note, the term "***Governmental Entity***" means any agency, bureau, commission, authority, department, official, political subdivision, tribunal or other instrumentality of any government, whether (i) regulatory, administrative or otherwise (including, without limitation, a self-regulatory organization or stock exchange); (ii) federal, state or local; or (iii) domestic or foreign.

5.3 The execution and delivery by Borrower of this Note, the performance by Borrower of its obligations hereunder, and the consummation by Borrower of the transactions contemplated hereby, will not conflict with or result

in a breach or violation of (i) any of the terms or provisions of, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which Borrower or any of its subsidiaries is a party or by which Borrower or any of its subsidiaries is bound or to which any of their property or assets is subject or (ii) any applicable law or statute or any order, rule or regulation of any Governmental Entity having jurisdiction over Borrower or any of its subsidiaries or any of their respective properties, except for in the case of either clause (i) or (ii) such conflicts, breaches or violations that would not prevent or delay the consummation of the transactions contemplated by this Note or that would not be reasonably expected to have a material adverse effect on Borrower, nor will any such action result in any violation of the provisions of the organizational documents of Borrower.

5.4 All of the New Shares, when issued in accordance with the terms of this Note, will be duly authorized and duly and validly issued, fully paid and nonassessable, free and clear of all liens, taxes, adverse claims, and will not be issued in violation of, or subject to, any preemptive or similar rights of any Person.

5.5 Borrower has filed all reports, schedules, forms, statements and other documents required to be filed by it under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "***SEC Reports***"). None of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Borrower is not in violation of the requirements of the NASDAQ Stock Market ("***NASDAQ***") and has no knowledge of any facts or circumstances which could reasonably be expected to lead to delisting or suspension of the Common Stock in the foreseeable future.

5.6 No brokerage or finder's fees or commissions are or will be payable by Borrower or any of its Affiliates or representatives to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by this Note. Lender shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section 5.6 that may be payable by Borrower or any of its Affiliates or representatives in connection with the transactions contemplated by this Note.

5.7 Assuming the accuracy of the representations and warranties of Lender contained in Section 6 hereof, the offer and issuance of this Note or the issuance of the New Shares by Borrower pursuant hereto will be exempt from the registration requirements of the Securities Act (and such issuances will be or have been registered or qualified (or are exempt from registration and qualification) under the registration, permit or qualification requirements of all applicable state securities laws). The amendments and transactions contemplated hereby does not contravene, including the issuance and sale of the New Shares under this Note, or require stockholder approval pursuant to, the rules and regulations of NASDAQ.

5.8 Neither Borrower, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, has made or will make any offers or sales of any security, or has solicited or will solicit any offers to buy any security, under circumstances that would cause the offering and issuance of the New Shares to be integrated with prior offerings by Borrower for purposes of the Securities Act and which would require the registration of any such securities under the Securities Act.

6. Representation and Warranties of Lender. Lender hereby represents and warrants to Borrower as follows:

6.1 Lender has full right, power and authority to enter into this Note and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Note.

6.2 Lender understands that nothing in this Note or any other materials presented to Lender in connection with this Note or the issuance of any New Shares constitutes legal, tax or investment advice. Lender has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with this Note and the issuance of any New Shares.

6.3 Lender understands that the this Note and any New Shares (collectively, the "***Securities***") have not been registered under the Securities Act. Lender also understands that the Securities are being offered and issued pursuant to an exemption from registration contained in the Securities Act based in part upon Lender's representations contained in this Note.

6.4 Lender has substantial experience in evaluating and investing in private placement transactions of securities in companies similar to Borrower so that it is capable of evaluating the merits and risks of the Securities and has the capacity to protect its own interests. Lender must bear the economic risk of the Securities indefinitely (subject to Borrower's payment obligations under this Note) unless the Securities are registered pursuant to the Securities Act, or an exemption from registration is available. Lender understands that Borrower has no present intention of registering any of the Securities. Lender also understands that there is no assurance that any exemption from registration under the Securities Act will be available and that, even if available, such exemption may not allow Lender to transfer all or any portion of any of the Securities under the circumstances, in the amounts or at the times Lender might propose.

6.5 Lender is acquiring the Securities for Lender's own account for investment only, and not with a view towards their distribution.

6.6 Lender has the capacity to protect its own interests in connection with the transactions contemplated in this Note.

6.7 Lender is an accredited investor within the meaning of Regulation D under the Securities Act.

7. Certain Definitions

For purposes of this Note, the following terms shall have the following meanings:

"***Affiliate***" means any person or entity that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a person or entity, as such terms are used in and construed under Rule 144 under the Securities Act. As used in this definition of "Affiliate," the term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities or partnership or other ownership interest, by contract, or otherwise.

"***Business Day***" means, with respect to this Note, any day other than a Saturday, a Sunday or a day on which the Federal Reserve Bank of New York is authorized or required by law or executive order to close or be closed.

"***Commission***" means the U.S. Securities and Exchange Commission.

"***Common Stock***" means the common stock of Borrower, par value $0.01 per share.

"Equity Conditions" means, with respect to the payment of interest in New Shares:

(i) either (1) all of the New Shares (in the case of a payment in New Shares) and held by a non-Affiliate of Borrower shall be eligible for sale without the need for registration under any applicable federal or state securities laws or (2) a shelf registration statement registering the resale of such New Shares has been filed by Borrower and been declared effective by the Commission or is automatically effective and is available for use, and Borrower expects such shelf registration statement to remain effective and available for use from the applicable Payment Date until thirty (30) days following the applicable Payment Date;

(ii) during the applicable Equity Conditions Measuring Period, the Common Stock is listed or traded on an Eligible Market and shall not have been suspended from trading on such Eligible Market (as defined below) (other than suspensions of not more than two Trading Days and occurring prior to the applicable date of determination due to business announcements by Borrower) nor shall delisting or suspension by such Eligible Market been threatened or pending either (A) in writing by such exchange or market or (B) by falling below the then effective minimum listing maintenance requirements of such Eligible Market;

(iii) any applicable New Shares may be issued in full without violating the rules or regulations of the Eligible Market on which the Common Stock is then listed or trading;

(vi) any applicable New Shares shall be duly authorized and will be validly issued, fully paid and non-assessable upon issuance in accordance with the terms of this Note; and

(vi) no Event of Default shall have occurred and be continuing.

"Equity Conditions Measuring Period" means the period (x) commencing on the Payment Notice Date with respect to such payment is delivered to Lender and (y) ending on the applicable Payment Date.

"***Exchange Act***" means the Securities Exchange Act of 1934, as amended.

"***Indenture***" means that certain indenture, dated as of August 6, 2019, between Borrower and U.S. Bank National Association, as Trustee, in respect of Borrowers 5.75% Convertible Senior Subordinated Exchange Notes Due 2024.

"***Last Reported Sale Price***" of the Common Stock on any date means the closing sale price per share (or if no closing sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and the average ask prices) on that date as reported in composite transactions for the principal U.S. national or regional securities exchange on which the Common Stock is traded (each, an "***Eligible Market***"). If the Common Stock is not listed for trading on a U.S. national or regional securities exchange on the relevant date, the "***Last Reported Sale Price***" shall be the last quoted bid price for the Common Stock in the over-the-counter market on the relevant date as reported by OTC Markets Group Inc. or a similar organization. If the Common Stock is not so quoted, the "***Last Reported Sale Price***" shall be the average of the mid-point of the last bid and ask prices for the Common Stock on the relevant date from each of at least three nationally recognized independent investment banking firms selected by Borrower for this purpose.

"***Payment Notice Date***" means a date on which Borrower delivers a Payment Notice to Lender.

"***Person***" or "***person***" means any individual, corporation, partnership, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization, government or any agency or political subdivision thereof or any syndicate or group that would be deemed to be a "***person***" under Section 13(d)(3) of the Exchange Act, or any other entity.

"***Securities Act***" means the Securities Act of 1933, as amended.

"***Trading Day***" means a day on which (i) trading in the Common Stock (or other security for which a closing sale price must be determined) generally occurs on The NASDAQ or, if the Common Stock (or such other security) is not then listed on The NASDAQ, on the principal other U.S. national or regional securities exchange on which the Common Stock (or such other security) is then listed or, if the Common Stock (or such other security) is not then listed on a U.S. national or regional securities exchange, on the principal other market on which the Common Stock (or such other security) is then traded and (ii) a Last Reported Sale Price for the Common Stock (or such other security) is available on such securities exchange or market; *provided* that if the Common Stock (or such other security) is not so listed or traded, "***Trading Day***" means a Business Day.

8. Default. Each of the following events shall be an "***Event of Default***" hereunder:

(a) Borrower fails to pay timely any of the principal amount due under this Note on the date the same becomes due and payable or within five (5) Business Days thereafter;

(b) Borrower files any petition or action for relief under any bankruptcy, reorganization, insolvency or moratorium law or any other law for the relief of, or relating to, debtors, now or hereafter in effect, or makes any assignment for the benefit of creditors or takes any corporate action in furtherance of any of the foregoing;

(c) An involuntary petition is filed against Borrower (unless such petition is dismissed or discharged within sixty (60) days) under any bankruptcy statute now or hereafter in effect, or a custodian, receiver, trustee, assignee for the benefit of creditors (or other similar official) is appointed to take possession, custody or control of any property of Borrower; or

(d) Any representation or warranty made herein or in any other document delivered in connection herewith shall be incorrect or misleading in any material respect when made or deemed made (except where any such representation or warranty by the terms thereof is subject to a materiality standard, in which case such representation or warranty shall be incorrect or misleading in any respect).

Upon the occurrence of an Event of Default hereunder, all unpaid principal and other amounts owing hereunder shall, at the option of Lender, and, in the case of an Event of Default pursuant to **(b)** or **(c)** above, automatically, be immediately due, payable and collectible by Lender pursuant to applicable law.

9. Waiver. Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest of this Note, and shall pay all costs of collection when incurred, including, without limitation, reasonable attorneys' fees, costs and other expenses.

The right to plead any and all statutes of limitations as a defense to any demands hereunder is hereby waived to the full extent permitted by law.

10. Governing Law. This Note shall be governed by, and construed and enforced in accordance with, the laws of the State of New York, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction. Borrower consents to *in personam* jurisdiction of the courts in the State of New York sitting in New York County and of the United States District Court of the Southern District of New York for any legal action or proceeding with respect to this Note. Borrower, by execution and delivery of this Note, hereby irrevocably accepts in respect of its property, generally and unconditionally, the jurisdiction of the aforesaid courts.

11. Successors and Assigns. This Note shall be binding upon and inure to the benefit of Borrower and Lender and their respective successors and assigns; *provided* that Borrower may not assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of Lender. Lender may assign to one or more other persons all or a portion of its rights (but not its obligations) under this Note.

12. Integration. This Note reflects the entire understanding of the parties with respect to the transactions contemplated hereby and shall not be contradicted or qualified by any other agreement or instrument, oral or written, before or after the date hereof.

13. Amendments, Modification, Etc. No amendment, modification or waiver of any provision of this Note, and no consent to any departure by Lender or Borrower and their assigns therefrom, shall in any event be effective unless the same shall be in writing and signed by Lender and Borrower, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

14. No Waiver. No failure on the part of Lender to exercise, and no delay in exercising, any right hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any right under this Note preclude any other or further exercise thereof or the exercise of any other right. The rights of Lender under this Note against Borrower are not conditional or contingent on any attempt by Lender to exercise any of its rights under this Note against Borrower or any other person.

15. Expenses. Borrower agrees to reimburse, periodically and upon request, and at the date of effectiveness of this Note or upon termination of this Note, (i) Lender's reasonable expenses, including the reasonable fees and disbursements of Lender's attorneys, arising in connection with the preparation, negotiation, execution, delivery, amendment and administration of this Note and related transactions and (ii) Lender's expenses, including the fees and disbursements of Lender's attorneys, in connection with the enforcement of this Note or the protection of Lender's rights under this Note. In addition, Borrower agrees to reimburse Lender for all reasonable expenses, including the reasonable fees and disbursements of Lender's attorneys, incurred in connection with the licensing of Lender as a finance lender under the California Finance Lenders Law.

16. Indemnity. Borrower shall indemnify, defend and hold harmless Lender and its agents and attorneys (collectively, the "***Indemnitees***") from and against (i) any and all transfer taxes, documentary taxes, assessments or charges made by any Governmental Entity by reason of the execution and delivery of this Note or the extension of credit represented hereby, and (ii) any and all liabilities, losses, damages, penalties, judgments, claims, costs and expenses of any kind or nature whatsoever (including reasonable attorneys' fees, and disbursements in connection with any actual or threatened investigative, administrative or judicial proceeding, whether or not such Indemnitee shall

be designated a party thereto) that may be imposed on, incurred by or asserted against such Indemnitee, in any manner relating to or arising out of this Note, the extension of credit represented hereby or the use or intended use of the proceeds thereof; *provided* that no Indemnitee shall have the right to be indemnified or held harmless hereunder for its own gross negligence or willful misconduct, as determined by a final judgment of a court of competent jurisdiction.

17. Seniority. Amounts due under this Note shall be subordinated in accordance with that certain Subordination Agreement, dated as of August 6, 2019, between Lender and MidCap Financial Trust.

[*Signature Pages Follow*]

BORROWER:

MANNKIND CORPORATION

By: /s/ Steven Binder
Name: Steven Binder
Title: Chief Financial Officer

LENDER:

BRUCE FUND, INC.

By: /s/ R. Jeffrey Bruce
Name: R. Jeffrey Bruce
Title: Vice President

[Signature Page to Promissory Note (July Deferred Payment)]

Exhibit A

PRINCIPAL SCHEDULE

Date	Repayment	Principal Balance

THE SECURITY REPRESENTED BY THIS CERTIFICATE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, OR APPLICABLE STATE SECURITIES LAWS. THIS SECURITY MAY NOT BE SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER SAID ACT, OR PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER SAID ACT INCLUDING, WITHOUT LIMITATION, PURSUANT TO RULE 144 UNDER SAID ACT, OR PURSUANT TO A PRIVATE SALE EFFECTED UNDER SECTION 4(A)(7) OF THE SECURITIES ACT OR APPLICABLE FORMAL OR INFORMAL SEC INTERPRETATION OR GUIDANCE, SUCH AS A SO-CALLED "4(A)(1) AND A HALF" SALE. NOTWITHSTANDING THE FOREGOING, THE SECURITY MAY BE PLEDGED (BUT NOT TRANSFERRED) IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING SECURED BY THE SECURITY. PRIOR TO THE REGISTRATION OF ANY TRANSFER PURSUANT TO AN EXEMPTION FROM REGISTRATION OTHER THAN RULE 144, BORROWER RESERVES THE RIGHT TO REQUIRE THE DELIVERY OF SUCH LEGAL OPINIONS, CERTIFICATIONS OR OTHER EVIDENCE AS MAY REASONABLY BE REQUIRED IN ORDER TO DETERMINE THAT THE PROPOSED TRANSFER IS BEING MADE IN COMPLIANCE WITH THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS.

THIS INSTRUMENT AND THE INDEBTEDNESS, RIGHTS AND OBLIGATIONS EVIDENCED HEREBY AND ANY LIENS OR OTHER SECURITY INTERESTS SECURING SUCH RIGHTS AND OBLIGATIONS ARE SUBORDINATE IN THE MANNER AND TO THE EXTENT SET FORTH IN THAT CERTAIN SUBORDINATION AGREEMENT (AS AMENDED, RESTATED, SUPPLEMENTED OR MODIFIED FROM TIME TO TIME, THE "SUBORDINATION AGREEMENT") DATED AS OF AUGUST 6, 2019, BY AND AMONG THE SUBORDINATING CREDITORS IDENTIFIED THEREIN AND MIDCAP FINANCIAL TRUST IN ITS CAPACITY AS AGENT FOR CERTAIN LENDERS (TOGETHER WITH ITS SUCCESSORS AND ASSIGNS, "SENIOR CREDITOR AGENT"), TO CERTAIN INDEBTEDNESS, RIGHTS, AND OBLIGATIONS OF MANKIND CORPORATION AND MANNKIND LLC TO SENIOR CREDITOR AGENT AND SENIOR LENDERS (AS DEFINED THEREIN) AND LIENS AND SECURITY INTERESTS OF SENIOR CREDITOR AGENT SECURING THE SAME ALL AS DESCRIBED IN THE SUBORDINATION AGREEMENT; AND EACH HOLDER AND TRANSFEREE OF THIS INSTRUMENT, BY ITS ACCEPTANCE HEREOF, IRREVOCABLY AGREES TO BE BOUND BY THE PROVISIONS OF THE SUBORDINATION AGREEMENT

PROMISSORY NOTE

$2,630,750 Issue Date: August 6, 2019

Westlake Village, California

THIS PROMISSORY NOTE (this "***Note***"), dated as of August 6, 2019, is issued pursuant to the certain Exchange Agreement, dated as of August 6, 2019, by and between **MANNKIND CORPORATION**, a Delaware corporation ("***Borrower***"), and **BRUCE FUND, INC.** ("***Lender***").

FOR VALUE RECEIVED, Borrower hereby promises to pay to Lender, in lawful money of the United States of America and in immediately available funds, the principal sum of up to Two Million Six Hundred Thirty Thousand Seven Hundred fifty Dollars ($2,630,750), due and payable on the Maturity Date.

1. Maturity; Repayment.

1.1 Maturity. The outstanding principal amount of this Note shall be due and payable on December 31, 2020; *provided* that if such date is not a Business Day, the outstanding principal amount of this Note, together with all accrued and unpaid interest thereon, shall be payable on the Business Day immediately succeeding such date (the "***Maturity Date***").

1.2 Repayment. Borrower shall pay this Note in lawful money of the United States of America and in immediately available funds or, at its option, in validly issued, fully paid and non-assessable shares of Common Stock (the "***New Shares***"), so long as each of the Equity Conditions are satisfied on each day during the Equity Conditions

Measuring Period applicable to such Payment Date. In respect of payments to be made in New Shares, Borrower shall deliver a written notice (which may be provided via e-mail) (such notice, a "***Payment Notice***") to Lender on or prior to the fifth Trading Day prior to the applicable payment date (such payment date, a "***Payment Date***"), which Payment Notice shall be irrevocable and shall specify the amount of this Note (the "***Payment Amount***") to be paid in New Shares, together with an officer's certificate certifying that the Equity Conditions with respect to such payment in New Shares have been met as of the applicable Payment Date. Notwithstanding anything herein to the contrary, if the Equity Conditions fail to have been met as of the applicable Payment Date, the applicable Payment Amount shall be payable in cash.

Any payments of this Note to paid with New Shares, shall be paid in a number of validly issued, fully paid and non-assessable shares of Common Stock equal to the quotient of (1) the Payment Amount payable on such Payment Date less any such payment paid in cash, divided by (2) the Last Reported Sale Price on the Trading Day immediately prior to the applicable Payment Date. If the issuance of New Shares would result in the issuance of a fraction of a share of Common Stock, Borrower shall round such fraction of a share of Common Stock to the nearest whole share (with 0.5 being rounded up). When any New Shares are to be issued, Borrower shall (i) (A) provided that Borrower's stock transfer agent is participating in the DTC Fast Automated Securities Transfer Program, upon the request of Lender, credit such aggregate number of New Shares to which Lender shall be entitled to Lender or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system, or (B) if the stock transfer agent is not participating in the DTC Fast Automated Securities Transfer Program, or upon request of Lender, issue and deliver to Lender no later than the second (2) Business Day after the applicable Payment Date certificates registered in the name of Lender for the number of New Shares to which Lender shall be entitled, (C) deposit such New Shares with the Depositary in accordance with the Applicable Procedures (as defined in the Indenture), or (D) otherwise deliver the applicable New Shares in accordance with procedures reasonably acceptable to the Lender.

2. Interest Rate. This Note shall be non-interest bearing.

3. Prepayment. This Note may be prepaid in whole or in part without penalty or premium.

4. Principal Amount. As of the date hereof, the principal amount of this Note is Two Million Six Hundred Thirty Thousand Seven Hundred Fifty Dollars ($2,630,750). At the time of prepayment of this Note, Lender shall make or cause to be made, an appropriate notation on Exhibit A attached hereto reflecting the amount of such prepayment. The outstanding amount of this Note set forth on Exhibit A shall be prima facie evidence of the principal amount thereof outstanding, but the failure to record, or any error in so recording, shall not limit or otherwise affect the obligations of Borrower to make payments of principal of or interest on this Note when due.

5. Representations and Warranties. Borrower hereby represents and warrants to Lender as follows:

5.1 Borrower has the requisite power and authority to enter into this Note and to consummate the transactions contemplated hereby. The execution and delivery of this Note by Borrower and the consummation by Borrower of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of Borrower. This Note has been duly executed and delivered by Borrower and constitutes the legal, valid and binding agreement of Borrower enforceable against Borrower in accordance with its terms, except as may be limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally and (ii) equitable principles of general applicability relating to the availability of specific performance, injunctive relief or other equitable remedies.

5.2 No consent, approval, authorization, order, license, registration or qualification of or with any Governmental Entity is required for the execution and delivery by Borrower of this Note or the transactions contemplated hereby, except such consents, approvals, authorizations, orders, licenses, registrations or qualifications as have been obtained, or which, if not obtained, would not, individually or in the aggregate, have a material adverse effect on the ability of Borrower to perform its obligations hereunder or consummate the transactions contemplated hereby on a timely basis. As used in this Note, the term "***Governmental Entity***" means any agency, bureau, commission, authority, department, official, political subdivision, tribunal or other instrumentality of any government, whether (i) regulatory, administrative or otherwise (including, without limitation, a self-regulatory organization or stock exchange); (ii) federal, state or local; or (iii) domestic or foreign.

5.3 The execution and delivery by Borrower of this Note, the performance by Borrower of its obligations hereunder, and the consummation by Borrower of the transactions contemplated hereby, will not conflict with or result

in a breach or violation of (i) any of the terms or provisions of, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which Borrower or any of its subsidiaries is a party or by which Borrower or any of its subsidiaries is bound or to which any of their property or assets is subject or (ii) any applicable law or statute or any order, rule or regulation of any Governmental Entity having jurisdiction over Borrower or any of its subsidiaries or any of their respective properties, except for in the case of either clause (i) or (ii) such conflicts, breaches or violations that would not prevent or delay the consummation of the transactions contemplated by this Note or that would not be reasonably expected to have a material adverse effect on Borrower, nor will any such action result in any violation of the provisions of the organizational documents of Borrower.

5.4 All of the New Shares, when issued in accordance with the terms of this Note, will be duly authorized and duly and validly issued, fully paid and nonassessable, free and clear of all liens, taxes, adverse claims, and will not be issued in violation of, or subject to, any preemptive or similar rights of any Person.

5.5 Borrower has filed all reports, schedules, forms, statements and other documents required to be filed by it under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "***SEC Reports***"). None of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Borrower is not in violation of the requirements of the NASDAQ Stock Market ("***NASDAQ***") and has no knowledge of any facts or circumstances which could reasonably be expected to lead to delisting or suspension of the Common Stock in the foreseeable future.

5.6 No brokerage or finder's fees or commissions are or will be payable by Borrower or any of its Affiliates or representatives to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by this Note. Lender shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section 5.6 that may be payable by Borrower or any of its Affiliates or representatives in connection with the transactions contemplated by this Note.

5.7 Assuming the accuracy of the representations and warranties of Lender contained in Section 6 hereof, the offer and issuance of this Note or the issuance of the New Shares by Borrower pursuant hereto will be exempt from the registration requirements of the Securities Act (and such issuances will be or have been registered or qualified (or are exempt from registration and qualification) under the registration, permit or qualification requirements of all applicable state securities laws). The amendments and transactions contemplated hereby does not contravene, including the issuance and sale of the New Shares under this Note, or require stockholder approval pursuant to, the rules and regulations of NASDAQ.

5.8 Neither Borrower, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, has made or will make any offers or sales of any security, or has solicited or will solicit any offers to buy any security, under circumstances that would cause the offering and issuance of the New Shares to be integrated with prior offerings by Borrower for purposes of the Securities Act and which would require the registration of any such securities under the Securities Act.

6. Representation and Warranties of Lender. Lender hereby represents and warrants to Borrower as follows:

6.1 Lender has full right, power and authority to enter into this Note and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Note.

6.2 Lender understands that nothing in this Note or any other materials presented to Lender in connection with this Note or the issuance of any New Shares constitutes legal, tax or investment advice. Lender has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with this Note and the issuance of any New Shares.

6.3 Lender understands that the this Note and any New Shares (collectively, the "***Securities***") have not been registered under the Securities Act. Lender also understands that the Securities are being offered and issued pursuant to an exemption from registration contained in the Securities Act based in part upon Lender's representations contained in this Note.

6.4 Lender has substantial experience in evaluating and investing in private placement transactions of securities in companies similar to Borrower so that it is capable of evaluating the merits and risks of the Securities and has the capacity to protect its own interests. Lender must bear the economic risk of the Securities indefinitely (subject to Borrower's payment obligations under this Note) unless the Securities are registered pursuant to the Securities Act, or an exemption from registration is available. Lender understands that Borrower has no present intention of registering any of the Securities. Lender also understands that there is no assurance that any exemption from registration under the Securities Act will be available and that, even if available, such exemption may not allow Lender to transfer all or any portion of any of the Securities under the circumstances, in the amounts or at the times Lender might propose.

6.5 Lender is acquiring the Securities for Lender's own account for investment only, and not with a view towards their distribution.

6.6 Lender has the capacity to protect its own interests in connection with the transactions contemplated in this Note.

6.7 Lender is an accredited investor within the meaning of Regulation D under the Securities Act.

7. Certain Definitions

For purposes of this Note, the following terms shall have the following meanings:

"***Affiliate***" means any person or entity that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a person or entity, as such terms are used in and construed under Rule 144 under the Securities Act. As used in this definition of "Affiliate," the term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities or partnership or other ownership interest, by contract, or otherwise.

"***Business Day***" means, with respect to this Note, any day other than a Saturday, a Sunday or a day on which the Federal Reserve Bank of New York is authorized or required by law or executive order to close or be closed.

"***Commission***" means the U.S. Securities and Exchange Commission.

"***Common Stock***" means the common stock of Borrower, par value $0.01 per share.

"Equity Conditions" means, with respect to the payment of interest in New Shares:

(i) either (1) all of the New Shares (in the case of a payment in New Shares) and held by a non-Affiliate of Borrower shall be eligible for sale without the need for registration under any applicable federal or state securities laws or (2) a shelf registration statement registering the resale of such New Shares has been filed by Borrower and been declared effective by the Commission or is automatically effective and is available for use, and Borrower expects such shelf registration statement to remain effective and available for use from the applicable Payment Date until thirty (30) days following the applicable Payment Date;

(ii) during the applicable Equity Conditions Measuring Period, the Common Stock is listed or traded on an Eligible Market and shall not have been suspended from trading on such Eligible Market (as defined below) (other than suspensions of not more than two Trading Days and occurring prior to the applicable date of determination due to business announcements by Borrower) nor shall delisting or suspension by such Eligible Market been threatened or pending either (A) in writing by such exchange or market or (B) by falling below the then effective minimum listing maintenance requirements of such Eligible Market;

(iii) any applicable New Shares may be issued in full without violating the rules or regulations of the Eligible Market on which the Common Stock is then listed or trading;

(vi) any applicable New Shares shall be duly authorized and will be validly issued, fully paid and non-assessable upon issuance in accordance with the terms of this Note; and

(vi) no Event of Default shall have occurred and be continuing.

"Equity Conditions Measuring Period" means the period (x) commencing on the Payment Notice Date with respect to such payment is delivered to Lender and (y) ending on the applicable Payment Date.

"***Exchange Act***" means the Securities Exchange Act of 1934, as amended.

"***Indenture***" means that certain indenture, dated as of August 6, 2019, between Borrower and U.S. Bank National Association, as Trustee, in respect of Borrowers 5.75% Convertible Senior Subordinated Exchange Notes Due 2024.

"***Last Reported Sale Price***" of the Common Stock on any date means the closing sale price per share (or if no closing sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and the average ask prices) on that date as reported in composite transactions for the principal U.S. national or regional securities exchange on which the Common Stock is traded (each, an "***Eligible Market***"). If the Common Stock is not listed for trading on a U.S. national or regional securities exchange on the relevant date, the "***Last Reported Sale Price***" shall be the last quoted bid price for the Common Stock in the over-the-counter market on the relevant date as reported by OTC Markets Group Inc. or a similar organization. If the Common Stock is not so quoted, the "***Last Reported Sale Price***" shall be the average of the mid-point of the last bid and ask prices for the Common Stock on the relevant date from each of at least three nationally recognized independent investment banking firms selected by Borrower for this purpose.

"***Payment Notice Date***" means a date on which Borrower delivers a Payment Notice to Lender.

"***Person***" or "***person***" means any individual, corporation, partnership, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization, government or any agency or political subdivision thereof or any syndicate or group that would be deemed to be a "***person***" under Section 13(d)(3) of the Exchange Act, or any other entity.

"***Securities Act***" means the Securities Act of 1933, as amended.

"***Trading Day***" means a day on which (i) trading in the Common Stock (or other security for which a closing sale price must be determined) generally occurs on The NASDAQ or, if the Common Stock (or such other security) is not then listed on The NASDAQ, on the principal other U.S. national or regional securities exchange on which the Common Stock (or such other security) is then listed or, if the Common Stock (or such other security) is not then listed on a U.S. national or regional securities exchange, on the principal other market on which the Common Stock (or such other security) is then traded and (ii) a Last Reported Sale Price for the Common Stock (or such other security) is available on such securities exchange or market; *provided* that if the Common Stock (or such other security) is not so listed or traded, "***Trading Day***" means a Business Day.

8. Default. Each of the following events shall be an "***Event of Default***" hereunder:

(a) Borrower fails to pay timely any of the principal amount due under this Note on the date the same becomes due and payable or within five (5) Business Days thereafter;

(b) Borrower files any petition or action for relief under any bankruptcy, reorganization, insolvency or moratorium law or any other law for the relief of, or relating to, debtors, now or hereafter in effect, or makes any assignment for the benefit of creditors or takes any corporate action in furtherance of any of the foregoing;

(c) An involuntary petition is filed against Borrower (unless such petition is dismissed or discharged within sixty (60) days) under any bankruptcy statute now or hereafter in effect, or a custodian, receiver, trustee, assignee for the benefit of creditors (or other similar official) is appointed to take possession, custody or control of any property of Borrower; or

(d) Any representation or warranty made herein or in any other document delivered in connection herewith shall be incorrect or misleading in any material respect when made or deemed made (except where any such representation or warranty by the terms thereof is subject to a materiality standard, in which case such representation or warranty shall be incorrect or misleading in any respect).

Upon the occurrence of an Event of Default hereunder, all unpaid principal and other amounts owing hereunder shall, at the option of Lender, and, in the case of an Event of Default pursuant to **(b)** or **(c)** above, automatically, be immediately due, payable and collectible by Lender pursuant to applicable law.

9. Waiver. Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest of this Note, and shall pay all costs of collection when incurred, including, without limitation, reasonable attorneys' fees, costs and other expenses.

The right to plead any and all statutes of limitations as a defense to any demands hereunder is hereby waived to the full extent permitted by law.

10. Governing Law. This Note shall be governed by, and construed and enforced in accordance with, the laws of the State of New York, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction. Borrower consents to *in personam* jurisdiction of the courts in the State of New York sitting in New York County and of the United States District Court of the Southern District of New York for any legal action or proceeding with respect to this Note. Borrower, by execution and delivery of this Note, hereby irrevocably accepts in respect of its property, generally and unconditionally, the jurisdiction of the aforesaid courts.

11. Successors and Assigns. This Note shall be binding upon and inure to the benefit of Borrower and Lender and their respective successors and assigns; *provided* that Borrower may not assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of Lender. Lender may assign to one or more other persons all or a portion of its rights (but not its obligations) under this Note.

12. Integration. This Note reflects the entire understanding of the parties with respect to the transactions contemplated hereby and shall not be contradicted or qualified by any other agreement or instrument, oral or written, before or after the date hereof.

13. Amendments, Modification, Etc. No amendment, modification or waiver of any provision of this Note, and no consent to any departure by Lender or Borrower and their assigns therefrom, shall in any event be effective unless the same shall be in writing and signed by Lender and Borrower, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

14. No Waiver. No failure on the part of Lender to exercise, and no delay in exercising, any right hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any right under this Note preclude any other or further exercise thereof or the exercise of any other right. The rights of Lender under this Note against Borrower are not conditional or contingent on any attempt by Lender to exercise any of its rights under this Note against Borrower or any other person.

15. Expenses. Borrower agrees to reimburse, periodically and upon request, and at the date of effectiveness of this Note or upon termination of this Note, (i) Lender's reasonable expenses, including the reasonable fees and disbursements of Lender's attorneys, arising in connection with the preparation, negotiation, execution, delivery, amendment and administration of this Note and related transactions and (ii) Lender's expenses, including the fees and disbursements of Lender's attorneys, in connection with the enforcement of this Note or the protection of Lender's rights under this Note. In addition, Borrower agrees to reimburse Lender for all reasonable expenses, including the reasonable fees and disbursements of Lender's attorneys, incurred in connection with the licensing of Lender as a finance lender under the California Finance Lenders Law.

16. Indemnity. Borrower shall indemnify, defend and hold harmless Lender and its agents and attorneys (collectively, the "***Indemnitees***") from and against (i) any and all transfer taxes, documentary taxes, assessments or charges made by any Governmental Entity by reason of the execution and delivery of this Note or the extension of credit represented hereby, and (ii) any and all liabilities, losses, damages, penalties, judgments, claims, costs and expenses of any kind or nature whatsoever (including reasonable attorneys' fees, and disbursements in connection with any actual or threatened investigative, administrative or judicial proceeding, whether or not such Indemnitee shall

be designated a party thereto) that may be imposed on, incurred by or asserted against such Indemnitee, in any manner relating to or arising out of this Note, the extension of credit represented hereby or the use or intended use of the proceeds thereof; *provided* that no Indemnitee shall have the right to be indemnified or held harmless hereunder for its own gross negligence or willful misconduct, as determined by a final judgment of a court of competent jurisdiction.

17. Seniority. Amounts due under this Note shall be subordinated in accordance with that certain Subordination Agreement, dated as of August 6, 2019, between Lender and MidCap Financial Trust.

[*Signature Pages Follow*]

BORROWER:

MANNKIND CORPORATION

By: /s/ Steven Binder
Name: Steven Binder
Title: Chief Financial Officer

LENDER:

BRUCE FUND, INC.

By: /s/ R. Jeffrey Bruce
Name: R. Jeffrey Bruce
Title: Vice President

[Signature Page to Promissory Note (December Deferred Payment)]

Exhibit A

PRINCIPAL SCHEDULE

Date	Repayment	Principal Balance

Exhibit 4.6

EXECUTION VERSION

THE SECURITY REPRESENTED BY THIS CERTIFICATE AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THIS SECURITY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, OR APPLICABLE STATE SECURITIES LAWS. THIS SECURITY AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THIS SECURITY MAY NOT BE SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER SAID ACT, OR PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER SAID ACT INCLUDING, WITHOUT LIMITATION, PURSUANT TO RULE 144 UNDER SAID ACT, OR PURSUANT TO A PRIVATE SALE EFFECTED UNDER SECTION 4(A)(7) OF THE SECURITIES ACT OR APPLICABLE FORMAL OR INFORMAL SEC INTERPRETATION OR GUIDANCE, SUCH AS A SO-CALLED "4(A)(1) AND A HALF" SALE. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED (BUT NOT TRANSFERRED) IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING SECURED BY THE SECURITIES. PRIOR TO THE REGISTRATION OF ANY TRANSFER PURSUANT TO AN EXEMPTION FROM REGISTRATION OTHER THAN RULE 144, BORROWER RESERVES THE RIGHT TO REQUIRE THE DELIVERY OF SUCH LEGAL OPINIONS, CERTIFICATIONS OR OTHER EVIDENCE AS MAY REASONABLY BE REQUIRED IN ORDER TO DETERMINE THAT THE PROPOSED TRANSFER IS BEING MADE IN COMPLIANCE WITH THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS.

THIS INSTRUMENT AND THE INDEBTEDNESS, RIGHTS AND OBLIGATIONS EVIDENCED HEREBY AND ANY LIENS OR OTHER SECURITY INTERESTS SECURING SUCH RIGHTS AND OBLIGATIONS ARE SUBORDINATE IN THE MANNER AND TO THE EXTENT SET FORTH IN THAT CERTAIN SUBORDINATION AGREEMENT (AS AMENDED, RESTATED, SUPPLEMENTED OR MODIFIED FROM TIME TO TIME, THE "SUBORDINATION AGREEMENT") OF EVEN DATE HEREWITH, BY AND AMONG THE SUBORDINATING CREDITORS IDENTIFIED THEREIN AND MIDCAP FINANCIAL TRUST IN ITS CAPACITY AS AGENT FOR CERTAIN LENDERS (TOGETHER WITH ITS SUCCESSORS AND ASSIGNS, "SENIOR CREDITOR AGENT"), TO CERTAIN INDEBTEDNESS, RIGHTS, AND OBLIGATIONS OF MANNKIND CORPORATION AND MANNKIND LLC TO SENIOR CREDITOR AGENT AND SENIOR LENDERS (AS DEFINED THEREIN) AND LIENS AND SECURITY INTERESTS OF SENIOR CREDITOR AGENT SECURING THE SAME ALL AS DESCRIBED IN THE SUBORDINATION AGREEMENT; AND EACH HOLDER AND TRANSFEREE OF THIS INSTRUMENT, BY ITS ACCEPTANCE HEREOF, IRREVOCABLY AGREES TO BE BOUND BY THE PROVISIONS OF THE SUBORDINATION AGREEMENT.

CONVERTIBLE PROMISSORY NOTE

$35,000,000 Issue Date: August 6, 2019

Westlake Village, California

THIS PROMISSORY NOTE (this "***Note***"), dated as of August 6, 2019, is issued pursuant to the certain Exchange Agreement, dated as of August 5, 2019, by and between **MANNKIND CORPORATION**, a Delaware corporation ("***Borrower***"), and **THE MANN GROUP LLC** ("***Lender***").

FOR VALUE RECEIVED, Borrower hereby promises to pay to Lender, in lawful money of the United States of America and in immediately available funds, the principal sum of up to Thirty-Five Million Dollars ($35,000,000), which amount represents the outstanding principal amount of this Note as of the date hereof, together with all PIK Interest (as defined below) added thereto and accrued and unpaid interest thereon, each due and payable on the dates and in the manner set forth below.

1. Principal Repayment. The outstanding principal amount of this Note together with all accrued and unpaid interest thereon shall be due and payable on November 3, 2024 (the "***Maturity Date***").

2. Interest Rate. Borrower further promises to pay interest on the outstanding principal amount of this Note from the date thereof until payment in full, which interest shall be payable at a rate equal to 7.0% per annum.

Interest shall be due and payable quarterly in arrears on the first day of each calendar quarter commencing with October 1, 2019; *provided* that if such date is not a Business Day, interest shall be *payable* on the Business Day immediately succeeding such date (each such date, an "***Interest Payment Date***"). Interest shall be payable in kind by adding the amount thereof to the principal amount of this Note (such interest, "***PIK Interest***"); *provided* that with respect to interest accruing from and after January 1, 2021, Borrower may, at its option, elect to, pay any such interest on any such Interest Payment Date in validly issued, fully paid and non-assessable shares of Common Stock (as defined below) ("***Interest Shares***") so long as each of the Equity Conditions (as defined below) are satisfied on each day during the Equity Conditions Measuring Period (as defined below) applicable to such Interest Payment Date.

If Borrower intends to issue Interest Shares, Borrower shall deliver a written notice (including via e-mail) to Lender on or prior to the fifth Trading Day (as defined below) prior to the applicable Interest Payment Date (such notice, an "***Interest Share Notice***"), electing to pay all or any portion of the accrued but unpaid and uncapitalized interest payable on such Interest Payment Date in Interest Shares, which notice shall be irrevocable and shall specify the amount of interest to be paid in Interest Shares, together with an Officer's Certificate (as defined below) certifying that the Equity Conditions with respect to such payment in Interest Shares will have been met as of the applicable Interest Payment Date. Notwithstanding anything herein to the contrary, if the Equity Conditions fail to have been met as of the applicable Interest Payment Date, the applicable interest shall be payable by adding the amount thereof to the principal amount of this Note. Any interest to be paid in Interest Shares on an Interest Payment Date shall be paid in a number of validly issued, fully paid and non-assessable shares of Common Stock equal to the quotient of (1) the amount of the accrued but unpaid and uncapitalized interest payable on such Interest Payment Date less any such payment payable by adding such amount to the principal amount of this Note, divided by (2) the Last Reported Sale Price (as defined below) on the Trading Day immediately prior to the applicable payment date. If the issuance of Interest Shares would result in the issuance of a fraction of a share of Common Stock, Borrower shall round such fraction of a share of Common Stock to the nearest whole share (with 0.5 being rounded up).

"Equity Conditions" means, with respect to the payment of interest in Interest Shares:

(i) either (1) all of the Interest Shares (in the case of a payment of interest in Interest Shares) held by a non-Affiliate of Borrower shall be eligible for sale without the need for registration under any applicable federal or state securities laws or (2) a shelf registration statement registering the resale of such Interest Shares has been filed by Borrower and been declared effective by the Commission or is automatically effective and is available for use, and Borrower expects such shelf registration statement to remain effective and available for use from the applicable Interest Payment Date until thirty (30) days following the applicable Interest Payment Date;

(ii) during the applicable Equity Conditions Measuring Period, the Common Stock is listed or traded on an Eligible Market (as defined below) and shall not have been suspended from trading on such Eligible Market (other than suspensions of not more than two Trading Days and occurring prior to the applicable date of determination due to business announcements by Borrower) nor shall delisting or suspension by such Eligible Market been threatened or pending either (A) in writing by such exchange or market or (B) by falling below the then effective minimum listing maintenance requirements of such Eligible Market;

(iii) any applicable Interest Shares may be issued in full without violating the rules or regulations of the Eligible Market on which the Common Stock is then listed or trading;

(vi) any applicable Interest Shares shall be duly authorized and will be validly issued, fully paid and non-assessable upon issuance in accordance with the terms of this Note;

(v) the issuance of the applicable Interest Shares shall not cause Lender (together with Lender's Affiliates) to beneficially own in excess of the Maximum Percentage (as defined below) of the Common Stock outstanding immediately after giving effect to the issuance of such Interest Shares (after giving effect to the limitations specified in Section 8.7 and any analogous limitations on conversion or exercise contained in any other securities of Borrower held by Lender or Lender's Affiliates); and

(vi) no Event of Default shall have occurred and be continuing.

"Equity Conditions Measuring Period" means the period (x) commencing on the Interest Notice Date with respect to such payment is delivered to Lender and (y) ending on the applicable Interest Payment Date.

"***Interest Notice Date***" means a date on which Borrower delivers an Interest Share Notice.

3. Place of Payment. All amounts payable hereunder shall be payable in lawful money of the United States of America at the office of Lender, 12744 San Fernando Road, Sylmar, CA 91342, unless another place of payment shall be specified in writing by Lender.

4. Application of Payments; Prepayment.

4.1 Payment on this Note shall be applied first to accrued interest, and thereafter to the outstanding principal balance hereof, unless otherwise consented to by Lender at or prior to the time of such payment.

4.2 This Note may be prepaid in whole or in part without penalty or premium. Any partial prepayment made pursuant to this Section 4.2 shall be applied to interest first and then to principal. At the time of any prepayment of principal hereunder, Borrower shall also pay all accrued, unpaid and uncapitalized interest on the amount prepaid through the date of prepayment.

5. Principal Amount. As of the date hereof, the principal amount of this Note is Thirty-Five Million Dollars ($35,000,000). At the time of the addition of any PIK Interest, prepayment or conversion of this Note, Lender shall make or cause to be made, an appropriate notation on Exhibit A attached hereto reflecting the amount of such PIK Interest, prepayment or conversion. The outstanding amount of this Note set forth on such Exhibit A shall be prima facie evidence of the principal amount thereof outstanding, but the failure to record, or any error in so recording, shall not limit or otherwise affect the obligations of Borrower to make payments of principal of or interest on this Note when due.

6. Representations and Warranties. Borrower hereby represents and warrants to Lender as follows:

6.1 Borrower has the requisite power and authority to enter into this Note and to consummate the transactions contemplated hereby. The execution and delivery of this Note by Borrower and the consummation by Borrower of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of Borrower. This Note has been duly executed and delivered by Borrower and constitutes the legal, valid and binding agreement of Borrower enforceable against Borrower in accordance with its terms, except as may be limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally and (ii) equitable principles of general applicability relating to the availability of specific performance, injunctive relief or other equitable remedies.

6.2 No consent, approval, authorization, order, license, registration or qualification of or with any Governmental Entity is required for the execution and delivery by Borrower of this Note or the transactions contemplated hereby, except such consents, approvals, authorizations, orders, licenses, registrations or qualifications as have been obtained, or which, if not obtained, would not, individually or in the aggregate, have a material adverse effect on the ability of Borrower to perform its obligations hereunder or consummate the transactions contemplated hereby on a timely basis. As used in this Note, the term "***Governmental Entity***" means any agency, bureau, commission, authority, department, official, political subdivision, tribunal or other instrumentality of any government, whether (i) regulatory, administrative or otherwise (including, without limitation, a self-regulatory organization or stock exchange); (ii) federal, state or local; or (iii) domestic or foreign.

6.3 The execution and delivery by Borrower of this Note, the performance by Borrower of its obligations hereunder, and the consummation by Borrower of the transactions contemplated hereby, will not conflict with or result in a breach or violation of (i) any of the terms or provisions of, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which Borrower or any of its subsidiaries is a party or by which Borrower or any of its subsidiaries is bound or to which any of their property or assets is subject or (ii) any applicable law or statute or any order, rule or regulation of any Governmental Entity having jurisdiction over Borrower or any of its subsidiaries or any of their respective properties, except for in the case of either clause (i) or (ii) such conflicts, breaches or

violations that would not prevent or delay the consummation of the transactions contemplated by this Note or that would not be reasonably expected to have a material adverse effect on Borrower, nor will any such action result in any violation of the provisions of the organizational documents of Borrower.

6.4 All of the shares of Common Stock issuable upon conversion of this Note (the "**Conversion Shares**"), are duly authorized and, when issued in accordance with the terms of this Note, will be duly and validly issued, fully paid and nonassessable, free and clear of all liens, taxes, adverse claims, and will not be issued in violation of, or subject to, any preemptive or similar rights of any Person. Borrower has reserved sufficient shares of Common Stock from its duly authorized capital stock for issuance upon conversion of this Note.

6.5 All of the Interest Shares, when issued in accordance with the terms of this Note, will be duly authorized and duly and validly issued, fully paid and nonassessable, free and clear of all liens, taxes, adverse claims, and will not be issued in violation of, or subject to, any preemptive or similar rights of any Person.

6.6 Borrower has filed all reports, schedules, forms, statements and other documents required to be filed by it under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "***SEC Reports***"). None of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Borrower is not in violation of the requirements of the NASDAQ Stock Market ("***NASDAQ***") and has no knowledge of any facts or circumstances which could reasonably be expected to lead to delisting or suspension of the Common Stock in the foreseeable future.

6.7 No brokerage or finder's fees or commissions are or will be payable by Borrower or any of its Affiliates or representatives to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by this Note. Lender shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section 6.7 that may be payable by Borrower or any of its Affiliates or representatives in connection with the transactions contemplated by this Note.

6.8 Assuming the accuracy of the representations and warranties of Lender contained in Section 7 hereof, the offer and issuance of this Note, the issuance of the Interest Shares or the issuance of the Conversion Shares by Borrower pursuant hereto will be exempt from the registration requirements of the Securities Act (and such issuances will be or have been registered or qualified (or are exempt from registration and qualification) under the registration, permit or qualification requirements of all applicable state securities laws). The transactions contemplated hereby, including the issuance and sale of the Interest Shares or Conversion Shares under this Note, do not contravene or require stockholder approval pursuant to, the rules and regulations of NASDAQ.

6.9 Neither Borrower, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, has made or will make any offers or sales of any security, or has solicited or will solicit any offers to buy any security, under circumstances that would cause the offering and issuance of the Interest Shares or Conversion Shares to be integrated with prior offerings by Borrower (i) for purposes of the Securities Act and which would require the registration of any such securities under the Securities Act, or (ii) for purposes of any applicable stockholder approval provisions of NASDAQ and which would require stockholder approval for the issuance of any Interest Shares or Conversion Shares.

7. Representation and Warranties of Lender. Lender hereby represents and warrants to Borrower as follows:

7.1 Lender has full right, power and authority to enter into this Note and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Note.

7.2 Lender understands that nothing in this Note or any other materials presented to Lender in connection with this Note or the issuance of the Conversion Shares or any Interest Shares constitutes legal, tax or investment advice. Lender has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with this Note and the issuance of the Conversion Shares or any Interest Shares.

7.3 Lender understands that this Note, the Interest Shares and any Conversion Shares (collectively, the "***Securities***") have not been registered under the Securities Act. Lender also understands that the Securities are being offered and issued pursuant to an exemption from registration contained in the Securities Act based in part upon Lender's representations contained in this Note.

7.4 Lender has substantial experience in evaluating and investing in private placement transactions of securities in companies similar to Borrower so that it is capable of evaluating the merits and risks of the Securities and has the capacity to protect its own interests. Lender must bear the economic risk of the Securities indefinitely (subject to Borrower's payment obligations under this Note) unless the Securities are registered pursuant to the Securities Act, or an exemption from registration is available. Lender understands that Borrower has no present intention of registering any of the Securities. Lender also understands that there is no assurance that any exemption from registration under the Securities Act will be available and that, even if available, such exemption may not allow Lender to transfer all or any portion of any of the Securities under the circumstances, in the amounts or at the times Lender might propose.

7.5 Lender is acquiring the Securities for Lender's own account for investment only, and not with a view towards their distribution.

7.6 Lender has the capacity to protect its own interests in connection with the transactions contemplated in this Note.

7.7 Lender is an accredited investor within the meaning of Regulation D under the Securities Act.

8. Conversion.

8.1 Conversion. Subject to and upon compliance with the provisions of this Section 8, Lender shall have the right, at Lender's option, to convert all or any portion of this Note at any time and from time to time prior to the close of business on the Business Day immediately preceding the Maturity Date at an initial conversion rate of 400 shares of Common Stock (subject to adjustment as provided in this Section 8, the "***Conversion Rate***") per $1,000 principal amount of this Note (subject to, and in accordance with, the settlement provisions of Section 8.2, the "***Conversion Obligation***"). Any accrued and unpaid interest on this Note may also be converted at Lender's option into Common Stock on the same terms as the principal of this Note.

8.2 Conversion Procedure; Settlement Upon Conversion.

(a) Upon conversion of all or part of the principal amount of this Note and/or any accrued and unpaid interest thereon, Borrower shall satisfy its Conversion Obligation by delivering to Lender a number of shares of Common Stock equal to the quotient of (i) (x) the Conversion Rate, multiplied by (y) the principal amount of this Note being converted and/or, accrued and unpaid interest thereon being converted, divided by (ii) $1,000, by the fifth (5th) Business Day immediately following the relevant Conversion Date.

(b) Before Lender shall be entitled to convert this Note as set forth above, Lender shall complete, manually sign and deliver an irrevocable notice to Borrower as set forth in Exhibit B hereto (or a facsimile, PDF or other electronic transmission thereof) (a "***Notice of Conversion***") at Borrower's address set forth on Exhibit B hereto, and state in writing therein the principal amount of this Note and/or accrued and unpaid interest thereon to be converted.

(c) This Note shall be deemed to have been converted immediately prior to the close of business on the date (the "***Conversion Date***") that Lender has complied with the requirements set forth in subsection (b) above or, if accrued and unpaid interest is being converted at or prior to the applicable interest payment date, such interest payment date. Borrower shall issue or cause to be issued, and deliver (if applicable) to Lender, the full number of shares of Common Stock to which Lender shall be entitled in satisfaction of Borrower's Conversion Obligation within five (5) days following the Conversion Date.

(d) If Lender submits all or part of this Note and/or accrued and unpaid interest thereon for conversion from time to time, Borrower shall pay any documentary, stamp or similar issue or transfer tax due on the issue of the shares of Common Stock upon conversion.

(e) Except as provided in Section 8.3, no adjustment shall be made for dividends on any shares of Common Stock issued upon the conversion of this Note and/or accrued and unpaid interest thereon as provided in this Section 8.

(f) Lender shall be treated as a stockholder of record as of the close of business on the relevant Conversion Date. Upon a conversion of principal of this Note, Lender shall no longer be deemed to be the holder of this Note with respect to that principal amount of this Note surrendered for conversion.

(g) Borrower shall not issue any fractional share of Common Stock upon conversion of the principal of this Note, and/or any accrued and unpaid interest thereon, and shall instead round any fractional share that is greater than 0.5 up to one whole share of Common Stock and round any fractional share that is 0.5 and below down to zero.

(h) Upon the conversion of principal of this Note, Borrower shall make a notation on Exhibit A of this Note as to the reduction in the principal amount represented thereby.

8.3. Adjustment of Conversion Rate. The Conversion Rate shall be adjusted from time to time by Borrower as follows:

(a) If Borrower issues shares of Common Stock as a dividend or distribution on shares of Common Stock, or if Borrower effects a share split or a share combination (i.e., a reverse stock split), the Conversion Rate will be adjusted based on the following formula:

$$CR' = CR_0 \times \frac{OS'}{OS_0}$$

where,

CR_0	=	the Conversion Rate in effect immediately prior to the close of business on the Record Date of such dividend or distribution, or immediately prior to the open of business on the Effective Date of such share split or share combination, as applicable;
CR’	=	the Conversion Rate in effect immediately after the close of business on such Record Date or immediately after the open of business on such Effective Date, as applicable;
OS_0	=	the number of shares of Common Stock outstanding immediately prior to the close of business on such Record Date or immediately prior to the open of business on such Effective Date, as applicable; and
OS’	=	the number of shares of Common Stock outstanding immediately after giving effect to such dividend, distribution, share split or share combination.

Any adjustment made under this Section 8.3(a) shall become effective immediately after the close of business on the Record Date for such dividend or distribution, or immediately after the open of business on the Effective Date for such share split or share combination, as applicable. If any dividend or distribution of the type described in this Section 8.3(a) is declared but not so paid or made, the Conversion Rate shall be immediately readjusted, effective as of the date the Board of Directors determines not to pay such dividend or distribution, to the Conversion Rate that would then be in effect if such dividend or distribution had not been declared.

(b) If Borrower issues to all or substantially all holders of the Common Stock any rights, options or warrants (other than pursuant to a stockholder rights plan) entitling them, for a period of not more than 45 calendar days after the announcement date of such issuance, to subscribe for or purchase shares of the Common Stock at a

price per share that is less than the average of the Last Reported Sale Prices of the Common Stock for the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the date of announcement of such issuance, the Conversion Rate shall be increased based on the following formula:

$$CR' = CR_0 \times \frac{OS_0 + X}{OS_0 + Y}$$

where,

CR_0	=	the Conversion Rate in effect immediately prior to the close of business on the Record Date for such issuance;
CR'	=	the Conversion Rate in effect immediately after the close of business on such Record Date;
OS_0	=	the number of shares of Common Stock outstanding immediately prior to the close of business on such Record Date;
X	=	the total number of shares of Common Stock issuable pursuant to such rights, options or warrants; and
Y	=	the number of shares of Common Stock equal to the aggregate price payable to exercise such rights, options or warrants, divided by the average of the Last Reported Sale Prices of the Common Stock over the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the date of announcement of the issuance of such rights, options or warrants.

Any increase made under this Section 8.3(b) shall be made successively whenever any such rights, options or warrants are issued and shall become effective immediately after the close of business on the Record Date for such issuance. To the extent that such rights, options or warrants are not exercised prior to their expiration or shares of Common Stock are not delivered after the expiration of such rights, options or warrants, the Conversion Rate shall be decreased to the Conversion Rate that would then be in effect had the increase with respect to the issuance of such rights, options or warrants been made on the basis of delivery of only the number of shares of Common Stock actually delivered. If such rights, options or warrants are not so issued or if no such rights, options or warrants are exercised prior to the expiration, the Conversion Rate shall be decreased to the Conversion Rate that would then be in effect if such Record Date for such issuance had not occurred.

For purposes of this Section 8.3(b), in determining whether any rights, options or warrants entitle Lender to subscribe for or purchase shares of Common Stock at less than such average of the Last Reported Sale Prices of the Common Stock for the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the date of announcement for such issuance, and in determining the aggregate offering price of such shares of Common Stock, there shall be taken into account any consideration received by Borrower for such rights, options or warrants and any amount payable on exercise or conversion thereof, the value of such consideration, if other than cash, to be determined by Borrower in good faith.

(c) If Borrower distributes shares of its Capital Stock, evidences of its indebtedness, other assets or property of Borrower or rights, options or warrants to acquire its Capital Stock or other securities, to all or substantially all holders of the Common Stock, excluding (i) dividends, distributions or issuances as to which an adjustment was effected pursuant to Section 8.3(a) or Section 8.3(b), (ii) dividends or distributions paid exclusively in cash as to which the provisions set forth in Section 8.3(d) shall apply, (iii) dividends or distributions that constitute Reference Property following an event pursuant to Section 8.6(f) and (iv) Spin-Offs as to which the provisions set forth below in this Section 8.3(c) shall apply (any of such shares of Capital Stock, evidences of

indebtedness, other assets or property or rights, options or warrants to acquire Capital Stock or other securities, the "***Distributed Property***"), then the Conversion Rate shall be increased based on the following formula:

$$CR' = CR_0 \times \frac{SP_0}{SP_0 - FMV}$$

where,

CR_0 = the Conversion Rate in effect immediately prior to the close of business on the Record Date for such distribution;

CR' = the Conversion Rate in effect immediately after the close of business on such Record Date;

SP_0 = the average of the Last Reported Sale Prices of the Common Stock over the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the Ex-Dividend Date for such distribution; and

FMV = the fair market value (as determined by Borrower in good faith) of the Distributed Property with respect to each outstanding share of the Common Stock on the Record Date for such distribution.

Any increase made under the portion of this Section 8.3(c) above shall become effective immediately after the close of business on the Record Date for such distribution. If such distribution is not so paid or made, the Conversion Rate shall be decreased to the Conversion Rate that would then be in effect if such distribution had not been declared. Notwithstanding the foregoing, if "FMV" (as defined above) is equal to or greater than "SP_0" (as defined above), in lieu of the foregoing increase, Lender shall receive, in respect of each $1,000 principal amount and/or accrued and unpaid interest thereof, at the same time and upon the same terms as holders of the Common Stock receive the Distributed Property, the amount and kind of Distributed Property Lender would have received if Lender owned a number of shares of Common Stock equal to the Conversion Rate in effect on the Record Date for the distribution. If the Board of Directors determines the "FMV" (as defined above) of any distribution for purposes of this Section 8.3(c) by reference to the actual or when-issued trading market for any securities, it shall in doing so consider the prices in such market over the same period used in computing the Last Reported Sale Prices of the Common Stock over the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the Ex-Dividend Date for such distribution.

With respect to an adjustment pursuant to this Section 8.3(c) where there has been a payment of a dividend or other distribution on the Common Stock of shares of Capital Stock of any class or series, or similar equity interest, of or relating to any of Borrower's Subsidiaries or other business units, that are, or, when issued, will be, listed or admitted for trading on a U.S. national securities exchange (a "***Spin-Off***"), the Conversion Rate shall be increased based on the following formula:

$$CR' = CR_0 \times \frac{FMV_0 + MP_0}{MP_0}$$

where,

CR_0 = the Conversion Rate in effect immediately prior to the end of the Valuation Period;

CR' = the Conversion Rate in effect immediately after the end of the Valuation Period;

FMV_0 = the average of the Last Reported Sale Prices of the Capital Stock or similar equity interest distributed to holders of the Common Stock applicable to one share of Common Stock (determined by reference to the definition of Last Reported Sale Price as set forth in Section 8.6 as if references therein to Common Stock were to such Capital Stock or similar equity interest) over the first 10 consecutive Trading Day period after, and including, the Ex-Dividend Date of the Spin-Off (the "***Valuation Period***"); and

MP_0 = the average of the Last Reported Sale Prices of the Common Stock over the Valuation Period.

The increase to the Conversion Rate under the preceding paragraph shall occur at the close of business on the last Trading Day of the Valuation Period; *provided* that in respect of any conversion of this Note, if the relevant Conversion Date occurs during the Valuation Period, references to "10" in the preceding paragraph shall be deemed to be replaced with such lesser number of Trading Days as have elapsed between the Ex-Dividend Date of such Spin-Off and the Conversion Date in determining the Conversion Rate. If any dividend or distribution that constitutes a Spin-Off is declared but not so paid or made, the Conversion Rate shall be immediately decreased, effective as of the date the Board of Directors determines not to pay or make such dividend or distribution, to the Conversion Rate that would then be in effect if such dividend or distribution had not been declared or announced.

(d) If Borrower makes any cash dividend or distribution to all or substantially all holders of the Common Stock, the Conversion Rate shall be adjusted based on the following formula:

$$CR' = CR_0 \times \frac{SP_0}{SP_0 - C}$$

where,

CR_0 = the Conversion Rate in effect immediately prior to the close of business on the Record Date for such dividend or distribution;

CR' = the Conversion Rate in effect immediately after the close of business on the Record Date for such dividend or distribution;

SP_0 = the Last Reported Sale Price of the Common Stock on the Trading Day immediately preceding the Ex-Dividend Date for such dividend or distribution; and

C = the amount in cash per share Borrower distributes to all or substantially all holders of the Common Stock.

Any increase pursuant to this Section 8.3(d) shall become effective immediately after the close of business on the Record Date for such dividend or distribution. If such dividend or distribution is not so paid, the Conversion Rate shall be decreased, effective as of the date the Board of Directors determines not to make or pay such dividend or distribution, to be the Conversion Rate that would then be in effect if such dividend or distribution had not been declared. Notwithstanding the foregoing, if "C" (as defined above) is equal to or greater than "SP_0" (as defined above), in lieu of the foregoing increase, Lender shall receive, for each $1,000 principal amount and/or accrued and unpaid interest of this Note converted (or portion thereof), at the same time and upon the same terms as holders of shares of the Common Stock, the amount of cash that Lender would have received if Lender owned a number of shares of Common Stock equal to the Conversion Rate on the Record Date for such cash dividend or distribution.

(e) If Borrower or any of its subsidiaries make a payment in respect of a tender or exchange offer for the Common Stock (other than odd-lot tender offers), to the extent that the cash and value of any other consideration included in the payment per share of Common Stock exceeds the average of the Last Reported Sale Prices of the Common Stock over the 10 consecutive Trading Day period commencing on, and including, the Trading Day next succeeding the last date on which tenders or exchanges may be made pursuant to such tender or exchange offer the Conversion Rate shall be increased based on the following formula.

$$CR' = CR_0 \times \frac{AC + (SP' \times OS')}{OS_0 \times SP'}$$

where,

CR_0 = the Conversion Rate in effect immediately prior to the close of business on the 10th Trading Day immediately following, and including, the Trading Day next succeeding the date such tender or exchange offer expires;

CR’	=	the Conversion Rate in effect immediately after the close of business on the 10th Trading Day immediately following, and including, the Trading Day next succeeding the date such tender or exchange offer expires;
AC	=	the aggregate value of all cash and any other consideration (as determined by Borrower in good faith) paid or payable for shares of Common Stock purchased in such tender or exchange offer;
OS_0	=	the number of shares of Common Stock outstanding immediately prior to the date such tender or exchange offer expires (prior to giving effect to the purchase of all shares of Common Stock accepted for purchase or exchange in such tender or exchange offer);
OS’	=	the number of shares of Common Stock outstanding immediately after the date such tender or exchange offer expires (after giving effect to the purchase of all shares of Common Stock accepted for purchase or exchange in such tender or exchange offer); and
SP’	=	the average of the Last Reported Sale Prices of the Common Stock over the 10 consecutive Trading Day period commencing on, and including, the Trading Day next succeeding the date such tender or exchange offer expires.

The increase to the Conversion Rate under this Section 8.3(e) shall occur at the close of business on the 10th Trading Day immediately following, and including, the Trading Day next succeeding the date such tender or exchange offer expires; *provided* that in respect of any conversion of this Note, if the relevant Conversion Date occurs during the 10 Trading Days immediately following, and including, the Trading Day next succeeding the expiration date of any tender or exchange offer, references to “10” or “10th” in the preceding paragraph shall be deemed replaced with such lesser number of Trading Days as have elapsed between the date that such tender or exchange offer expires and the Conversion Date in determining the Conversion Rate.

If Borrower is obligated to purchase Common Stock pursuant to any such tender or exchange offer described in this Section 8.3(e) but is permanently prevented by applicable law from effecting any such purchase or all such purchases are rescinded, the applicable Conversion Rate shall be readjusted to be the Conversion Rate that would then be in effect if such tender or exchange offer had not been made or had been made only in respect of the purchases that have been effected.

(f) Except as provided in this Section 8, Borrower shall not adjust the Conversion Rate for the issuance of shares of Common Stock or any securities convertible into or exchangeable for shares of Common Stock or the right to purchase shares of Common Stock or such convertible or exchangeable securities.

(g) In addition to those adjustments required by clauses (a), (b), (c), (d) and (e) of this Section 8.3, and to the extent permitted by applicable law and subject to the applicable rules and/or listing standards of any exchange on which any of Borrower’s securities are then listed and The Nasdaq Stock Market, Borrower from time to time may increase the Conversion Rate by any amount for a period of at least 20 Business Days if the Board of Directors determines that such increase would be in Borrower’s best interest. In addition, to the extent permitted by applicable law and subject to the applicable rules and/or listing standards of any exchange on which any of Borrower’s securities are then listed and The Nasdaq Stock Market, Borrower may (but is not required to) increase the Conversion Rate to avoid or diminish any income tax to holders of the Common Stock or rights to purchase the Common Stock in connection with a dividend or distribution of shares of Common Stock (or rights to acquire shares of Common Stock) or similar event. Whenever the Conversion Rate is increased pursuant to either of the preceding two sentences, Borrower shall deliver to Lender a notice of the increase at least 15 days prior to the date the increased Conversion Rate takes effect, and such notice shall state the increased Conversion Rate and the period during which it will be in effect.

(h) Notwithstanding anything to the contrary in this Section 8, the Conversion Rate shall not be adjusted:

(i) upon the issuance of Common Stock at a price below the Conversion Price or otherwise, other than any such issuance described in Section 8.3(a), Section 8.3(b) or Section 8.3(c);

(ii) upon the issuance of any shares of Common Stock pursuant to any present or future plan providing for the reinvestment of dividends or interest payable on Borrower's securities and the investment of additional optional amounts in shares of Common Stock under any plan;

(iii) upon the issuance of any shares of Common Stock or options or rights to acquire shares of Common Stock pursuant to any present or future employee, director or consultant benefit plan or program of or assumed by Borrower or any of Borrower's subsidiaries;

(iv) upon the issuance of any shares of Common Stock pursuant to any option, warrant, right or exercisable, exchangeable or convertible security not described in clause (ii) of this subsection and outstanding as of the date the Note was first issued;

(v) for a third-party tender offer by any party other than a tender offer by one or more of Borrower's subsidiaries as described in Section 8.3(e);

(vi) upon the repurchase of any shares of Common Stock pursuant to an open market share purchase program or other buy-back transaction, including structured or derivative transactions such as accelerated share repurchase transactions or similar forward derivatives, or other buy-back transaction, that is not a tender or exchange offer of the kind described in Section 8.3(e) above;

(vii) solely for a change in the par value of the Common Stock; or

(viii) for accrued and unpaid interest, if any.

Further, if the application of the foregoing formulas in Section 8.3 would result in a decrease in the Conversion Rate, no adjustment to the Conversion Rate will be made (except on account of a reverse stock split).

(i) All calculations and other determinations under this Section 8 shall be made by Borrower and shall be made to the nearest one-ten thousandth (1/10,000th) of a share. No adjustment in the Conversion Rate shall be required unless such adjustment would require an increase or decrease of at least 1% in the Conversion Rate as last adjusted; *provided, however*, that any adjustments which would be required to be made but for this Section 8.3(i) shall be carried forward and taken into account in any subsequent adjustment and any carry forward amount shall be paid to the holder of this Note upon conversion regardless of the 1% threshold. All calculations under this Section 8 shall be made to the nearest cent or to the nearest one-hundredth of a share.

(j) For purposes of this Section 8.3, the number of shares of Common Stock at any time outstanding shall not include shares of Common Stock held in the treasury of Borrower so long as Borrower does not pay any dividend or make any distribution on shares of Common Stock held in the treasury of Borrower, but shall include shares of Common Stock issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock.

8.4 Adjustments of Prices. Whenever any provision of this Note requires Borrower to calculate the Last Reported Sale Prices over a span of multiple days, the Board of Directors shall make appropriate adjustments to each to account for any adjustment to the Conversion Rate that becomes effective, or any event requiring an adjustment to the Conversion Rate where the Ex-Dividend Date, Record Date, Effective Date or expiration date, as the case may be, of the event occurs, at any time during the period when the Last Reported Sale Prices are to be calculated.

For the avoidance of doubt, the adjustments made pursuant to the foregoing paragraph shall be made, solely to the extent the Board of Directors determines that any such adjustment is necessary, without duplication of any adjustment made pursuant to the provisions set forth under Section 8.3.

8.5 Shares to Be Fully Paid. Borrower shall reserve, free from preemptive rights, out of its authorized but unissued shares or shares held in treasury, a sufficient number of shares of Common Stock to provide for the conversion of this Note in full.

8.6 Certain Covenants.

(a) Borrower covenants that all shares of Common Stock issued upon conversion of this Note will be duly authorized, validly issued, fully paid and nonassessable and shall be free from preemptive or similar rights and free of any taxes, liens or adverse claims.

(b) Borrower covenants that, if any shares of Common Stock to be provided for the purpose of conversion of this Note hereunder require registration with or approval of any Governmental Entity under any federal or state law before such shares of Common Stock may be validly issued upon conversion, Borrower will, to the extent then permitted by the rules and interpretations of the U.S. Securities and Exchange Commission or any applicable state laws, secure such registration or approval, as the case may be.

(c) Borrower further covenants that if at any time the Common Stock shall be listed on any national securities exchange or automated quotation system Borrower will list and keep listed, so long as the Common Stock shall be so listed on such exchange or automated quotation system, any Common Stock issuable upon conversion of this Note.

(d) Whenever the Conversion Rate or conversion privilege is required to be adjusted pursuant to the provisions of this Note, Borrower shall promptly mail to the holder a notice of the adjustment and a certificate signed by an officer of Borrower ("***Officer's Certificate***") briefly stating the facts requiring the adjustment, the adjusted Conversion Rate and the manner of computing it. Failure to mail such notice or any defect therein shall not affect the validity of any such adjustment. Unless and until the holder of this Note shall receive an Officer's Certificate setting forth an adjustment of the Conversion Rate, such holder may assume without inquiry that the Conversion Rate has not been adjusted and that the last Conversion Rate of which it has knowledge remains in effect.

(e) If any of the following events occur:

(i) any recapitalization, reclassification or change of the outstanding shares of Common Stock (other than a change resulting from a subdivision or combination),

(2) any consolidation, merger, or combination involving Borrower with another corporation,

(3) any sale, conveyance or lease to any other corporation of all or substantially all of the property and assets of Borrower, or

(4) any statutory share exchange,

in each case as a result of which holders of Common Stock shall be entitled to receive stock, other securities or other property or assets (including cash or any combination thereof) (the "***Reference Property***") with respect to or in exchange for such Common Stock, the holder of this Note will be entitled thereafter to convert the Note into the kind and amount of shares of stock, other securities or other property or assets (including cash or any combination thereof) which they would have owned or been entitled to receive upon such transaction had such notes been converted into Common Stock immediately prior to such transaction. In the event holders of Common Stock have the opportunity to elect the form of consideration to be received in such transaction, the reference property will be deemed to be the weighted average of the types and amounts of consideration received by the holders of Common Stock that affirmatively make such election. Borrower shall notify the holder of this Note of the weighted average as soon as practicable after such determination is made. None of the foregoing provisions shall affect the right of the holder of this Note to convert this Note into shares of Common Stock prior to the effective date of such transaction. The above provisions of this Section 8.6(f) shall similarly apply to successive recapitalizations, reclassifications, mergers, consolidations, statutory share exchanges, combinations, sales and conveyances. If this Section 8.6(f) applies to any event or occurrence, Section 8.3 hereof shall not apply. Borrower shall not become a party to any such transaction unless its terms are consistent with the foregoing. None of the foregoing provisions shall affect the right of the holder of this Note to convert this Note as set forth in Section 8 prior to the effective time of such transaction.

8.7 Conversion Limitation. Anything to the contrary notwithstanding, Borrower shall not effect the conversion of this Note and Lender shall not have the right to convert this Note, to the extent that after giving effect to such conversion, Lender (together with Lender's Affiliates) would beneficially own in excess of 9.99% (the

"***Maximum Percentage***") of the shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by Lender and its Affiliates shall include the number of shares of Common Stock issuable upon conversion of this Note with respect to which the determination of such sentence is being made (i.e., the particular conversion requested by Lender at such time), but shall exclude shares of Common Stock which would be issuable upon (i) exercise of the remaining, unconverted portion of this Note beneficially owned by Lender and its Affiliates and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of Borrower beneficially owned by Lender and its Affiliates (including, without limitation, any other convertible notes or convertible preferred stock or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained herein. Except as set forth in the preceding sentence, for purposes of this paragraph and for purposes of the definition of Equity Conditions, beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended. For purposes of this Note, in determining the number of outstanding shares of Common Stock, Lender may rely on the number of outstanding shares of Common Stock as reflected in (x) Borrower's most recent Form 10-Q or Form 10-K, as the case may be, filed with the U.S. Securities and Exchange Commission on the date thereof, (y) a more recent public announcement by Borrower or (z) any other notice by Borrower or its transfer agent setting forth the number of shares of Common Stock outstanding. By written notice to Borrower, Lender may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 19.99% specified in such notice; *provided* that any such increase will not be effective until the sixty-fifth (65th) day after such notice is delivered to Borrower. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this paragraph to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended beneficial ownership limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation and comply with any rules of the Nasdaq Stock Market.

8.8 Definitions. For purposes of this Note, the following terms shall have the following meanings:

"***Affiliate***" means any person or entity that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a person or entity, as such terms are used in and construed under Rule 144 under the Securities Act. As used in this definition of "Affiliate," the term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities or partnership or other ownership interest, by contract, or otherwise.

"***Board of Directors***" means the board of directors of Borrower or a committee of such board duly authorized to act for it hereunder.

"***Business Day***" means, with respect to this Note, any day other than a Saturday, a Sunday or a day on which the Federal Reserve Bank of New York is authorized or required by law or executive order to close or be closed.

"***Capital Stock***" means, with respect to Borrower, any and all shares, interests, rights to purchase, warrants, options, participations or other equivalents of or interests in (however designated) stock issued by Borrower, but, for the avoidance of doubt, excluding any debt securities convertible into or exchangeable for any securities otherwise constituting Capital Stock pursuant to this definition.

"***close of business***" means 5:00 p.m. (New York City time).

"***Commission***" means the U.S. Securities and Exchange Commission.

"***Common Stock***" means the common stock of Borrower, par value $0.01 per share.

"***Effective Date***" means the first date on which shares of the Common Stock trade on the applicable exchange or in the applicable market, regular way, reflecting the relevant share split or share combination, as applicable.

"***Exchange Act***" means the Securities Exchange Act of 1934, as amended.

"***Ex-Dividend Date***" means the first date on which shares of the Common Stock trade on the applicable exchange or in the applicable market, regular way, without the right to receive the issuance, dividend or distribution in question, from Borrower or, if applicable, from the seller of Common Stock on such exchange or market (in the form of due bills or otherwise) as determined by such exchange or market.

"***Last Reported Sale Price***" of the Common Stock on any date means the closing sale price per share (or if no closing sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and the average ask prices) on that date as reported in composite transactions for the principal U.S. national or regional securities exchange on which the Common Stock is traded (each, an "***Eligible Market***"). If the Common Stock is not listed for trading on a U.S. national or regional securities exchange on the relevant date, the "***Last Reported Sale Price***" shall be the last quoted bid price for the Common Stock in the over-the-counter market on the relevant date as reported by OTC Markets Group Inc. or a similar organization. If the Common Stock is not so quoted, the "***Last Reported Sale Price***" shall be the average of the mid-point of the last bid and ask prices for the Common Stock on the relevant date from each of at least three nationally recognized independent investment banking firms selected by Borrower for this purpose.

"***open of business***" means 9:00 a.m. (New York City time).

"***Person***" or "***person***" means any individual, corporation, partnership, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization, government or any agency or political subdivision thereof or any syndicate or group that would be deemed to be a "**person**" under Section 13(d)(3) of the Securities Exchange Act of 1934, as amended, or any other entity.

"***Record Date***" means, with respect to any dividend, distribution or other transaction or event in which the holders of the Common Stock (or other applicable security) have the right to receive any cash, securities or other property or in which the Common Stock (or such other security) is exchanged for or converted into any combination of cash, securities or other property, the date fixed for determination of holders of the Common Stock (or such other security) entitled to receive such cash, securities or other property (whether such date is fixed by the Board of Directors, by statute, by contract or otherwise).

"***Reference Property***" has the meaning set forth in Section 8.6(f).

"***Securities Act***" means the Securities Act of 1933, as amended.

"***Spin-Off***" has the meaning set forth in Section 8.3(c).

"***Trading Day***" means a day on which (i) trading in the Common Stock (or other security for which a closing sale price must be determined) generally occurs on The Nasdaq Stock Market or, if the Common Stock (or such other security) is not then listed on The Nasdaq Stock Market, on the principal other U.S. national or regional securities exchange on which the Common Stock (or such other security) is then listed or, if the Common Stock (or such other security) is not then listed on a U.S. national or regional securities exchange, on the principal other market on which the Common Stock (or such other security) is then traded and (ii) a Last Reported Sale Price for the Common Stock (or such other security) is available on such securities exchange or market; *provided* that if the Common Stock (or such other security) is not so listed or traded, "***Trading Day***" means a Business Day.

9. Default. Each of the following events shall be an "***Event of Default***" hereunder:

(a) Borrower fails to pay timely any of the principal amount due under this Note or any accrued interest or other amounts due under this Note on the date the same becomes due and payable or within five (5) Business Days thereafter;

(b) Borrower files any petition or action for relief under any bankruptcy, reorganization, insolvency or moratorium law or any other law for the relief of, or relating to, debtors, now or hereafter in effect, or makes any assignment for the benefit of creditors or takes any corporate action in furtherance of any of the foregoing;

(c) An involuntary petition is filed against Borrower (unless such petition is dismissed or discharged within sixty (60) days) under any bankruptcy statute now or hereafter in effect, or a custodian, receiver, trustee, assignee for the benefit of creditors (or other similar official) is appointed to take possession, custody or control of any property of Borrower;

(d) Any representation or warranty made herein or in any other document delivered in connection herewith shall be incorrect or misleading in any material respect when made or deemed made (except where any such representation or warranty by the terms thereof is subject to a materiality standard, in which case such representation or warranty shall be incorrect or misleading in any respect); or

(e) Borrower fails to deliver when due all shares of Common Stock deliverable upon conversion of all or any portion of this Note and/or accrued and unpaid interest thereon pursuant to Section 8, which failure continues for 10 days.

Upon the occurrence of an Event of Default hereunder, all unpaid principal, accrued interest and other amounts owing hereunder shall, at the option of Lender, and, in the case of an Event of Default pursuant to **(b)** or **(c)** above, automatically, be immediately due, payable and collectible by Lender pursuant to applicable law, the commitment of Lender to lend shall, at the option of Lender, and in the case of an Event of Default pursuant to **(b)** or **(c)** above, automatically, terminate, and the interest rate applicable to outstanding principal amount of this Note while an Event of Default has occurred and is continuing shall increase to 12% per annum, or the maximum rate permissible by law as defined above, whichever is less.

10. Waiver. Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest of this Note, and shall pay all costs of collection when incurred, including, without limitation, reasonable attorneys' fees, costs and other expenses.

The right to plead any and all statutes of limitations as a defense to any demands hereunder is hereby waived to the full extent permitted by law.

11. Governing Law. This Note shall be governed by, and construed and enforced in accordance with, the laws of the State of New York, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction. Borrower consents to *in personam* jurisdiction of the courts in the State of New York sitting in New York County and of the United States District Court of the Southern District of New York for any legal action or proceeding with respect to this Note. Borrower, by execution and delivery of this Note, hereby irrevocably accepts in respect of its property, generally and unconditionally, the jurisdiction of the aforesaid courts.

12. Successors and Assigns. This Note shall be binding upon and inure to the benefit of Borrower and Lender and their respective successors and assigns; *provided* that Borrower may not assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of Lender. Lender may assign to one or more other persons all or a portion of its rights (but not its obligations) under this Note.

13. Integration. This Note reflects the entire understanding of the parties with respect to the transactions contemplated hereby and shall not be contradicted or qualified by any other agreement or instrument, oral or written, before or after the date hereof.

14. Amendments, Modification, Etc. No amendment, modification or waiver of any provision of this Note, and no consent to any departure by Lender or Borrower and their assigns therefrom, shall in any event be effective unless the same shall be in writing and signed by Lender and Borrower, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

15. No Waiver. No failure on the part of Lender to exercise, and no delay in exercising, any right hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any right under this Note preclude any other or further exercise thereof or the exercise of any other right. The rights of Lender under this Note against Borrower are not conditional or contingent on any attempt by Lender to exercise any of its rights under this Note against Borrower or any other person.

16. Expenses. Borrower agrees to reimburse, periodically and upon request, and at the date of effectiveness of this Note or upon termination of this Note, (i) Lender's reasonable expenses, including the reasonable fees and disbursements of Lender's attorneys, arising in connection with the preparation, negotiation, execution, delivery,

amendment and administration of this Note and related transactions and (ii) Lender's expenses, including the fees and disbursements of Lender's attorneys, in connection with the enforcement of this Note or the protection of Lender's rights under this Note.

17. Indemnity. Borrower shall indemnify, defend and hold harmless Lender and its agents and attorneys (collectively, the "***Indemnitees***") from and against (i) any and all transfer taxes, documentary taxes, assessments or charges made by any Governmental Entity by reason of the execution and delivery of this Note or the extension of credit represented hereby, and (ii) any and all liabilities, losses, damages, penalties, judgments, claims, costs and expenses of any kind or nature whatsoever (including reasonable attorneys' fees, and disbursements in connection with any actual or threatened investigative, administrative or judicial proceeding, whether or not such Indemnitee shall be designated a party thereto) that may be imposed on, incurred by or asserted against such Indemnitee, in any manner relating to or arising out of this Note, the extension of credit represented hereby or the use or intended use of the proceeds thereof; *provided* that no Indemnitee shall have the right to be indemnified or held harmless hereunder for its own gross negligence or willful misconduct, as determined by a final judgment of a court of competent jurisdiction.

18. Seniority. Amounts due under this Note are unsecured and shall be subordinated in accordance with the Subordination Agreement.

[*Signature Pages Follow*]

BORROWER: **MANNKIND CORPORATION**

By: /s/ Steven Binder
Name: Steven Binder
Title: Chief Financial Officer

LENDER: **THE MANN GROUP LLC**

By: /s/ Michael S. Dreyer
Name: Michael S. Dreyer
Title: President

[Signature Page to Amended and Restated Promissory Note]

Exhibit A

PRINCIPAL SCHEDULE

Date	Borrowing/PIK Interest	Repayment/Conversion	Principal Balance
8/6/2019	35,000,000	—	35,000,000

Exhibit B

[FORM OF NOTICE OF CONVERSION]

To: MannKind Corporation
30930 Russell Ranch Road
Suite 301
Westlake Village, CA 91362
Attn: [ ]

The Mann Group LLC hereby exercises the option to convert this Note, or the portion hereof below designated, into shares of Common Stock in accordance with the terms of this Note, and directs that any shares of Common Stock issuable and deliverable upon such conversion and any portion of this Note representing any unconverted principal amount hereof, be issued and delivered to The Mann Group LLC. Capitalized terms used herein but not defined shall have the meanings ascribed to such terms in this Note.

Dated:

Principal amount to be converted: $
Accrued and unpaid interest to be converted: $

By: THE MANN GROUP LLC

By: _____
Name:
Title:

Exhibit 4.7

EXECUTION VERSION

THE SECURITY REPRESENTED BY THIS CERTIFICATE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, OR APPLICABLE STATE SECURITIES LAWS. THIS SECURITY MAY NOT BE SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER SAID ACT, OR PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER SAID ACT INCLUDING, WITHOUT LIMITATION, PURSUANT TO RULE 144 UNDER SAID ACT, OR PURSUANT TO A PRIVATE SALE EFFECTED UNDER SECTION 4(A)(7) OF THE SECURITIES ACT OR APPLICABLE FORMAL OR INFORMAL SEC INTERPRETATION OR GUIDANCE, SUCH AS A SO-CALLED "4(A)(1) AND A HALF" SALE. NOTWITHSTANDING THE FOREGOING, THE SECURITY MAY BE PLEDGED (BUT NOT TRANSFERRED) IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING SECURED BY THE SECURITY. PRIOR TO THE REGISTRATION OF ANY TRANSFER PURSUANT TO AN EXEMPTION FROM REGISTRATION OTHER THAN RULE 144, BORROWER RESERVES THE RIGHT TO REQUIRE THE DELIVERY OF SUCH LEGAL OPINIONS, CERTIFICATIONS OR OTHER EVIDENCE AS MAY REASONABLY BE REQUIRED IN ORDER TO DETERMINE THAT THE PROPOSED TRANSFER IS BEING MADE IN COMPLIANCE WITH THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS.

THIS INSTRUMENT AND THE INDEBTEDNESS, RIGHTS AND OBLIGATIONS EVIDENCED HEREBY AND ANY LIENS OR OTHER SECURITY INTERESTS SECURING SUCH RIGHTS AND OBLIGATIONS ARE SUBORDINATE IN THE MANNER AND TO THE EXTENT SET FORTH IN THAT CERTAIN SUBORDINATION AGREEMENT (AS AMENDED, RESTATED, SUPPLEMENTED OR MODIFIED FROM TIME TO TIME, THE "SUBORDINATION AGREEMENT") DATED AS OF EVEN DATE HEREWITH, , BY AND AMONG THE SUBORDINATING CREDITORS IDENTIFIED THEREIN AND MIDCAP FINANCIAL TRUST IN ITS CAPACITY AS AGENT FOR CERTAIN LENDERS (TOGETHER WITH ITS SUCCESSORS AND ASSIGNS, "SENIOR CREDITOR AGENT"), TO CERTAIN INDEBTEDNESS, RIGHTS, AND OBLIGATIONS OF MANNKIND CORPORATION AND MANNKIND LLC TO SENIOR CREDITOR AGENT AND SENIOR LENDERS (AS DEFINED THEREIN) AND LIENS AND SECURITY INTERESTS OF SENIOR CREDITOR AGENT SECURING THE SAME ALL AS DESCRIBED IN THE SUBORDINATION AGREEMENT; AND EACH HOLDER AND TRANSFEREE OF THIS INSTRUMENT, BY ITS ACCEPTANCE HEREOF, IRREVOCABLY AGREES TO BE BOUND BY THE PROVISIONS OF THE SUBORDINATION AGREEMENT.

PROMISSORY NOTE

$35,050,750 Issue Date: August 6, 2019

Westlake Village, California

THIS PROMISSORY NOTE (this "***Note***"), dated as of August 6, 2019, is issued pursuant to the certain Exchange Agreement, dated as of August 5, 2019, by and between **MANNKIND CORPORATION**, a Delaware corporation ("***Borrower***"), and **THE MANN GROUP LLC** ("***Lender***").

FOR VALUE RECEIVED, Borrower hereby promises to pay to Lender, in lawful money of the United States of America and in immediately available funds, the principal sum of up to Thirty-Five Million, Fifty Thousand Seven Hundred Fifty Dollars ($35,050,750), which amount represents the outstanding principal amount of this Note as of the date hereof, together with all PIK Interest (as defined below) added thereto and accrued and unpaid interest thereon, each due and payable on the dates and in the manner set forth below.

1. Principal Repayment. The outstanding principal amount of this Note, together with all accrued and unpaid interest thereon, shall be due and payable on the earlier of (i) November 3, 2024, and (ii) the 90th day after the repayment in full, and termination and discharge of all obligations (other than contingent indemnity obligations) under the Designated Senior Debt (as defined below); *provided* that if such date is not a Business Day, the outstanding principal amount of this Note, together with all accrued and unpaid interest thereon, shall be payable on the Business Day immediately succeeding such date (the "***Maturity Date***").

2. Interest Rate. Borrower further promises to pay interest on the outstanding principal amount of this Note from the date thereof until payment in full, which interest shall be payable at a rate equal to 7.0% per annum. Interest shall be due and payable quarterly in arrears on the first day of each calendar quarter commencing with October 1, 2019; *provided* that if such date is not a Business Day, interest shall be payable on the Business Day immediately succeeding such date (each such date, an "***Interest Payment Date***"). Interest shall be payable in kind by adding the amount thereof to the principal amount of this Note (such interest, "***PIK Interest***"); *provided* that with respect to interest accruing from and after January 1, 2021, Borrower may, at its option, elect to, pay any such interest on any such Interest Payment Date in validly issued, fully paid and non-assessable shares of Common Stock (as defined below) ("***Interest Shares***") so long as each of the Equity Conditions (as defined below) are satisfied on each day during the Equity Conditions Measuring Period (as defined below) applicable to such Interest Payment Date.

If Borrower intends to issue Interest Shares, Borrower shall deliver a written notice (including via e-mail) to Lender on or prior to the fifth Trading Day (as defined below) prior to the applicable Interest Payment Date (such notice, an "***Interest Share Notice***"), electing to pay all or any portion of the accrued but unpaid and uncapitalized interest payable on such Interest Payment Date in Interest Shares, which notice shall be irrevocable and shall specify the amount of interest to be paid in Interest Shares, together with an officer's certificate certifying that the Equity Conditions with respect to such payment in Interest Shares will have been met as of the applicable Interest Payment Date. Notwithstanding anything herein to the contrary, if the Equity Conditions fail to have been met as of the applicable Interest Payment Date, the applicable interest shall be payable by adding the amount thereof to the principal amount of this Note. Any interest to be paid in Interest Shares on an Interest Payment Date shall be paid in a number of validly issued, fully paid and non-assessable shares of Common Stock equal to the quotient of (1) the amount of the accrued but unpaid and uncapitalized interest payable on such Interest Payment Date less any such payment payable by adding such amount to the principal amount of this Note, divided by (2) the Last Reported Sale Price (as defined below) on the Trading Day immediately prior to the applicable payment date. If the issuance of Interest Shares would result in the issuance of a fraction of a share of Common Stock, Borrower shall round such fraction of a share of Common Stock to the nearest whole share (with 0.5 being rounded up).

All amounts payable in cash hereunder shall be payable in lawful money of the United States of America at the office of Lender, 12744 San Fernando Road, Sylmar, CA 91342, unless another place of payment shall be specified in writing by Lender.

4. Application of Payments; Prepayment.

4.1 Payment on this Note shall be applied first to accrued interest, and thereafter to the outstanding principal balance hereof, unless otherwise consented to by Lender at or prior to the time of such payment.

4.2 This Note may be prepaid in whole or in part without penalty or premium. Any partial prepayment made pursuant to this Section 4.2 shall be applied to interest first and then to principal. At the time of any prepayment of principal hereunder, Borrower shall also pay all accrued, unpaid and uncapitalized interest on the amount prepaid through the date of prepayment.

5. Principal Amount. As of the date hereof, the principal amount of this Note is Thirty-Five Million, Fifty Thousand Seven Hundred Fifty Dollars ($35,050,750). At the time of the addition of any PIK Interest or prepayment of this Note, Lender shall make or cause to be made, an appropriate notation on Exhibit A attached hereto reflecting the amount of such PIK Interest or prepayment. The outstanding amount of this Note set forth on such Exhibit A shall be prima facie evidence of the principal amount thereof outstanding, but the failure to record, or any error in so recording, shall not limit or otherwise affect the obligations of Borrower to make payments of principal of or interest on this Note when due.

6. Representations and Warranties. Borrower hereby represents and warrants to Lender as follows:

6.1 Borrower has the requisite power and authority to enter into this Note and to consummate the transactions contemplated hereby. The execution and delivery of this Note by Borrower and the consummation by Borrower of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of Borrower. This Note has been duly executed and delivered by Borrower and constitutes the legal, valid and binding agreement of Borrower enforceable against Borrower in accordance with its terms, except as may be

limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally and (ii) equitable principles of general applicability relating to the availability of specific performance, injunctive relief or other equitable remedies.

6.2 No consent, approval, authorization, order, license, registration or qualification of or with any Governmental Entity is required for the execution and delivery by Borrower of this Note or the transactions contemplated hereby, except such consents, approvals, authorizations, orders, licenses, registrations or qualifications as have been obtained, or which, if not obtained, would not, individually or in the aggregate, have a material adverse effect on the ability of Borrower to perform its obligations hereunder or consummate the transactions contemplated hereby on a timely basis. As used in this Note, the term "***Governmental Entity***" means any agency, bureau, commission, authority, department, official, political subdivision, tribunal or other instrumentality of any government, whether (i) regulatory, administrative or otherwise (including, without limitation, a self-regulatory organization or stock exchange); (ii) federal, state or local; or (iii) domestic or foreign.

6.3 The execution and delivery by Borrower of this Note, the performance by Borrower of its obligations hereunder, and the consummation by Borrower of the transactions contemplated hereby, will not conflict with or result in a breach or violation of (i) any of the terms or provisions of, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which Borrower or any of its subsidiaries is a party or by which Borrower or any of its subsidiaries is bound or to which any of their property or assets is subject or (ii) any applicable law or statute or any order, rule or regulation of any Governmental Entity having jurisdiction over Borrower or any of its subsidiaries or any of their respective properties, except for in the case of either clause (i) or (ii) such conflicts, breaches or violations that would not prevent or delay the consummation of the transactions contemplated by this Note or that would not be reasonably expected to have a material adverse effect on Borrower, nor will any such action result in any violation of the provisions of the organizational documents of Borrower.

6.4 All of the Interest Shares, when issued in accordance with the terms of this Note, will be duly authorized and duly and validly issued, fully paid and nonassessable, free and clear of all liens, taxes, adverse claims, and will not be issued in violation of, or subject to, any preemptive or similar rights of any Person.

6.5 Borrower has filed all reports, schedules, forms, statements and other documents required to be filed by it under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "***SEC Reports***"). None of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Borrower is not in violation of the requirements of the NASDAQ Stock Market ("***NASDAQ***") and has no knowledge of any facts or circumstances which could reasonably be expected to lead to delisting or suspension of the Common Stock in the foreseeable future.

6.6 No brokerage or finder's fees or commissions are or will be payable by Borrower or any of its Affiliates or representatives to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by this Note. Lender shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section 6.6 that may be payable by Borrower or any of its Affiliates or representatives in connection with the transactions contemplated by this Note.

6.7 Assuming the accuracy of the representations and warranties of Lender contained in Section 7 hereof, the offer and issuance of this Note or the issuance of the Interest Shares by Borrower pursuant hereto will be exempt from the registration requirements of the Securities Act (and such issuances will be or have been registered or qualified (or are exempt from registration and qualification) under the registration, permit or qualification requirements of all applicable state securities laws). The transactions contemplated hereby, including the issuance and sale of the Interest Shares under this Note, do not contravene, or require stockholder approval pursuant to, the rules and regulations of NASDAQ.

6.8 Neither Borrower, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, has made or will make any offers or sales of any security, or has solicited or will solicit any offers to buy any security, under circumstances that would cause the offering and issuance of the Interest Shares to be integrated with prior offerings by Borrower for purposes of the Securities Act and which would require the registration of any such securities under the Securities Act.

7. Representation and Warranties of Lender. Lender hereby represents and warrants to Borrower as follows:

7.1 Lender has full right, power and authority to enter into this Note and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Note.

7.2 Lender understands that nothing in this Note or any other materials presented to Lender in connection with this Note or the issuance of any Interest Shares constitutes legal, tax or investment advice. Lender has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with this Note and the issuance of any Interest Shares.

7.3 Lender understands that this Note and any Interest Shares (collectively, the "***Securities***") have not been registered under the Securities Act. Lender also understands that the Securities are being offered and issued pursuant to an exemption from registration contained in the Securities Act based in part upon Lender's representations contained in this Note.

7.4 Lender has substantial experience in evaluating and investing in private placement transactions of securities in companies similar to Borrower so that it is capable of evaluating the merits and risks of the Securities and has the capacity to protect its own interests. Lender must bear the economic risk of the Securities indefinitely (subject to Borrower's payment obligations under this Note) unless the Securities are registered pursuant to the Securities Act, or an exemption from registration is available. Lender understands that Borrower has no present intention of registering any of the Securities. Lender also understands that there is no assurance that any exemption from registration under the Securities Act will be available and that, even if available, such exemption may not allow Lender to transfer all or any portion of any of the Securities under the circumstances, in the amounts or at the times Lender might propose.

7.5 Lender is acquiring the Securities for Lender's own account for investment only, and not with a view towards their distribution.

7.6 Lender has the capacity to protect its own interests in connection with the transactions contemplated in this Note.

7.7 Lender is an accredited investor within the meaning of Regulation D under the Securities Act.

8. Certain Definitions

For purposes of this Note, the following terms shall have the following meanings:

"***Affiliate***" means any person or entity that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a person or entity, as such terms are used in and construed under Rule 144 under the Securities Act. As used in this definition of "Affiliate," the term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities or partnership or other ownership interest, by contract, or otherwise.

"***Business Day***" means, with respect to this Note, any day other than a Saturday, a Sunday or a day on which the Federal Reserve Bank of New York is authorized or required by law or executive order to close or be closed.

"***Commission***" means the U.S. Securities and Exchange Commission.

"***Common Stock***" means the common stock of Borrower, par value $0.01 per share.

"***Convertible Note***" means that certain convertible promissory note, dated as of the date hereof, in an initial principal amount of Thirty-Five Million Dollars ($35,000,000) issued by Borrower to Lender.

"***Designated Senior Debt***" means the principal of, premium, if any, interest on, including any interest accruing after the commencement of any bankruptcy or similar proceeding, whether or not a claim for postpetition interest is allowed as a claim in the proceeding, or termination payment with respect to or in connection with, and all fees, costs, expenses and other amounts accrued or due on or under or in respect of, the term loans made and other obligations incurred under that certain Credit and Security Agreement, dated as of August 6, 2019, among Borrower and MannKind LLC, as borrowers, and MidCap Financial Trust, as agent and the lenders from to time party thereto, as amended, restated, supplemented or otherwise modified from time to time.

"Equity Conditions" means, with respect to the payment of interest in Interest Shares:

(i) either (1) all of the Interest Shares (in the case of a payment of interest in Interest Shares) held by a non-Affiliate of Borrower shall be eligible for sale without the need for registration under any applicable federal or state securities laws or (2) a shelf registration statement registering the resale of such Interest Shares has been filed by Borrower and been declared effective by the Commission or is automatically effective and is available for use, and Borrower expects such shelf registration statement to remain effective and available for use from the applicable Interest Payment Date until thirty (30) days following the applicable Interest Payment Date;

(ii) during the applicable Equity Conditions Measuring Period, the Common Stock is listed or traded on an Eligible Market (as defined below) and shall not have been suspended from trading on such Eligible Market (other than suspensions of not more than two Trading Days and occurring prior to the applicable date of determination due to business announcements by Borrower) nor shall delisting or suspension by such Eligible Market been threatened or pending either (A) in writing by such exchange or market or (B) by falling below the then effective minimum listing maintenance requirements of such Eligible Market;

(iii) any applicable Interest Shares may be issued in full without violating the rules or regulations of the Eligible Market on which the Common Stock is then listed or trading;

(vi) any applicable Interest Shares shall be duly authorized and will be validly issued, fully paid and non-assessable upon issuance in accordance with the terms of this Note;

(v) the issuance of the applicable Interest Shares shall not cause Lender (together with Lender's Affiliates) to beneficially own in excess of the Maximum Percentage (as defined in the Convertible Note) of the Common Stock outstanding immediately after giving effect to the issuance of such Interest Shares (after giving effect to the limitations specified in Section 8.7 of the Convertible Note and any analogous limitations on conversion or exercise contained in any other securities of Borrower held by Lender or Lender's Affiliates); and

(vi) no Event of Default shall have occurred and be continuing.

"Equity Conditions Measuring Period" means the period (x) commencing on the Interest Notice Date with respect to such payment is delivered to Lender and (y) ending on the applicable Interest Payment Date.

"***Exchange Act***" means the Securities Exchange Act of 1934, as amended.

"***Interest Notice Date***" means a date on which Borrower delivers an Interest Share Notice.

"***Last Reported Sale Price***" of the Common Stock on any date means the closing sale price per share (or if no closing sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and the average ask prices) on that date as reported in composite transactions for the principal U.S. national or regional securities exchange on which the Common Stock is traded (each, an "***Eligible Market***"). If the Common Stock is not listed for trading on a U.S. national or regional securities exchange on the relevant date, the "***Last Reported Sale Price***" shall be the last quoted bid price for the Common Stock in the over-

the-counter market on the relevant date as reported by OTC Markets Group Inc. or a similar organization. If the Common Stock is not so quoted, the "***Last Reported Sale Price***" shall be the average of the mid-point of the last bid and ask prices for the Common Stock on the relevant date from each of at least three nationally recognized independent investment banking firms selected by Borrower for this purpose.

"***Person***" or "***person***" means any individual, corporation, partnership, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization, government or any agency or political subdivision thereof or any syndicate or group that would be deemed to be a "***person***" under Section 13(d)(3) of the Securities Exchange Act of 1934, as amended, or any other entity.

"***Securities Act***" means the Securities Act of 1933, as amended.

"***Trading Day***" means a day on which (i) trading in the Common Stock (or other security for which a closing sale price must be determined) generally occurs on The Nasdaq Stock Market or, if the Common Stock (or such other security) is not then listed on The Nasdaq Stock Market, on the principal other U.S. national or regional securities exchange on which the Common Stock (or such other security) is then listed or, if the Common Stock (or such other security) is not then listed on a U.S. national or regional securities exchange, on the principal other market on which the Common Stock (or such other security) is then traded and (ii) a Last Reported Sale Price for the Common Stock (or such other security) is available on such securities exchange or market; *provided* that if the Common Stock (or such other security) is not so listed or traded, "***Trading Day***" means a Business Day.

9. Default. Each of the following events shall be an "***Event of Default***" hereunder:

(a) Borrower fails to pay timely any of the principal amount due under this Note or any accrued interest or other amounts due under this Note on the date the same becomes due and payable or within five (5) Business Days thereafter;

(b) Borrower files any petition or action for relief under any bankruptcy, reorganization, insolvency or moratorium law or any other law for the relief of, or relating to, debtors, now or hereafter in effect, or makes any assignment for the benefit of creditors or takes any corporate action in furtherance of any of the foregoing;

(c) An involuntary petition is filed against Borrower (unless such petition is dismissed or discharged within sixty (60) days) under any bankruptcy statute now or hereafter in effect, or a custodian, receiver, trustee, assignee for the benefit of creditors (or other similar official) is appointed to take possession, custody or control of any property of Borrower;

(d) Any representation or warranty made herein or in any other document delivered in connection herewith shall be incorrect or misleading in any material respect when made or deemed made (except where any such representation or warranty by the terms thereof is subject to a materiality standard, in which case such representation or warranty shall be incorrect or misleading in any respect); or

(e) Borrower fails to deliver when due any Interest Shares hereunder, any "Interest Shares" pursuant to that certain Convertible Promissory Note of even date herewith between Borrower and Lender, or any shares of Common Stock deliverable upon conversion of all or any portion of such Convertible Promissory Note pursuant to Section 8 thereof, in each case which failure continues for 10 days.

Upon the occurrence of an Event of Default hereunder, all unpaid principal, accrued interest and other amounts owing hereunder shall, at the option of Lender, and, in the case of an Event of Default pursuant to **(b)** or **(c)** above, automatically, be immediately due, payable and collectible by Lender pursuant to applicable law and the interest rate applicable to outstanding principal amount of this Note while an Event of Default has occurred and is continuing shall increase to 12% per annum, or the maximum rate permissible by law as defined above, whichever is less.

10. Waiver. Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest of this Note, and shall pay all costs of collection when incurred, including, without limitation, reasonable attorneys' fees, costs and other expenses.

The right to plead any and all statutes of limitations as a defense to any demands hereunder is hereby waived to the full extent permitted by law.

11. Governing Law. This Note shall be governed by, and construed and enforced in accordance with, the laws of the State of New York, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction. Borrower consents to *in personam* jurisdiction of the courts in the State of New York sitting in New York County and of the United States District Court of the Southern District of New York for any legal action or proceeding with respect to this Note. Borrower, by execution and delivery of this Note, hereby irrevocably accepts in respect of its property, generally and unconditionally, the jurisdiction of the aforesaid courts.

12. Successors and Assigns. This Note shall be binding upon and inure to the benefit of Borrower and Lender and their respective successors and assigns; *provided* that Borrower may not assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of Lender. Lender may assign to one or more other persons all or a portion of its rights (but not its obligations) under this Note.

13. Integration. This Note reflects the entire understanding of the parties with respect to the transactions contemplated hereby and shall not be contradicted or qualified by any other agreement or instrument, oral or written, before or after the date hereof.

14. Amendments, Modification, Etc. No amendment, modification or waiver of any provision of this Note, and no consent to any departure by Lender or Borrower and their assigns therefrom, shall in any event be effective unless the same shall be in writing and signed by Lender and Borrower, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

15. No Waiver. No failure on the part of Lender to exercise, and no delay in exercising, any right hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any right under this Note preclude any other or further exercise thereof or the exercise of any other right. The rights of Lender under this Note against Borrower are not conditional or contingent on any attempt by Lender to exercise any of its rights under this Note against Borrower or any other person.

16. Expenses. Borrower agrees to reimburse, periodically and upon request, and at the date of effectiveness of this Note or upon termination of this Note, (i) Lender's reasonable expenses, including the reasonable fees and disbursements of Lender's attorneys, arising in connection with the preparation, negotiation, execution, delivery, amendment and administration of this Note and related transactions and (ii) Lender's expenses, including the fees and disbursements of Lender's attorneys, in connection with the enforcement of this Note or the protection of Lender's rights under this Note.

17. Indemnity. Borrower shall indemnify, defend and hold harmless Lender and its agents and attorneys (collectively, the "***Indemnitees***") from and against (i) any and all transfer taxes, documentary taxes, assessments or charges made by any Governmental Entity by reason of the execution and delivery of this Note or the extension of credit represented hereby, and (ii) any and all liabilities, losses, damages, penalties, judgments, claims, costs and expenses of any kind or nature whatsoever (including reasonable attorneys' fees, and disbursements in connection with any actual or threatened investigative, administrative or judicial proceeding, whether or not such Indemnitee shall be designated a party thereto) that may be imposed on, incurred by or asserted against such Indemnitee, in any manner relating to or arising out of this Note, the extension of credit represented hereby or the use or intended use of the proceeds thereof; *provided* that no Indemnitee shall have the right to be indemnified or held harmless hereunder for its own gross negligence or willful misconduct, as determined by a final judgment of a court of competent jurisdiction.

18. Seniority. Amounts due under this Note shall be subordinated in accordance with the Subordination Agreement.

[*Signature Pages Follow*]

BORROWER: **MANNKIND CORPORATION**

By: /s/ Steven Binder
Name: Steven Binder
Title: Chief Financial Officer

LENDER: **THE MANN GROUP LLC**

By: /s/ Michael S. Dreyer
Name: Michael S. Dreyer
Title: President

[Signature Page to Amended and Restated Promissory Note]

Exhibit A

PRINCIPAL SCHEDULE

Date	Borrowing/PIK Interest	Repayment	Principal Balance
8/6/2019	35,050,750	—	35,050,750

Exhibit 99.1

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD LIKELY CAUSE COMPETITIVE HARM IF PUBLICLY DISCLOSED.

Execution Version

CREDIT AND SECURITY AGREEMENT

dated as of August 6, 2019

by and among

MANNKIND CORPORATION,
MANNKIND LLC, each as a Borrower

and any additional borrower that hereafter becomes party hereto,

and

MIDCAP FINANCIAL TRUST,

as Agent and as a Lender,

and

THE ADDITIONAL LENDERS

FROM TIME TO TIME PARTY HERETO

CREDIT AND SECURITY AGREEMENT

THIS CREDIT AND SECURITY AGREEMENT (this "**Agreement**"), dated as of August 6, 2019 (the "**Closing Date**") by and among **MIDCAP FINANCIAL TRUST,** a Delaware statutory trust ("**MidCap**"), as administrative agent, the Lenders listed on the Credit Facility Schedule attached hereto and otherwise party hereto from time to time (each a "**Lender**", and collectively the "**Lenders**"), **MANNKIND CORPORATION**, a Delaware corporation ("**MannKind**"), **MANNKIND LLC**, a Delaware limited liability company ("**MannKind LLC**") and the other entities from time to time party to this Agreement as borrowers (collectively in the singular, "**Borrower**"), provides the terms on which Lenders agree to lend to Borrower and Borrower shall repay the Lenders. The parties agree as follows:

1. ACCOUNTING AND OTHER TERMS

Accounting terms not defined in this Agreement shall be construed in accordance with GAAP. Calculations and determinations must be made in accordance with GAAP. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Article 15. All other capitalized terms contained in Article 4 and Exhibit A, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein. All headings numbered without a decimal point are herein referred to as "Articles," and all paragraphs numbered with a decimal point (and all subparagraphs or subsections thereof) are herein referred to as "Sections." All references herein to a merger, transfer, consolidation, amalgamation, assignment, sale or transfer, or analogous term, will be construed to mean also a division of or by a limited liability company, as if it were a merger, transfer, consolidation, amalgamation, assignment, sale or transfer, or similar term, as applicable. Any series of limited liability company shall be considered a separate Person.

2. CREDIT FACILITIES AND TERMS

2.1 Promise to Pay. Borrower hereby unconditionally promises to pay to each Lender in accordance with each Lender's respective Pro Rata Share of each Credit Facility, the outstanding principal amount of all Credit Extensions made by the Lenders under such Credit Facility and accrued and unpaid interest thereon and any other amounts due hereunder as and when due in accordance with this Agreement.

2.2 Credit Facilities. Subject to the terms and conditions hereof, each Lender, severally, but not jointly, agrees to make available to Borrower Credit Extensions in respect of each Credit Facility set forth opposite such Lender's name on the Credit Facility Schedule, in each case not to exceed such Lender's commitment as identified on the Credit Facility Schedule (such commitment of each Lender, as it may be amended to reflect assignments made in accordance with this Agreement or terminated or reduced in accordance with this Agreement, its "**Applicable Commitment**", and the aggregate of all such commitments of all Lenders, the "**Applicable Commitments**").

2.3 Credit Facilities.

(a) Nature of Credit Facility; Credit Extension Requests. Credit Extensions in respect of a Credit Facility may be requested by Borrower during the Draw Period for such Credit Facility. For any Credit Extension requested under a Credit Facility (other than a Credit Extension on the Closing Date), Agent must receive the completed Credit Extension Form by 12:00 noon (New York time) ten (10) Business Days prior to the date the Credit Extension is to be funded (other than the Credit Extension made on the Closing Date). To the extent any Credit Facility proceeds are repaid for any reason, whether voluntarily or involuntarily (including repayments from insurance or condemnation proceeds), Agent and the Lenders shall have no obligation to re-advance such sums to Borrower.

(b) Principal Payments. Principal payable on account of a Credit Facility shall be payable by Borrower to Agent, for the account of the applicable Lenders in accordance with their respective Pro Rata Shares,

immediately upon the earliest of (i) the date(s) set forth in the Amortization Schedule for such Credit Facility, or (ii) the Maturity Date. Except as this Agreement may specifically provide otherwise, all prepayments of Credit Extensions under the Credit Facilities shall be applied by Agent to the applicable Credit Facility in inverse order of maturity. The monthly payments required under the Amortization Schedule shall continue in the same amount (for so long as the applicable Credit Facility shall remain outstanding) notwithstanding any partial prepayment, whether mandatory or optional, of the applicable Credit Facility.

(c) Mandatory Prepayment. If a Credit Facility is accelerated following the occurrence of an Event of Default, Borrower shall immediately pay to Agent, for payment to each Lender in accordance with its respective Pro Rata Share, an amount equal to the sum of: (i) all outstanding principal of the Credit Facility and all other Obligations, plus accrued and unpaid interest thereon, (ii) any fees payable under the Fee Letters by reason of such prepayment, (iii) the Applicable Prepayment Fee as specified in the Credit Facility Schedule for the Credit Facility being prepaid, and (iv) all other sums that shall have become due and payable, including Protective Advances. Additionally, at the election of Agent, Borrower shall prepay the Credit Facilities (to be allocated pro rata among the outstanding Credit Extensions under all Credit Facilities) in the following amounts: (A) within five (5) Business Days after the date on which any Credit Party (or Agent as loss payee or assignee) receives any casualty proceeds in excess of One Hundred and Fifty Thousand Dollars ($150,000) for property (including real property), in respect of assets upon which Agent has been granted a Lien, an amount equal to one hundred percent (100%) of such proceeds (net of out-of-pocket expenses and, in the case of personal property, repayment of any permitted purchase money debt encumbering the personal property that suffered such casualty), or such lesser portion of such proceeds as Agent shall elect to apply to the Obligations; and (B) within five (5) Business Days of receipt by any Credit Party of the proceeds of any asset disposition of personal property not made in the Ordinary Course of Business (other than transfers permitted by Section 7.1) an amount equal to one hundred percent (100%) of the net cash proceeds of such asset disposition (net of out-of-pocket expenses and repayment of any permitted purchase money debt encumbering such asset), or such lesser portion as Agent shall elect to apply to the Obligations. Notwithstanding the foregoing, (a) so long as no Default or Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any casualty policy up to $5,000,000 in the aggregate with respect to any property loss or series of related property losses toward the replacement or repair of destroyed or damaged property; *provided* that (I) without limiting the foregoing, any such proceeds of a casualty policy received in connection with the Owned Real Property shall be applied toward replacement and repair of destroyed or damaged property solely to the extent permitted by the Mortgage (including any applicable dollar caps set forth therein), and (II) any such replaced or repaired property (x) shall be of greater, equal, or like value as the replaced or repaired Collateral and (y) shall be deemed Collateral in which Agent and the Lenders have been granted a first priority security interest, and (b) after the occurrence and during the continuance of a Default or Event of Default, all proceeds payable under such casualty policy shall, at the option of Agent, be payable to Agent, for the ratable benefit of the Lenders, on account of the Obligations.

(d) Permitted Prepayment. Except as provided below, Borrower shall have no right to prepay the Credit Extensions made in respect of a Credit Facility. For the applicable Credit Facility as specified in the Credit Facility Schedule therefor, Borrower shall have the option to prepay the Prepayable Amount (as defined below) of such Credit Facility advanced by the Lenders under this Agreement, *provided* Borrower (i) provides irrevocable written notice to Agent and each Lender of its election to prepay the Prepayable Amount at least ten (10) Business Days prior to such prepayment, and (ii) pays to Agent, for payment to each applicable Lender in accordance with its respective Pro Rata Share, on the date of such prepayment, an amount equal to the sum of (A) the Prepayable Amount, plus accrued interest thereon, (B) any fees payable under the Fee Letters by reason of such prepayment, (C) the Applicable Prepayment Fee as specified in the Credit Facility Schedule for the Credit Facility being prepaid, and (D) all Protective Advances. The term “Prepayable Amount” means the lesser of (x) all of the Credit Extensions and all other Obligations under all Credit Facilities and (y) a portion of the Credit Extensions and related Obligations in amounts of no less than $1,000,000 of principal being prepaid. Notwithstanding the foregoing, the Applicable Prepayment Fee shall be deemed to be zero (0) for prepayments required to be made pursuant to Section 2.3(c)(A) from proceeds as a result of a casualty or condemnation of all or any portion of the Owned Real Property.

2.4 Reserved.

2.5 Reserved.

2.6 Interest and Payments; Administration.

(a) Interest; Computation of Interest. Each Credit Extension shall bear interest on the outstanding principal amount thereof from the date when made until paid in full at a rate per annum equal to the Applicable Interest Rate. Each Lender may, upon the failure of Borrower to pay any fees or interest as required herein, capitalize such interest and fees and begin to accrue interest thereon until paid in full, which such interest shall be at a rate per annum equal to the Applicable Interest Rate unless and until the Default Rate shall otherwise apply. All other Obligations shall bear interest on the outstanding amount thereof from the date they first become payable by Borrower under the Financing Documents until paid in full at a rate per annum equal to the Applicable Interest Rate unless and until the Default Rate shall otherwise apply. Interest on the Credit Extensions and all fees payable under the Financing Documents shall be computed on the basis of a three hundred sixty (360) day year and the actual number of days elapsed in the period during which such interest accrues. In computing interest on any Credit Extension or other advance, the date of the making of such Credit Extension or advance shall be included and the date of payment shall be excluded; *provided*, *however*, that if any Credit Extension or advance is repaid on the same day on which it is made, such day shall be included in computing interest on such Credit Extension or advance. As of each Applicable Interest Rate Determination Date, Agent shall determine (which determination shall, absent manifest error in calculation, be final, conclusive and binding upon all parties) the interest rate that shall apply to the Credit Extensions.

(b) Default Rate. Upon the election of Agent following the occurrence and during the continuance of an Event of Default, Obligations shall bear interest at a rate per annum which is two hundred basis points (2.00%) above the rate that is otherwise applicable thereto (the "**Default Rate**"). Payment or acceptance of the increased interest rate provided in this subsection is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Agent or the Lenders.

(c) Payments Generally. Except as otherwise provided in this Agreement, including pursuant to Section 2.6(c), or as otherwise directed by Agent, all payments in respect of the Obligations shall be made to Agent for the account of the applicable Lenders in accordance with their Pro Rata Share. Payments of principal and interest in respect of each Credit Facility shall be made to each applicable Lender identified on the applicable Credit Facility Schedule. All Obligations are payable upon demand of Agent in the absence of any other due date specified herein. All fees payable under the Financing Documents shall be deemed non-refundable as of the date paid. Any payment required to be made to Agent or a Lender (and any servicer or trustee on behalf of a securitization vehicle designated by either) under this Agreement may be made by debit or automated clearing house payment initiated by Agent or such Lender (or any servicer designated or trustee on behalf of a securitization vehicle on behalf of either) from any of Borrower's deposit accounts, including the Designated Funding Account, and Borrower hereby authorizes Agent and each Lender (or any servicer or trustee on behalf of a securitization vehicle designated on behalf of either) to debit any such accounts for any amounts Borrower owes hereunder when due. Without limiting the foregoing, Borrower shall tender to Agent and the Lenders any authorization forms as Agent or any Lender may require to implement such debit or automated clearing house payment. These debits or automated clearing house payments shall not constitute a set-off. Payments of principal and/or interest received after 12:00 noon New York time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment is due the next Business Day and additional fees or interest, as applicable, shall continue to accrue until paid. All payments to be made by Borrower under any Financing Document shall be made without set-off, recoupment or counterclaim, in lawful money of the United States and in immediately available funds. The balance of the Obligations, as recorded in Agent's books and records at any time, shall be conclusive and binding evidence of the amounts due and owing to Agent and the Lenders by each Borrower absent manifest error; *provided*, *however*, that any failure to so record or any error in so recording shall not limit or otherwise affect any Borrower's duty to pay all amounts owing hereunder or under any Financing Document. Agent shall endeavor to provide Borrower with a monthly statement regarding the Credit Extensions (but neither Agent nor any Lender shall have any liability if Agent shall fail to provide any such statement). Unless Borrower notifies Agent of any objection to any such statement (specifically describing the basis for such objection) within ninety (90) days after the date of receipt thereof, it shall be deemed final, binding and conclusive upon Borrower in all respects as to all matters reflected therein.

(d) Interest Payments; Maturity Date. Commencing on the first (1st) Payment Date following the funding of a Credit Extension, and continuing on the Payment Date of each successive month thereafter through and including the Maturity Date, Borrower shall make monthly payments of interest, in arrears, calculated as set forth in this Section 2.6. All unpaid principal and accrued interest is due and payable in full on the Maturity Date or any earlier date specified herein. If the Obligations are not paid in full on or before the Maturity Date, all interest thereafter accruing shall be payable immediately upon accrual.

(e) Fees. Borrower shall pay, as and when due and payable under the terms of the Fee Letters, to Agent and each Lender, as applicable, for their own accounts and not for the benefit of any other Lenders, the fees set forth in the Fee Letters.

(f) Protective Advances. Borrower shall pay to Agent for the account of the Lenders all Protective Advances (including reasonable attorneys' fees and expenses for documentation and negotiation of this Agreement and the other Financing Documents) when due under any Financing Document (and in the absence of any other due date specified herein, such Protective Advances shall be due upon demand).

(g) Maximum Lawful Rate. In no event shall the interest charged hereunder with respect to the Obligations exceed the maximum amount permitted under the Laws of the State of New York. Notwithstanding anything to the contrary in any Financing Document, if at any time the rate of interest payable hereunder (the "**Stated Rate**") would exceed the highest rate of interest permitted under any applicable Law to be charged (the "**Maximum Lawful Rate**"), then for so long as the Maximum Lawful Rate would be so exceeded, the rate of interest payable shall be equal to the Maximum Lawful Rate; *provided*, *however*, that if at any time thereafter the Stated Rate is less than the Maximum Lawful Rate, Borrower shall, to the extent permitted by Law, continue to pay interest at the Maximum Lawful Rate until such time as the total interest received is equal to the total interest which would have been received had the Stated Rate been (but for the operation of this provision) the interest rate payable. Thereafter, the interest rate payable shall be the Stated Rate unless and until the Stated Rate again would exceed the Maximum Lawful Rate, in which event this provision shall again apply. In no event shall the total interest received by any Lender exceed the amount which it could lawfully have received, had the interest been calculated for the full term hereof at the Maximum Lawful Rate. If, notwithstanding the prior sentence, any Lender has received interest hereunder in excess of the Maximum Lawful Rate, such excess amount shall be applied to the reduction of the principal balance of such Lender's Credit Extensions or to other amounts (other than interest) payable hereunder, and if no such Credit Extensions or other amounts are then outstanding, such excess or part thereof remaining shall be paid to Borrower. In computing interest payable with reference to the Maximum Lawful Rate applicable to any Lender, such interest shall be calculated at a daily rate equal to the Maximum Lawful Rate *divided by* the number of days in the year in which such calculation is made.

(h) Taxes; Additional Costs.

(i) Any and all payments by or on account of any obligation of Borrower hereunder shall be made without deduction or withholding for any Taxes, except as required by applicable law. For purposes of this Section 2.6(h), the term "applicable law" shall include FATCA. If any applicable law (as determined in the good faith discretion of an applicable Withholding Agent) requires the deduction or withholding of any Tax from any such payment by a Withholding Agent, then the applicable Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable law and, if such Tax is an Indemnified Tax, then the sum payable by Borrower shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section 2.6(h)) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

(ii) Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable law, or at the option of Agent timely reimburse it for the payment of, any Other Taxes.

(iii) Borrower shall indemnify each Recipient, within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 2.6(h)) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to Borrower by a Lender (with a copy to Agent), or by Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(iv) Each Lender shall severally indemnify Agent, within ten (10) days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that Borrower has not already indemnified Agent for such Indemnified Taxes and without limiting the obligation of Borrower to do so), (ii) any Taxes attributable to such Lender's failure to comply with the provisions of Section 13.1(c) relating to the maintenance of a Participant Register and (iii) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by Agent in connection with this Agreement or any Obligation, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by Agent shall be conclusive absent manifest error. Each Lender hereby authorizes Agent to set off and apply any and all amounts at any time owing to such Lender pursuant to this Agreement or otherwise payable by Agent to the Lender from any other source against any amount due to Agent under this paragraph (iv).

(v) As soon as practicable after any payment of Taxes by Borrower to a Governmental Authority pursuant to this Section 2.6(h), Borrower shall deliver to Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to Agent.

(vi) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made in connection with this Agreement or any Obligation shall deliver to Borrower and Agent, at the time or times prescribed by applicable Law or reasonably requested by Borrower or Agent, such properly completed and executed documentation reasonably requested by Borrower or Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by Borrower or Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by Borrower or Agent as will enable Borrower or Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two (2) sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 2.6(h)(vii)(A), (vii)(B) and (vii)(D) below) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(vii) Without limiting the generality of the foregoing,

(A) any Lender that is a U.S. Person shall deliver to Borrower and Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or Agent), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under this Agreement or any Financing Document, executed copies of IRS Form W-8BEN-E or W-8BEN, as applicable, establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under this Agreement or any other Financing Document, IRS Form W-8BEN-E or W-8BEN, as applicable, establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(2) executed copies of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the IRC, (x) executed copies of IRS Form W-8BEN-E or W-8BEN, as applicable and (y) a certification to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the IRC, a "10 percent shareholder" of Borrower within the meaning of Section 881(c)(3)(B) of the IRC, or a "controlled foreign corporation" related to Borrower as described in Section 881(c)(3)(C) of the IRC, together with such Other Tax Certification as Borrower or Agent may reasonably request from time to time; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed copies of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN-E or W-8BEN, as applicable, IRS Form W-9, and/or such Other Tax Certification from each beneficial owner as Borrower or Agent may reasonably request, as applicable; *provided* that if the Foreign Lender is a partnership and one (1) or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide such Other Tax Certification as may be reasonably required by Borrower or Agent on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or Agent), executed copies of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such Other Tax Certification as may be prescribed by applicable law to permit Borrower or Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to Agent or a Lender under any Financing Document would be subject to U.S. federal withholding Tax imposed by FATCA if Agent or such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the IRC, as applicable), Agent or such Lender shall deliver to Borrower and Agent on or prior to the date on which Agent or such Lender becomes an Agent or Lender under this Agreement, at the time or times prescribed by law and at such time or times reasonably requested by Borrower or Agent, such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the IRC) and such Other Tax Certification reasonably requested by Borrower or Agent as may be necessary for Borrower and Agent to comply with their obligations under FATCA and to determine that Agent or such Lender has complied with Agent or such Lender's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

Agent and each Lender agrees that if any form or certification it previously delivered pursuant to this Section 2.6(h)(vi), (vii) or (viii) expires or becomes obsolete or inaccurate in any respect, it shall promptly update such form or certification or promptly notify Borrower and Agent, if applicable, in writing of its legal inability to do so.

(viii) On or prior to the date Agent becomes a party to this Agreement, Agent shall, in the event that Agent is a U.S. Person, deliver an IRS Form W-9 to Borrower, and in the event Agent is not a U.S. Person, deliver to Borrower the appropriate IRS Form W-8 certifying Agent's exemption, if any, from U.S. withholding Taxes with respect to amounts payable under this Agreement.

(ix) If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 2.6(h) (including by the payment of additional amounts pursuant to this Section 2.6(h)), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all reasonable and documented out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (h) (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (h), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (h) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(x) If any Lender shall determine in its commercially reasonable judgment that the adoption or taking effect of, or any change in, any applicable Law regarding capital adequacy, in each instance, after the Closing Date, or any change after the Closing Date in the interpretation, administration or application thereof by any Governmental Authority, central bank or comparable agency charged with the interpretation, administration or application thereof, or the compliance by any Lender or any Person controlling such Lender with any request, guideline or directive regarding capital adequacy (whether or not having the force of law) of any such Governmental Authority, central bank or comparable agency adopted or otherwise taking effect after the Closing Date, has or would have the effect of reducing the rate of return on such Lender's or such controlling Person's capital as a consequence of such Lender's obligations hereunder to a level below that which such Lender or such controlling Person could have achieved but for such adoption, taking effect, change, interpretation, administration, application or compliance (taking into consideration such Lender's or such controlling Person's policies with respect to capital adequacy) then from time to time, upon written demand by such Lender (which demand shall be accompanied by a statement setting forth the basis for such demand and a calculation of the amount thereof in reasonable detail, a copy of which shall be furnished to Agent), Borrower shall promptly pay to such Lender such additional amount as will compensate such Lender or such controlling Person for such reduction; *provided*, *however*, that notwithstanding anything in this Agreement to the contrary, (A) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (B) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a "change in applicable Law", regardless of the date enacted, adopted or issued.

(xi) If any Lender requires compensation under this subsection (h), or requires any Borrower to pay any additional amount to any Lender or any Governmental Authority for the account of any Lender pursuant to this subsection (h), then, upon the written request of Borrower, such Lender shall use reasonable efforts to designate a different lending office for funding or booking its Credit Extensions hereunder or to assign its rights and obligations hereunder (subject to the terms of this Agreement) to another of its offices, branches or affiliates, if, in the judgment of such Lender, such designation or assignment (A) would eliminate or materially reduce amounts payable pursuant to any such subsection, as the case may be, in the future, and (B) would not subject such Lender to any unreimbursed cost or expense and would not otherwise be materially disadvantageous to such Lender (as determined in its sole good faith discretion). Borrower hereby agrees to pay all reasonable and documented out-of-pocket costs and expenses incurred by any Lender in connection with any such designation or assignment.

(xii) Each party's obligations under this Section 2.6(h) shall survive the resignation or replacement of Agent or any assignment of rights by, or the replacement of, a Lender, and the repayment, satisfaction or discharge of all Obligations hereunder.

(i) Administrative Fees and Charges.

(i) Borrower shall pay to Agent, for its own account and not for the benefit of any other Lenders, all reasonable and documented fees and expenses in connection with audits and inspections of the books and records of the Credit Parties, audits, valuations or appraisals of the Collateral, audits of Borrower's compliance with applicable Laws and such other matters as Agent shall deem appropriate, which shall be due and payable on the first (1st) Business Day of the month following the date of issuance by Agent of a written request for payment thereof to any Borrower.

(ii) If payments of principal or interest due on the Obligations, or any other amounts due hereunder or under the other Financing Documents, are not timely made and remain overdue for a period of five (5) Business Days, Borrower, without notice or demand by Agent, promptly shall pay to Agent, for its own account and not for the benefit of any other Lenders, as additional compensation to Agent in administering the Obligations, an amount equal to five percent (5.0%) of each delinquent payment.

2.7 Secured Promissory Notes. At the election of any Lender made as to each Credit Facility for which it has made Credit Extensions, each Credit Facility shall be evidenced by one (1) or more secured promissory notes in form and substance reasonably satisfactory to Agent and the Lenders (each a "**Secured Promissory Note**"). Upon receipt of an affidavit of an officer of a Lender as to the loss, theft, destruction, or mutilation of its Secured Promissory Note, Borrower shall issue, in lieu thereof, a replacement Secured Promissory Note in the same principal amount thereof and of like tenor.

3. CONDITIONS OF CREDIT EXTENSIONS

3.1 Conditions Precedent to Initial Credit Extension. Each Lender's obligation to make the initial advance in respect of a Credit Facility is subject to the condition precedent that Agent shall consent to or shall have received, in form and substance satisfactory to Agent, such documents, and completion of such other matters, as Agent may reasonably deem necessary or appropriate, including, without limitation, all items listed on the Closing Deliveries Schedule attached hereto.

3.2 Conditions Precedent to all Credit Extensions. The obligation of each Lender to make each Credit Extension, including the initial Credit Extension, is subject to the following conditions precedent:

(a) satisfaction of all Applicable Funding Conditions for the applicable Credit Extension as set forth in the Credit Facility Schedule, if any, in each case each in form and substance satisfactory to Agent and each Lender;

(b) timely receipt by Agent and each Lender of an executed Credit Extension Form in the form attached hereto;

(c)

(i) for Credit Extensions made on the Closing Date, the representations and warranties in Article 5 and elsewhere in the Financing Documents shall be true, correct and complete in all material respects on the Closing Date; *provided*, *however*, that those representations and warranties expressly referring to a specific date shall be true, correct and complete in all material respects as of such date; and

(ii) for Credit Extensions made after the Closing Date, if any, the representations and warranties in Article 5 and elsewhere in the Financing Documents shall be true, correct and complete in all material respects on the date of the Credit Extension Form and on the Funding Date of each Credit Extension;

provided, *however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and *provided*, *further* that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date. Each Credit Extension is Borrower's representation and warranty on that date that the representations and warranties in Article 5 and elsewhere in the Financing Documents remain true, accurate and complete in all material respects; *provided*, *however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and *provided*, *further* that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date;

(d) no Default or Event of Default shall have occurred and be continuing or result from the Credit Extension;

(e) Agent shall be satisfied with the results of any searches conducted under Section 3.5;

(f) receipt by Agent of such evidence as Agent shall reasonably request to confirm that the deliveries made in Section 3.1 remain current, accurate and in full force and effect, or if not, updates thereto, each in form and substance reasonably satisfactory to Agent;

(g) as determined in such Lender's sole but reasonable discretion, there has not been any Material Adverse Change or any material adverse deviation by Borrower from the most recent business plan of Borrower presented to and accepted by Agent; and

(h) with respect to each Credit Extension, each Lender (or its designated Affiliate) shall have received the Warrants (or additional Warrants, as the case may be) to purchase common stock of MannKind equal to three and one quarter of one percent (3.25%) of the total principal amount of the Credit Extensions divided by the Exercise Price, which Warrants for Credit Extensions made after the Closing Date shall be in form and substance substantially similar to the Warrants issued on the Closing Date and otherwise reasonably acceptable to each Lender.

3.3 Method of Borrowing. Each Credit Extension in respect of each Credit Facility shall be in an amount at least equal to the applicable Minimum Credit Extension Amount for such Credit Facility as set forth in the Credit Facility Schedule or such lesser amount as shall remain undisbursed under the Applicable Commitments for such Credit Facility. The date of funding for any requested Credit Extension shall be a Business Day. To obtain a Credit Extension, Borrower shall deliver to Agent a completed Credit Extension Form executed by a Responsible Officer. Agent may rely on any notice given by a person whom Agent reasonably believes is a Responsible Officer or designee thereof. Agent and the Lenders shall have no duty to verify the authenticity of any such notice.

3.4 Funding of Credit Facilities. In Agent's discretion, Credit Extensions may be funded by Agent on behalf of the Lenders or by the Lenders directly. If Agent elects to fund any Credit Extension on behalf of the Lenders, upon the terms and subject to the conditions set forth in this Agreement, each Lender, severally and not jointly, shall make available to Agent its Pro Rata Share of the requested Credit Extension, in lawful money of the United States of America in immediately available funds, prior to 11:00 a.m. (New York time) on the specified date for the Credit Extension. Agent (or if Agent elects to have each Lender fund its Credit Extensions to Borrower directly, each Lender) shall, unless it shall have determined that one of the conditions set forth in Section 3.1 or 3.2, as applicable, has not been satisfied, by 2:00 p.m. (New York time) on the specified date for the Credit Extension, credit the amounts received by it in like funds to Borrower by wire transfer to the Designated Funding Account (or to the account of Borrower in respect of the Obligations, if the Credit Extension is being made to pay an Obligation of Borrower). A Credit Extension made prior to the satisfaction of any conditions set forth in Section 3.1 or 3.2 shall not constitute a waiver by Agent or the Lenders of Borrower's obligation to satisfy such conditions, and any such Credit Extension made in the absence of such satisfaction shall be made in each Lender's discretion.

3.5 Searches. Before the Closing Date, and thereafter (as and when determined by Agent in its reasonable discretion), Agent shall have the right to perform, all at Borrower's expense, the searches described in

clauses (a), (b), and (c) below against Borrower and any other Credit Party, the results of which are to be consistent with Borrower's representations and warranties under this Agreement and the reasonably satisfactory results of which shall be a condition precedent to all Credit Extensions requested by Borrower: (a) title investigations, UCC searches and fixture filings searches and the equivalent thereof in any foreign jurisdiction; (b) judgment, pending litigation, federal tax lien, personal property tax lien, and corporate and partnership tax lien searches, in each jurisdiction searched under clause (a) above; and (c) searches of applicable corporate, limited liability company, partnership and related records to confirm the continued existence, organization and good standing of the applicable Person and the exact legal name under which such Person is organized.

4. CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Borrower hereby grants Agent, for the ratable benefit of the Lenders, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Agent, for the ratable benefit of the Lenders, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof. Borrower represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral, subject only to Permitted Liens that may have priority by operation of applicable Law or by the terms of a written intercreditor or subordination agreement entered into by Agent.

4.2 Representations and Covenants.

(a) As of the Closing Date , Borrower has no ownership interest in any Chattel Paper, letter of credit rights, commercial tort claims, Instruments, documents or investment property (other than as disclosed on the **Disclosure Schedule** to the Disclosure Letter).

(b) Borrower shall promptly (and in any event within ten (10) days of acquiring any of the following) deliver to Agent all tangible Chattel Paper and all Instruments and documents with an aggregate value in excess of $500,000 owned at any time by any Borrower and constituting part of the Collateral duly endorsed and accompanied by duly executed instruments of transfer or assignment, all in form and substance satisfactory to Agent. Borrower shall provide Agent with "control" (as defined in the Code) of all electronic Chattel Paper owned by any Borrower and constituting part of the Collateral by having Agent identified as the assignee on the records pertaining to the single authoritative copy thereof and otherwise complying with the applicable elements of control set forth in the Code. Borrower also shall deliver to Agent all security agreements securing any such Chattel Paper and securing any such Instruments. Borrower will mark conspicuously all such Chattel Paper and all such Instruments and Documents with a legend, in form and substance satisfactory to Agent, indicating that such Chattel Paper and such Instruments and Documents are subject to the security interests and Liens in favor of Agent created pursuant to this Agreement and the Financing Documents.

(c) Borrower shall promptly (and in any event within ten (10) days of acquiring any of the following) deliver to Agent all letters of credit with an aggregate value in excess of $500,000 on which any Borrower is the beneficiary and which give rise to letter of credit rights owned by such Borrower which constitute part of the Collateral in each case duly endorsed and accompanied by duly executed instruments of transfer or assignment, all in form and substance satisfactory to Agent. Borrower shall take any and all actions as may be necessary or desirable, or that Agent may request, from time to time, to cause Agent to obtain exclusive "control" (as defined in the Code) of any such letter of credit rights in a manner acceptable to Agent.

(d) Borrower shall promptly (and in any event within 10 days) advise Agent upon any Borrower becoming aware that it has any interests in any commercial tort claim with an aggregate value in excess of $500,000 that constitutes part of the Collateral, which such notice shall include descriptions of the events and circumstances giving rise to such commercial tort claim and the dates such events and circumstances occurred, the potential defendants with respect such commercial tort claim and any court proceedings that have been instituted with respect to such commercial tort claims, and Borrower shall, with respect to any such commercial tort claim, execute and deliver to Agent such documents as Agent shall request to perfect, preserve or protect the Liens, rights and remedies of Agent with respect to any such commercial tort claim.

(e) Except for Inventory or other Collateral in an aggregate amount of One Million Dollars ($1,000,000), no Inventory or other Collateral shall at any time be in the possession or control of any warehouse, consignee, bailee or any of Borrower's agents or processors without prior written notice to Agent and the receipt by Agent, if Agent has so requested, of warehouse receipts, consignment agreements or bailee lien waivers (as applicable) satisfactory to Agent prior to the commencement of such possession or control. Except for locations where Borrower maintains less than One Million Dollars ($1,000,000) in the aggregate in Inventory or other Collateral, Borrower shall, upon the request of Agent, notify any such warehouse, consignee, bailee, agent or processor of the security interests and Liens in favor of Agent created pursuant to this Agreement and the Financing Documents, instruct such Person to hold all such Collateral for Agent's account subject to Agent's instructions and shall, in Agent's discretion, obtain an Access Agreement or other acknowledgement from such Person that such Person holds the Collateral for Agent's benefit.

(f) Upon reasonable request of Agent (after taking into the account the costs and benefits of perfecting its security interests in such property), Borrower shall promptly deliver to Agent any and all certificates of title, applications for title or similar evidence of ownership of all such tangible personal property with an aggregate value in excess of Five Hundred Thousand Dollars ($500,000) and shall cause Agent to be named as lienholder on any such certificate of title or other evidence of ownership. Borrower shall not permit any such tangible personal property to become fixtures to real estate unless such real estate is subject to a Lien in favor of Agent.

(g) As of the Closing Date and each subsequent date that the representations and warranties under this Agreement are remade, all Deposit Accounts, Securities Accounts, Commodity Accounts or other bank accounts or investment accounts owned by Borrower, together with the purpose of such accounts and the financial institutions at which such accounts reside, are listed on the **Disclosure Schedule** to the Disclosure Letter.

(h) Each Borrower hereby authorizes Agent to file without the signature of such Borrower one or more UCC financing statements relating to its Liens on all or any part of the Collateral, which financing statements may list Agent as the "secured party" and such Borrower as the "debtor" and which describe and indicate the collateral covered thereby as all or any part of the Collateral under the Financing Documents (including an indication of the collateral covered by any such financing statement as "all assets" of such Borrower now owned or hereafter acquired), in such jurisdictions as Agent from time to time determines are appropriate, and to file without the signature of such Borrower any continuations of or corrective amendments to any such financing statements, in any such case in order for Agent to perfect, preserve or protect the Liens, rights and remedies of Agent with respect to the Collateral. Each Borrower also ratifies its authorization for Agent to have filed in any jurisdiction any initial financing statements or amendments thereto if filed prior to the date hereof. Any financing statement may include a notice that any disposition of the Collateral in contravention of this Agreement, by either Borrower or any other Person, shall be deemed to violate the rights of Agent and the Lenders under the Code.

(i) As of the Closing Date, no Borrower holds, and, after the Closing Date, Borrower shall promptly notify Agent in writing upon creation or acquisition by any Borrower of, any Collateral which constitutes a claim against any Governmental Authority, including, without limitation, the federal government of the United States or any instrumentality or agency thereof, the assignment of which claim is restricted by any applicable Law, including, without limitation, the federal Assignment of Claims Act and any other comparable Law. Upon the request of Agent, Borrower shall take such steps as may be necessary or desirable, or that Agent may request, to comply with any such applicable Law.

(j) Borrower shall furnish to Agent from time to time any statements and schedules further identifying or describing the Collateral and any other information, reports or evidence concerning the Collateral as Agent may reasonably request from time to time.

5. REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants as follows on the Closing Date, on the date of each Credit Extension, and on such other dates when such representations and warranties under this Agreement are made or deemed to be made:

5.1 Due Organization, Authorization: Power and Authority.

(a) Each Credit Party and each Subsidiary is duly organized, validly existing and in good standing (if applicable in such entity's jurisdiction of formation) as a Registered Organization in its respective jurisdiction of formation. Each Credit Party and each Subsidiary has the power to own its assets and is qualified and licensed to do business and is in good standing (if applicable in such jurisdiction) in any jurisdiction in which the conduct of its business or its ownership of property requires that it be qualified except where the failure to do so could not reasonably be expected to have a Material Adverse Change. The Financing Documents have been duly authorized, executed and delivered by each Credit Party and constitute legal, valid and binding agreements enforceable in accordance with their terms. The execution, delivery and performance by each Credit Party of each Financing Document executed or to be executed by it is in each case within such Credit Party's powers.

(b) The execution, delivery and performance by each Credit Party of the Financing Documents to which it is a party do not (i) conflict with any of such Credit Party's organizational documents; (ii) contravene, conflict with, constitute a default under or violate any Law in any material respect; (iii) contravene, conflict or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which such Credit Party or any of its property or assets may be bound or affected; (iv) require any action by, filing, registration, or qualification with, or Required Permit from, any Governmental Authority (except such Required Permits which have already been obtained and are in full force and effect); or (v) constitute a default under or conflict with any Material Agreement. No Credit Party is in default under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to have a Material Adverse Change.

5.2 Litigation. Except as disclosed on the **Disclosure Schedule** to the Disclosure Letter or, after the Closing Date, pursuant to Section 6.7, there are no actions, suits, proceedings or investigations pending or, to the knowledge of the Responsible Officers, threatened in writing by or against any Credit Party which involves the possibility of any judgment or liability of more than One Million Dollars ($1,000,000.00). There are no actions, suits, proceedings or investigations pending or, to the knowledge of the Responsible Officers, threatened in writing by or against any Credit Party that could result in a Material Adverse Change, or which questions the validity of the Financing Documents.

5.3 No Material Deterioration in Financial Condition; Financial Statements. All financial statements for the Credit Parties delivered to Agent or any Lender fairly present, in conformity with GAAP, in all material respects the consolidated financial condition and consolidated results of operations of such Credit Party. There has been no material deterioration in the consolidated financial condition of any Credit Party from the most recent financial statements and projections submitted to Agent. There has been no material adverse deviation from the most recent annual operating plan of Borrower delivered to Agent.

5.4 Solvency. As of any date of determination, the fair salable value of each of (a) MannKind's and (b) the Credit Parties' (taken as whole) assets exceeds the fair value of their liabilities on such date. After giving effect to the transactions described in this Agreement, (i) neither MannKind nor the Credit Parties (taken as a whole) is left with unreasonably small capital in relation to their business as presently conducted, and (ii) each of (x) MannKind and (y) the Credit Parties (taken as whole) are able to pay their debts (including trade debts) as they mature.

5.5 Subsidiaries; Investments; Margin Stock. Borrower and its Subsidiaries do not own any stock, partnership interest or other equity securities, except for Permitted Investments. Without limiting the foregoing, Borrower and its Subsidiaries do not own or hold any Margin Stock.

5.6 Tax Returns and Payments; Pension Contributions. Each Credit Party and its Subsidiaries has timely filed all required federal and income tax returns and all other material tax returns and reports, and, except for those Taxes that are subject to a Permitted Contest, each Credit Party and its Subsidiaries has timely paid all federal Taxes and all foreign, , state and local income Taxes and other material Taxes, assessments, deposits and contributions owed by such Credit Party or Subsidiary, as applicable. Other than as disclosed to Agent in

accordance with Section 6.2, Borrower is unaware of any claims or adjustments proposed for any prior tax years of any Credit Party or any of its Subsidiaries which could result in additional Taxes becoming due and payable by such Credit Party. No Credit Party nor any trade or business (whether or not incorporated) that is under common control with any Credit Party within the meaning of Section 414(b) or (c) of the IRC (and Sections 414(m) and (o) of the IRC for purposes of the provisions relating to Section 412 of the IRC) or Section 4001 of ERISA (an "**ERISA Affiliate**") (i) has failed to satisfy the "minimum funding standards" (as defined in Section 412 of or Section 302 of ERISA), whether or not waived, with respect to any Pension Plan, (ii) has incurred liability with respect to the withdrawal or partial withdrawal of any Credit Party or ERISA Affiliate from any Pension Plan or incurred a cessation of operations that is treated as a withdrawal, (iii) has incurred any liability under Title IV of ERISA (other than for PBGC premiums due but not delinquent under Section 4007 of ERISA), (iv) has had any "reportable event" as defined in Section 4043(c) of ERISA (or the regulations issued thereunder) (other than an event for which the thirty (30) day notice requirement is waived) occur with respect to any Pension Plan or (v) failed to maintain (1) each "plan" (as defined by Section 3(3) of ERISA) in all material respects with the applicable provisions of ERISA, the IRC and other federal or state laws, and (2) the tax qualified status of each plan (as defined above) intended to be so qualified.

5.7 Intellectual Property and License Agreements. A list of all Registered Intellectual Property of each Credit Party and all material in-bound license or sublicense agreements, all exclusive out-bound license or sublicense agreements, or all other material rights of any Credit Party to use Intellectual Property (but excluding in-bound licenses of over-the-counter software that is commercially available to the public), as of the Closing Date and, as updated pursuant to Section 6.14, is set forth on the **Intangible Assets Schedule** to the Disclosure Letter. Such **Intangible Assets Schedule** to the Disclosure Letter shall be prepared by Borrower in the form provided by Agent and contain all information required in such form. Except for Permitted Licenses, each Credit Party is the sole owner of, or has valid license rights to, its Intellectual Property free and clear of any Liens other than Permitted Liens. Each patent is valid and enforceable and no part of the Material Intangible Assets has been determined to be invalid or unenforceable, in whole or in part, by a final judgment or other order by any applicable Governmental Authority, and to the best of Borrower's knowledge, no claim has been made that any part of the Intellectual Property materially violates the rights of any third party.

5.8 Regulatory Status.

(a) All of Borrower's material Products and material Regulatory Required Permits (limited to those Regulatory Required Permits the loss of which would reasonably be expected to result in a Material Adverse Change) are listed on the **Products Schedule** to the Disclosure Letter and **Required Permits Schedule** to the Disclosure Letter, respectively (as updated from time to time pursuant to Section 6.14), and Borrower has delivered to Agent a copy of all Regulatory Required Permits requested by Agent as of the date hereof or to the extent requested by Agent pursuant to Section 6.16.

(b) None of the Borrowers or any Subsidiary thereof are in violation of any Healthcare Law, except where any such violation could not reasonably be expected to result in a Material Adverse Change.

(c) None of the Borrower's or its Subsidiaries' officers, directors, employees, shareholders, their agents or affiliates has made an untrue statement of material fact or fraudulent statement to the FDA or failed to disclose a material fact required to be disclosed to the FDA, committed an act, made a statement, or failed to make a statement that could reasonably be expected to provide a basis for the FDA to invoke its policy respecting "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities," set forth in 56 Fed. Regulation 46191 (September 10, 1991).

(d) With respect to each Product, (i) Borrower and its Subsidiaries have received, and such Product is the subject of, all Regulatory Required Permits needed in connection with the testing, manufacture, marketing or sale of such Product as currently being conducted by or on behalf of Borrower, and have provided Agent and each Lender with all notices and other information required by Section 6.16, (ii) such Product is being tested, manufactured, marketed or sold, as the case may be, in material compliance with all applicable Laws and Regulatory Required Permits.

(e) As of the Closing Date, there have been no Regulatory Reporting Events.

5.9 No Default. No Event of Default, or to such Borrower's knowledge, Default, has occurred and is continuing. No Credit Party is in breach or default under or with respect to any contract, agreement, lease or other instrument to which it is a party or by which its property is bound or affected, which breach or default would reasonably be expected to have a Material Adverse Change.

5.10 Accuracy of Schedules and Perfection Certificate. All information set forth in the **Disclosure Schedule** to the Disclosure Letter, **Intangible Assets Schedule** to the Disclosure Letter, the **Required Permits Schedule** to the Disclosure Letter and the **Products Schedule** to the Disclosure Letter is true, accurate and complete in all material respects as of the Closing Date, the date of delivery of the last Compliance Certificate and any other subsequent date on which Borrower is requested to update such certificate. All information set forth in the Perfection Certificate is true, accurate and complete in all material respects as of the Closing Date, the date of each Credit Extension and each other subsequent date on which Borrower delivers an updated Perfection Certificate pursuant to Agent's request. Notwithstanding the foregoing, Borrower shall not be required to update information on any of the **Disclosure Schedule** to the Disclosure Letter, **Intangible Assets Schedule** to the Disclosure Letter, the **Required Permits Schedule** to the Disclosure Letter and the **Products Schedule** to the Disclosure Letter or the Perfection Certificate, except as expressly required by the Financing Documents.

6. AFFIRMATIVE COVENANTS

Borrower covenants and agrees as follows:

6.1 Organization and Existence; Government Compliance.

(a) Each Credit Party and its Subsidiaries shall maintain its legal existence and good standing in its respective jurisdiction of formation and shall maintain qualification in each jurisdiction in which the failure to so qualify could reasonably be expected to have a Material Adverse Change. If a Credit Party is not now a Registered Organization but later becomes one, Borrower shall promptly notify Agent of such occurrence and provide Agent with such Credit Party's organizational identification number. Notwithstanding the foregoing, prior to April 1, 2020, this Section 6.1(a) shall not restrict the ability of the Restricted Foreign Subsidiaries to be wound-up and dissolved in accordance with Section 7.2(b).

(b) Each Credit Party and its Subsidiaries shall comply with all Laws, ordinances and regulations to which it or its business locations are subject, the noncompliance with which could reasonably be expected to result in a Material Adverse Change. Each Credit Party shall obtain and keep in full force and effect and comply with all of the Required Permits, except where failure to have or maintain compliance with or effectiveness of such Required Permit could not reasonably be expected to result in a Material Adverse Change. Upon request of Agent or any Lender, each Credit Party shall promptly (and in any event within five (5) Business Days of such request) provide copies of any such obtained Required Permits to Agent. Borrower shall notify Agent within five (5) Business Days (but in any event prior to Borrower submitting any requests for Credit Extensions or release of any reserves) of the occurrence of any facts, events or circumstances known to a Borrower, whether threatened in writing, existing or pending, that could cause any Required Permit to become materially limited, suspended or revoked. Notwithstanding the foregoing, each Credit Party shall comply with Section 6.16 as it relates to Regulatory Required Permits and to the extent that there is a conflict between this Section and Section 6.16 as it relates to Regulatory Required Permits, Section 6.16 shall govern.

6.2 Financial Statements, Reports, Certificates.

(a) Each Credit Party shall deliver to Agent and each Lender: (i) as soon as available, but no later than forty-five (45) days after the last day of each month, a company prepared consolidated and consolidating balance sheet and income statement covering such Credit Party's consolidated operations for such month certified by a Responsible Officer and in a form acceptable to Agent and each Lender and Borrower's internal monthly dashboard and flash report in substantially the form provided to Agent prior to the Closing Date;

(ii) as soon as available, but no later than ninety (90) days after the last day of a Credit Party's fiscal year, audited consolidated and consolidating financial statements prepared under GAAP, consistently applied, together with an unqualified opinion (other than a going concern qualification based solely on a determination that any Borrower has less than 12 months liquidity) on the financial statements from an independent certified public accounting firm acceptable to Agent and each Lender in its reasonable discretion; (iii) as soon as available after approval thereof by such Credit Party's governing board, but no later than sixty (60) days after the last day of such Credit Party's fiscal year, and as amended and/or updated, such Credit Party's financial projections for the current fiscal year; (iv) within five (5) days of delivery, copies of all statements, reports and notices made available to all of such Credit Party's security holders or to any holders of Subordinated Debt; (v) in the event that such Credit Party is or becomes subject to the reporting requirements under the Securities Exchange Act of 1934, as amended, within five (5) days of filing, all reports on Form 10-K, 10-Q and 8-K filed with the Securities and Exchange Commission ("**SEC**") or a link thereto on such Credit Party's or another website on the Internet; (vi) promptly (and in any event within ten (10) days of any request therefor) such readily available budgets, sales projections, operating plans, financial information and other information, reports or statements regarding the Credit Parties or their respective businesses, contractors and subcontractors reasonably requested by Agent or any Lender; (vii) as soon as available, but no later than forty-five (45) days after the last day of each month, copies of the month-end account statements for each Collateral Account maintained by a Credit Party, which statements may be provided to Agent and each Lender by Borrower or directly from the applicable institution(s); and (vii) within ten (10) days after any Credit Party becomes aware of any claim or adjustment proposed for any prior tax years of any Credit Party or any of their Subsidiaries which could result in additional material Taxes becoming due and payable by such Credit Party or Subsidiary, notice of such claim or adjustment. Notwithstanding anything to the contrary herein, documents required to be delivered pursuant to Section 6.2(a)(i) or (ii) (to the extent any such documents are included in materials filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower posts such documents, or provides a link thereto, on Borrower's website on the Internet at Borrower's website address.

(b) Within forty five (45) days after the last day of each month, Borrower shall deliver to Agent and each Lender with the monthly financial statements described above, a duly completed Compliance Certificate signed by a Responsible Officer.

(c) Borrower shall cause each Credit Party to keep proper books of record and account in accordance with GAAP in which full, true and correct entries shall be made of all dealings and transactions in relation to its business and activities. Upon prior written notice and during business hours (which such limitations shall not apply if a Default or Event of Default has occurred and is continuing), Borrower shall allow, and cause each Credit Party to allow, Agent and the Lenders to visit and inspect any properties of a Credit Party, to examine and make abstracts or copies from any Credit Party's books, to conduct a collateral audit and analysis of its operations and the Collateral to verify the amount and age of the accounts, the identity and credit of the respective account debtors, to review the billing practices of the Credit Party and to discuss its respective affairs, finances and accounts with their respective officers, employees and independent public accountants as often as may reasonably be desired. Borrower shall reimburse Agent and each Lender for all reasonable and documented costs and expenses associated with such visits and inspections; *provided*, *however*, that Borrower shall be required to reimburse Agent and each Lender for such costs and expenses for no more than one (1) such visit and inspection per twelve (12) month period unless a Default or Event of Default has occurred and is continuing.

(d) Borrower shall, and shall cause each Credit Party to, deliver to Agent and each Lender, within ten (10) Business Days after the same are sent or received, copies of all material correspondence, reports, documents and other filings with any Governmental Authority that could reasonably be expected to have a material adverse effect on any of the Required Permits material to Borrower's business or otherwise on the operations of Borrower or any of its Subsidiaries.

(e) Borrower shall, and shall cause each Credit Party to, promptly, but in any event within ten (10) Business Days, after any Responsible Officer of any Borrower obtains knowledge of the occurrence of any event or change (including, without limitation, any notice of any violation of Healthcare Laws) that has resulted or could reasonably be expected to result in, either in any case or in the aggregate, a Material Adverse Change, a

certificate of a Responsible Officer specifying the nature and period of existence of any such event or change, or specifying the notice given or action taken by such holder or Person and the nature of such event or change, and what action the applicable Credit Party or Subsidiary has taken, is taking or proposes to take with respect thereto.

(f) Borrower shall, and shall cause each Credit Party to, promptly after the request by any Lender, provide all documentation and other information that such Lender reasonably requests in order to comply with its ongoing obligations under applicable "know your customer" and anti-money laundering rules and regulations, including, without limitation, the USA PATRIOT Act.

6.3 Maintenance of Property. Borrower shall, and shall cause each Credit Party to, cause all equipment and other tangible personal property other than Inventory that is useful or necessary to its business to be maintained and preserved in the same condition, repair and in working order as of the date hereof, ordinary wear and tear excepted, and shall promptly make or cause to be made all repairs, replacements and other improvements in connection therewith that are necessary or desirable to such end. Borrower shall cause each Credit Party to keep all material Inventory in good and marketable condition, free from material defects. Returns and allowances between a Credit Party and its Account Debtors shall follow the Credit Party's customary practices as they exist at the Closing Date. Borrower shall promptly notify Agent of all returns, recoveries, disputes and claims that involve more than five percent (5%) of the aggregate gross sales of Inventory collectively among all Credit Parties during any fiscal quarter.

6.4 Taxes; Pensions. Borrower shall timely file and cause each Credit Party to timely file, all required federal and income tax returns and other material tax returns and reports and timely pay, and cause each Credit Party to timely pay, all federal Taxes and all foreign, state and local income Taxes and all other material Taxes, assessments, deposits and contributions owed, and shall deliver to Agent, promptly on demand, appropriate certificates attesting to such payments; *provided*, *however*, that a Credit Party may defer payment of any contested Taxes, so long as such Credit Party (a) in good faith contests its obligation to pay the Taxes by appropriate proceedings promptly and diligently instituted and conducted, (b) notifies Agent in writing of the commencement of, and any material development in, the proceedings, and (c) posts bonds or takes any other steps required to prevent the Governmental Authority levying such contested Taxes from obtaining a Lien upon any of the Collateral other than a Permitted Lien (such contest, a "**Permitted Contest**"). Borrower shall pay, and cause each Credit Party to pay, all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms. Each Credit Party and their ERISA Affiliates shall timely make all required contributions to each Pension Plan and shall maintain each "plan" (as defined by Section 3(3) of ERISA) in material compliance with the applicable provisions of ERISA, the Internal Revenue Code and other federal and state laws. Borrower shall give written notice to Agent and each Lender promptly (and in any event within five (5) Business Days) upon Borrower becoming aware of any (i) Credit Party's or any ERISA Affiliate's failure to make any contribution required to be made with respect to any Pension Plan not having been timely made, (ii) notice of the PBGC's, any Credit Party's or any ERISA Affiliate's intention to terminate or to have a trustee appointed to administer any such Pension Plan, or (iii) complete or partial withdrawal by any Credit Party or any ERISA Affiliate from any Pension Plan.

6.5 Insurance. Borrower shall, and shall cause each Credit Party to, keep its business and the Collateral insured for risks and in amounts standard for companies in Borrower's industry and location and as Agent may reasonably request. Insurance policies shall be in a form, with companies, and in amounts that are satisfactory to Agent. All property policies shall have a lender's loss payable endorsement showing Agent as sole lender's loss payee and waive subrogation against Agent, and all liability policies shall show, or have endorsements showing, Agent as an additional insured. No other loss payees may be shown on the policies unless Agent shall otherwise consent in writing. If required by Agent, all policies (or the loss payable and additional insured endorsements) shall provide that the insurer shall endeavor to give Agent at least thirty (30) days' (ten (10) days' for non-payment of premium) notice before canceling, amending, or declining to renew its policy. At Agent's request, Borrower shall deliver certified copies of all such Credit Party insurance policies and evidence of all premium payments. If any Credit Party fails to obtain insurance as required under this Section 6.5 or to pay any amount or furnish any required proof of payment to third persons and Agent, Agent may make all or part of such payment or obtain such insurance policies required in this Section 6.5, and take any action under the policies Agent deems prudent.

6.6 Collateral Accounts. Borrower shall, and shall cause each Credit Party to, provide Agent five (5) days prior written notice before establishing any Collateral Account at or with any bank or financial institution. In addition, for each Collateral Account that any Credit Party at any time maintains (and in connection with any such Collateral Account established after the Closing Date, prior to opening such Collateral Account), Borrower shall, and shall cause each Credit Party to, cause the applicable bank or financial institution at or with which any Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect Agent's Lien in such Collateral Account in accordance with the terms hereunder, which Control Agreement, *inter alia*, (a) provides that, upon written notice from Agent, such bank or financial institution shall comply with instructions originated by Agent directing disposition of the funds in such Collateral Account without further consent by Borrower and (b) may not be terminated without prior written consent of Agent. The provisions of the previous sentence shall not apply to (i) Excluded Accounts and (ii) deposit accounts exclusively used for payroll, payroll taxes and, in Agent's discretion, other employee wage and benefit payments to or for the benefit of a Credit Party's employees and identified to Agent by Borrower as such; *provided*, *however*, that, at all times Borrower shall maintain one (1) or more separate Deposit Accounts to hold any and all amounts to be used for payroll, payroll taxes and other employee wage and benefit payments, and shall not commingle any monies allocated for such purposes with funds in any other Deposit Account.

6.7 Notices of Material Agreements, Litigation and Defaults; Cooperation in Litigation.

(a) Borrower shall promptly (and in any event within the time periods specified below) provide written notice to Agent and each Lender that the following has occurred:

(i) Within five (5) Business Days of Borrower becoming aware of the existence of any Default or Event of Default;

(ii) Within five (5) Business Days of Borrower becoming aware of (or having reason to believe any of the following are pending or threatened in writing) any action, suit, proceeding or investigation by or against Borrower or any Credit Party which involves the possibility of any judgment or liability of more than One Million Dollars ($1,000,000) or that could result in a Material Adverse Change, or which questions the validity of any of the Financing Documents, or the other documents required thereby or any action to be taken pursuant to any of the foregoing; and

(iii) (A) Within five (5) Business Days of Borrower receiving or delivering any notice of termination (due to a breach or default and not from termination in accordance with its terms) or similar notice in connection with any Material Agreement, and (B) together with delivery of the next Compliance Certificate the execution of any new Material Agreement and/or any new material amendment, consent, waiver or other modification to any Material Agreement not previously disclosed. Documents required to be delivered pursuant to this Section 6.7(a)(iii) (to the extent any such documents are included in materials filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower posts such documents or provides a link thereto, on Borrower's website on the Internet at Borrower's website address.

(b) Borrower shall, and shall cause each Credit Party, to provide such further information (including copies of such documentation) as Agent or any Lender shall reasonably request with respect to any of the events or notices described in clause (a). From the date hereof and continuing through the termination of this Agreement, Borrower shall, and shall cause each Credit Party to, make available to Agent and each Lender, without expense to Agent or any Lender, each Credit Party's officers, employees and agents and books, to the extent that Agent or any Lender may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Agent or any Lender with respect to any Collateral or relating to a Credit Party.

6.8 Creation/Acquisition of Subsidiaries.

(a) Borrower shall provide Agent with at least ten (10) Business Days (or such shorter period as Agent may accept in its sole discretion) prior written notice of its intention to create or, to the extent

permitted pursuant to this Agreement, acquire a new Subsidiary. Upon such creation or, to the extent permitted hereunder, acquisition of any Subsidiary, Borrower and such Subsidiary shall promptly (and in any event within fifteen (15) Business Days of such creation or acquisition) take all such action as may be reasonably required by Agent or the Required Lenders to cause each such Subsidiary to either, in the discretion of Agent, become a co-Borrower hereunder or to guarantee the Obligations of Borrower under the Financing Documents and, in each case, grant a continuing pledge and security interest in and to the assets of such Subsidiary (substantially as described on **Exhibit A** hereto); and Borrower shall grant and pledge to Agent, for the ratable benefit of the Lenders, a perfected security interest in the stock, units or other evidence of ownership of each Subsidiary (the foregoing collectively, the "**Joinder Requirements**"); *provided* that Borrower shall not be permitted to make any Investment in such Subsidiary until such time as Borrower has satisfied the Joinder Requirements.

(b) By April 1, 2020, Borrower shall either (i) provide Agent with evidence reasonably satisfactory to Agent that each Restricted Foreign Subsidiary has been wound-up and dissolved in accordance with Section 7.2(b) or (ii) upon the prior written request of Agent, cause each Restricted Foreign Subsidiary to comply with the Joinder Requirements as though such Restricted Foreign Subsidiary were a new Subsidiary such that, without limiting the requirements of Section 6.8(a), (A) each Restricted Foreign Subsidiary becomes a Guarantor of all of the Obligations and pledges all of its assets (other than Excluded Property) to Agent, on behalf of Lenders, to secure the Obligations, in each case, pursuant to documentation (including, as applicable, agreements governed by the law of the jurisdiction of formation of such Restricted Foreign Subsidiary) in form and substance reasonably acceptable to and (B) one hundred percent (100%) of the outstanding shares of equity interest of such Restricted Foreign Subsidiary owned directly or indirectly by any Credit Party have been pledged to Agent pursuant to a pledge agreement in form and substance reasonably acceptable to Agent and governed by the law of the jurisdiction of formation of such Restricted Foreign Subsidiary. Following such a joinder, each such Subsidiary shall at all times thereafter be a Credit Party and a Restricted Foreign Subsidiary for all purposes hereunder and under the other Financing Documents.

6.9 Use of Proceeds. Borrower shall use the proceeds of the Credit Extensions solely for (a) transaction fees incurred in connection with the Financing Documents and the payment in full on the Closing Date of certain existing Indebtedness of Borrower and (b) for working capital needs of Borrower and its Subsidiaries. No portion of the proceeds of the Credit Extensions will be used for family, personal, agricultural or household use or to purchase Margin Stock.

6.10 Hazardous Materials; Remediation.

(a) If any release or disposal of Hazardous Materials shall occur or shall have occurred on any real property or any other assets of any Borrower or any other Credit Party, such Borrower will cause, or direct the applicable Credit Party to cause, the prompt containment and removal of such Hazardous Materials and the remediation of such real property or other assets as is necessary to comply in all material respects with all applicable Laws and to preserve the material value of such real property or other assets. Without limiting the generality of the foregoing, each Borrower shall, and shall cause each other Credit Party to, comply in all material respects with each applicable Law requiring the performance at any real property by any Borrower or any other Credit Party of activities in response to the release or threatened release of a Hazardous Material.

(b) Borrower will provide Agent within thirty (30) days after written demand therefor with a bond, letter of credit or similar financial assurance evidencing to the reasonable satisfaction of Agent that sufficient funds are available to pay the cost of removing, treating and disposing of any Hazardous Materials or Hazardous Materials Contamination and discharging any assessment which may be established on any property as a result thereof, such demand to be made, if at all, upon Agent's determination that the failure to remove, treat or dispose of any Hazardous Materials or Hazardous Materials Contamination, or the failure to discharge any such assessment could reasonably be expected to have a Material Adverse Change.

(c) If there is any conflict between this Section 6.10 and any environmental indemnity agreement which is a Financing Document, the environmental indemnity agreement shall govern and control.

6.11 Power of Attorney. Each of the officers of Agent is hereby irrevocably made, constituted and appointed the true and lawful attorney for each Borrower (without requiring any of them to act as such) with full power of substitution to do the following: (a) after the occurrence and during the continuance of an Event of Default, pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; (b) so long as Agent has provided not less than three (3) Business Days' prior written notice to Borrower to perform the same and Borrower has failed to take such action, (i) execute in the name of any Person comprising Borrower any schedules, assignments, instruments, documents, and statements that Borrower is obligated to give Agent under this Agreement or that Agent or any Lender deems necessary to perfect or better perfect Agent's security interest or Lien in any Collateral, (ii) after the occurrence and during the continuance of an Event of Default, do such other and further acts and deeds in the name of Borrower that Agent may deem necessary or desirable to enforce, protect or preserve any Collateral or its rights therein, including, but not limited to, to sign Borrower's name on any invoice or bill of lading for any Account or drafts against Account Debtors; and (iii) after the occurrence and during the continuance of an Event of Default, (A) endorse the name of any Borrower upon any and all checks, drafts, money orders, and other instruments for the payment of money that are payable to Borrower; (B) make, settle, and adjust all claims under Borrower's insurance policies; (C) take any action any Credit Party is required to take under this Agreement or any other Financing Document; (D) transfer the Collateral into the name of Agent or a third party as the Code permits; (E) exercise any rights and remedies described in this Agreement or the other Financing Documents; and (F) do such other and further acts and deeds in the name of Borrower that Agent may deem necessary or desirable to enforce its rights with regard to any Collateral.

6.12 Further Assurances. Borrower shall, and shall cause each Credit Party and their Subsidiaries to, at its own cost and expense, promptly and duly take, execute, acknowledge and deliver all such further acts, documents and assurances as may from time to time be necessary or as Agent or Required Lenders may from time to time reasonably request in order to carry out the intent and purposes of the Financing Documents and the transactions contemplated thereby, including all such actions to establish, create, preserve, protect and perfect a first priority Lien (subject only to Permitted Liens) in favor of Agent for itself and for the benefit Lenders on the Collateral (including Collateral acquired after the date hereof), including on any and all assets of each Credit Party, whether now owned or hereafter acquired (subject to the limitations set forth in the Financing Documents).

6.13 Post-Closing Obligations. Borrower shall, and shall cause each Credit Party to, complete each of the post-closing obligations and/or deliver to Agent each of the documents, instruments, agreements and information listed on the **Post-Closing Obligations Schedule** attached hereto, on or before the date set forth for each such item thereon (as the same may be extended by Agent in writing in its sole discretion), each of which shall be completed or provided in form and substance satisfactory to Agent and the Lenders.

6.14 Disclosure Schedule Updates. Borrower shall deliver to Agent, together with the each Compliance Certificate delivered with respect to the last month of a calendar quarter under this Agreement, an update to the **Disclosure Schedule** to the Disclosure Letter correcting all outdated, inaccurate, incomplete or misleading information therein. With respect to any proposed updates to the **Disclosure Schedule** to the Disclosure Letter involving Permitted Liens, Permitted Indebtedness or Permitted Investments, Agent will replace the **Disclosure Schedule** to the Disclosure Letter with such proposed updates only if such updated information reflects transactions that are otherwise expressly permitted by the definitions of, and limitations herein pertaining to, Permitted Liens, Permitted Indebtedness or Permitted Investments (it being understood that such updates will not be deemed to amend the **Disclosure Schedule** to the Disclosure Letter as in effect on the Closing Date). With respect to any updates to the **Disclosure Schedule** to the Disclosure Letter involving matters other than those set forth in the preceding sentence, Agent will replace the applicable portion of the **Disclosure Schedule** to the Disclosure Letter with such update upon Agent's receipt and approval thereof.

6.15 Intellectual Property and Licensing.

(a) Together with each Compliance Certificate delivered with respect to the last month of a calendar quarter under this Agreement, to the extent (A) Borrower acquires and/or develops any new Registered Intellectual Property, or (B) Borrower enters into or becomes bound by any additional material in-bound license or

sublicense agreement, any additional exclusive out-bound license or sublicense agreement or other material agreement with respect to rights in Intellectual Property (other than over-the-counter software that is commercially available to the public), or (C) there occurs any other material change in Borrower's Registered Intellectual Property, in-bound licenses or sublicenses or exclusive out-bound licenses or sublicenses from that listed on the **Intangible Assets Schedule** to the Disclosure Letter, together with such Compliance Certificate, deliver to Agent an updated **Intangible Assets Schedule** to the Disclosure Letter reflecting such updated information.

(b) If Borrower obtains any Registered Intellectual Property, Borrower shall promptly execute such intellectual property security agreements (which shall be filed in the United States Patent and Trademark Office or the United States Copyright Office, as applicable) and other documents and provide such other information (including, without limitation, copies of applications) and take such other actions as Agent shall request in its good faith business judgment to perfect and maintain a first priority perfected security interest in favor of Agent, for the ratable benefit of Lenders, in such property.

(c) Borrower shall use commercially reasonable efforts to take such steps as Agent requests to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for (x) all licenses or agreements to be deemed "Collateral" and for Agent to have a security interest in it that might otherwise be restricted or prohibited by Law or by the terms of any such license or agreement, whether now existing or entered into in the future, and (y) Agent to have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with Agent's rights and remedies under this Agreement and the other Financing Documents.

(d) Borrower shall own, or be licensed to use or otherwise have the right to use, all Material Intangible Assets subject to Permitted Licenses. Borrower shall cause all Registered Intellectual Property to be duly and properly registered, filed or issued in the appropriate office and jurisdictions for such registrations, filings or issuances, except where the failure to do so would not reasonably be expected to result in a Material Adverse Change. Borrower shall at all times conduct its business without material infringement or claim of infringement of any Intellectual Property rights of others. Borrower shall (i) protect, defend and maintain the validity and enforceability of its Material Intangible Assets (ii) promptly advise Agent in writing of material infringements of its Material Intangible Assets, or of a material claim of infringement by Borrower on the Intellectual Property rights of others, in each case to the extent Borrower has received written notice from a third party thereof; and (iii) not allow any of Borrower's Material Intangible Assets to be abandoned, invalidated, forfeited or dedicated to the public or to become unenforceable. Borrower shall not become a party to, nor become bound by, any material license or other agreement with respect to which Borrower is the licensee that prohibits or otherwise restricts Borrower from granting a security interest in Borrower's interest in such license or agreement or other property except to the extent that any such restriction or prohibition is rendered ineffective pursuant to the Code or any other applicable Law or principles of equity.

6.16 Regulatory Reporting and Covenants.

(a) Borrower shall notify Agent and each Lender promptly, and in any event within three (3) Business Days of receiving, becoming aware of or determining that, (each, a "Regulatory Reporting Event" and collectively, the "Regulatory Reporting Events"):

(i) any Governmental Authority, specifically including the FDA is conducting or has conducted (A) if applicable, any investigation of Borrower's or its Subsidiaries' manufacturing facilities and processes for any Product (or any investigation of the facility of a contract manufacturer engaged by Borrower or is Subsidiaries in respect of a Product of which Borrower and/or its Subsidiaries are aware), which has disclosed any material deficiencies or violations of Laws and/or the Regulatory Required Permits related thereto or (B) an investigation or review of any Regulatory Required Permit (other than routine reviews in the Ordinary Course of Business associated with the renewal of a Regulatory Required Permit),

(ii) any development, testing, and/or manufacturing of any Product should cease,

(iii) if a Product has been approved for marketing and sale, any marketing or sales of such Product should cease or such Product should be withdrawn from the marketplace,

(iv) any Regulatory Required Permit has been revoked or withdrawn,

(v) adverse clinical test results have occurred with respect to any Product to the extent that such results have or could reasonably be expected to result in a Material Adverse Change,

(vi) receipt by Borrower or any Subsidiary thereof from the FDA a warning letter, Form FDA-483, "Untitled Letter," other correspondence or notice setting forth allegedly objectionable observations or alleged violations of laws and regulations enforced by the FDA, or any comparable correspondence from any state or local authority responsible for regulating drug products and establishments, or any comparable correspondence from any foreign counterpart of the FDA, or any comparable correspondence from any foreign counterpart of any state or local authority with regard to any Product or the manufacture, processing, packing, or holding thereof to the extent that such correspondence or notice has or could reasonably be expected to result in a Material Adverse Change;

(vii) any Product recalls or voluntary Product withdrawals from any market (other than with respect to discrete batches or lots that are not material in quantity or amount and are not made in conjunction with a larger recall) have occurred, or

(viii) any significant failures in the manufacturing of any Product have occurred such that the amount of such Product successfully manufactured in accordance with all specifications thereof and the required payments to be made to Borrower therefor in any month shall decrease significantly with respect to the quantities of such Product and payments produced in the prior month.

Borrower shall provide to Agent or any Lender such further information (including copies of such documentation) as Agent or any Lender shall reasonably request with respect to any such Regulatory Reporting Event promptly, but in any event within five (5) Business Days of, upon such request.

(b) Borrower shall have, and shall ensure that it and each of its Subsidiaries has, each material Required Permit and other rights from, and have made all declarations and filings with, all applicable Governmental Authorities, all self-regulatory authorities and all courts and other tribunals necessary to engage in all material respects in the ownership, management and operation of the business or the assets of any Borrower and Borrowers shall take reasonable actions to ensure that no Governmental Authority has taken action to limit, suspend or revoke any such Required Permit. Borrower shall ensure that all such Required Permits are valid and in full force and effect and Borrowers are in material compliance with the terms and conditions of all such Required Permits in all material respects.

(c) Borrower will maintain in full force and effect, and free from restrictions, probations, conditions or known conflicts which would materially impair the use or operation of Borrowers' business and assets, all material Required Permits necessary under Healthcare Laws to carry on the business of Borrowers as it is conducted on the Closing Date in all material respects.

(d) In connection with the development, testing, manufacture, marketing or sale of each and any material Product, Borrower shall, and shall cause each Credit Party to, obtain and comply with all material Regulatory Required Permits at all times issued or required to be issued by any Governmental Authority, specifically including the FDA, with respect to such development, testing, manufacture, marketing or sales of such Product by such Borrower as such activities are at any such time being conducted by such Borrower.

(e) Borrowers will timely file or caused to be timely filed (after giving effect to any extension duly obtained), all material notifications, reports, submissions, material Required Permit renewals and reports required by applicable Healthcare Laws (which reports will be materially accurate and complete in all respects and not misleading in any respect and shall not remain open or unsettled).

(f) In the event Borrower or any Credit Party obtains any new Regulatory Required Permit or any information on the **Required Permits Schedule** to the Disclosure Letter becomes outdated, inaccurate, incomplete or misleading, Borrower shall, together with the next Compliance Certificate required to be delivered under this Agreement after such event,-provide Agent with an updated **Required Permits Schedule** to the Disclosure Letter including such updated information

(g) If, after the Closing Date, (i) Borrower determines to manufacture, sell, develop, test or market any new Product commercially (by itself or through a third party), Borrower shall deliver, together with delivery of the next Compliance Certificate shall provide an updated **Intangible Assets Schedule** to the Disclosure Letter, **Products Schedule** to the Disclosure Letter and **Required Permits Schedule** to the Disclosure Letter (and copies of such Required Permits as Agent may request) reflecting updates related to such determination.

7. NEGATIVE COVENANTS

Borrower shall not do, nor shall it permit any Credit Party or any of its Subsidiaries to do, any of the following without the prior written consent of Agent:

7.1 Dispositions. Convey, sell, abandon, lease, license, transfer, assign or otherwise dispose of (collectively, "**Transfer**") all or any part of its business or property, except for (a) sales, transfers or dispositions of Inventory in the Ordinary Course of Business; (b) sales or abandonment of (i) worn-out, surplus or obsolete Equipment or (ii) other Equipment that is no longer used or useful in the business of Borrower with a fair salable value not to exceed Five Hundred Thousand Dollars ($500,000) in the aggregate for all such Equipment; (c) to the extent constituting a Transfer, Permitted Liens; (d) to the extent they may constitute a Transfer, the use of cash and Cash Equivalents in the Ordinary Course of Business and to make Permitted Investments; (e) the granting of Permitted Licenses; (f) Transfers from any Subsidiary to a Borrower or Guarantor, (g) Transfers between Borrowers and Guarantors, (h) the expiration, forfeiture, invalidation, cancellation, abandonment or lapse (including, without limitation, the narrowing of claims) of Intellectual Property (other than Material Intangible Assets) to the extent such Intellectual Property is no longer used or useful in the business of Borrower, (i) sales or discounting of delinquent accounts in the Ordinary Course of Business, (j) leases of the Owned Real Property to the extent the same are entered into in accordance with the provisions of Section 8.1 (including, for the avoidance of doubt, the provisions requiring the Agent's consent) or (k) so long as no Event of Default has occurred and is continuing or would result therefrom, other Transfers of tangible personal property in the aggregate not to exceed Five Hundred Thousand Dollars ($500,000) per fiscal year.

7.2 Changes in Business, Management, Ownership or Business Locations. (a) Engage in, or permit any of its Subsidiaries to engage in, any business other than the businesses currently engaged in by Borrower, such Credit Party or such Subsidiary, as applicable, or reasonably related thereto; (b) liquidate or dissolve; *provided* that a Subsidiary that is not a Credit Party may liquidate or dissolve in the Ordinary Course of Business so long as such Subsidiary distributes its assets to a Credit Party upon such liquidation or dissolution; (c) enter into any transaction or series of related transactions which would result in a Change in Control unless the agreements with respect to such transactions provide for, as a condition precedent to the consummation thereof, either (x) the indefeasible payment in full of the Obligations or (y) the consent of Agent and the Lenders; (d) add any new offices or business locations, or enter into any new leases with respect to existing offices or business locations without first delivering a fully-executed Access Agreement to Agent (except as otherwise provided below); (e) without at least 10 Business Days' prior written notice to Agent (i) change its jurisdiction of organization (provided that no Credit Party shall change its jurisdiction of organization to a new country without Agent's consent); (ii) change its organizational structure or type; (iii) change its legal name; or (iv) change any organizational number (if any) assigned by its jurisdiction of organization. Notwithstanding the foregoing in the case of subpart (d) above, provided that the applicable lease or license agreement, or applicable law, does not grant to the landlord or licensor any Lien upon intangible assets of the tenant or licensee, subpart (d) shall not restrict leases or licenses for (i) such new or existing offices or business locations containing less than Five Hundred Thousand Dollars ($500,000) in Borrower's assets or property and not containing Borrower's Books and (ii) any new or existing business location constituting a warehouse, consignee or bailee location that does not contain any of Borrower's Books and would not otherwise require an Access Agreement pursuant to the criteria set forth in Section 4.2(e).

7.3 Mergers and Consolidations. Merge or consolidate with any other Person, *provided*, *however*, that (a) a Borrower may merge or consolidate into another Borrower, (b) a Guarantor may merge or consolidate into another Guarantor, (c) a Subsidiary that is not a Credit Party may merge or consolidate into another Subsidiary that is not a Credit Party and (d) a Subsidiary that is not a Credit Party may merge or consolidate into a Credit Party, so long as, in each case, (i) Borrower has provided Agent with prior written notice of such transaction, (ii) if a Credit Party is a party thereto, a Person already comprising a Credit Party shall be the surviving legal entity, (iii) if MannKind is a party thereto, MannKind shall be the surviving legal entity, (iv) no Event of Default has occurred and is continuing prior thereto or arises as a result therefrom and (v) Borrower shall be in compliance with the covenants set forth in this Agreement both before and after giving effect to such transaction.

7.4 Indebtedness. (a) Create, incur, assume, or be liable for any Indebtedness other than Permitted Indebtedness or (b) purchase, redeem, defease or prepay any principal of, premium, if any, interest or other amount payable in respect of any Indebtedness (other than with respect to the Obligations as described in Section 2.3) prior to its scheduled maturity.

7.5 Encumbrance. (a) Create, incur, allow, or suffer any Lien on any of its property, except for Permitted Liens, (b) permit any Collateral to fail to be subject to the first priority security interest granted herein except for Permitted Liens that may have priority by operation of applicable Law or by the terms of a written intercreditor or subordination agreement entered into by Agent, or (c) enter into any agreement, document, instrument or other arrangement (except with or in favor of Agent) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower or any Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower's or any Subsidiary's Collateral, except as is otherwise permitted in the definition of "Permitted Liens" herein.

7.6 Maintenance of Collateral Accounts. Maintain any Collateral Account, except pursuant to the terms of Section 6.6 hereof.

7.7 Distributions; Investments and Acquisitions; Margin Stock.

(a) Pay any dividends or make any distribution or payment with respect to or redeem, retire or purchase or repurchase any of its equity interests other than Permitted Distributions.

(b) directly or indirectly make any Investment (including, without limitation, any additional Investment in any Subsidiary and any Acquisition) other than Permitted Investments.

(c) Without limiting the foregoing, Borrower shall not, and shall not permit any of its Subsidiaries or any Credit Party to, purchase or carry Margin Stock.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of any Credit Party, except for (a) transactions that are in the Ordinary Course of Business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated Person, (b) transactions with Subsidiaries that are designated as a Borrower hereunder and that are not otherwise prohibited by Article 7 of this Agreement, (c) transactions permitted by Section 7.7(a) of this Agreement, (d) transactions constituting bona fide equity financings for capital raising purposes not otherwise in contravention of this Agreement, and (e) reasonable and customary director, officer and employee compensation (including bonuses) and other benefits (including retirement, health, stock option and other benefit plans and indemnification arrangements approved by the relevant board of directors, board managers or equivalent corporate body in the Ordinary Course of Business).

7.9 Subordinated Debt; Convertible Note Indebtedness; Milestone Obligations.

(a) Make or permit any payment (or set aside any funds for payment) on, or any distribution in respect of, any Mann Group Note Obligations, except (i) at any time after December 31, 2020 and so long as the closing price of MannKind's common stock reported for the Business Day immediately prior to the

making of such payment is greater than One Dollar and Fifty Cents ($1.50) per share, the issuance of common stock of MannKind (and not, for the avoidance of doubt, any payments in cash) to make regularly scheduled payments of interest required under the Mann Group Note Documents; *provided* that (A) the aggregate amount of payments made pursuant to this Section 7.9(a)(i), when combined with all other Subordinated Debt Common Stock Payments, shall not exceed $20,000,000 in the aggregate during the term of this Agreement (the "**Stock Payment Cap**"); *provided* that if the closing price of MannKind's common stock reported for the business day immediately prior to any such payment is greater than Two Dollars and Fifty Cents ($2.50) per share, Borrower shall be permitted to issue common stock to make additional regularly scheduled interest payments required under the Mann Notes up to an additional aggregate amount of $5,000,000 in excess of the Stock Payment Cap, and (B) no Event of Default shall have occurred and be continuing prior to or immediately after giving effect to such payment, (ii) to the extent expressly permitted to be made pursuant to the terms of the Mann Group Note Subordination Agreement, (iii) conversion into equity interest of MannKind (other than Disqualified Stock) in accordance with the terms thereof, and (iv) required payments of cash in lieu of fractional shares of equity interests of MannKind (other than Disqualified Stock) upon conversion.

(b) Make or permit any payment (or set aside any funds for payment) on, or any distribution in respect of, the Closing Date Convertible Note Documents, except:

(i) the issuance of common stock of MannKind (and not, for the avoidance of doubt, any payments in cash) to make regularly scheduled payments of interest required under the Closing Date Convertible Notes; *provided* that (A) the aggregate amount of payments made pursuant to this Section 7.9(b)(i), when combined with all other Subordinated Debt Common Stock Payments, shall not exceed $20,000,000 in the aggregate during the term of this Agreement and (B) no Event of Default shall have occurred and be continuing prior to or immediately after giving effect to such payment;

(ii) conversion into equity interest of MannKind (other than Disqualified Stock) in accordance with the terms thereof;

(iii) required payments of cash in lieu of fractional shares of equity interests of MannKind (other than Disqualified Stock) upon conversion; and

(c) Make or permit any payment (or set aside any funds for payment) on, or any distribution in respect of, the Bruce Notes except (i) payment of principal outstanding under the June 30, 2020 Bruce Note, in an aggregate amount not to exceed $2,630,750, on June 30, 2020 (or such later date as Agent may agree in its sole discretion), and (ii) payment of principal outstanding under the December 31, 2020 Bruce Note, in an aggregate amount not to exceed $2,630,750, on December 31, 2020 (or such later date as Agent may agree in its sole discretion); *provided* that (x) in the event such payments are made in cash, immediately prior to and after giving effect to each such payments, Borrower Unrestricted Cash shall be greater than or equal to $50,000,000, (y) in the event such payments are made in common stock of MannKind, the aggregate amount of such payments made in accordance with this Section 7.9(c), when combined with all other Subordinated Debt Common Stock Payments, does not exceed $20,000,000 in the aggregate during the term of this Agreement, and (z) no Event of Default shall have occurred and be continuing prior to or immediately after giving effect to such payment.

(d) payments in common stock (and not in cash) of (i) the Closing Date Share Payment (as defined in the Closing Date Convertible Notes Exchange Agreement) on the Closing Date and (ii) the Accrued Interest Consideration (as defined in the Closing Date Convertible Notes Exchange Agreement, the "**Accrued Interest Consideration**")) required under the Closing Date Convertible Notes Exchange Agreement and the Existing Indenture, in an amount not to exceed $550,000 on or before August 15, 2019; *provided* that Credit Parties shall have no obligations in respect of the Existing Indenture other than the Accrued Interest Consideration and following the payment of Accrued Interest Consideration in common stock, no Indebtedness shall remain outstanding under the Existing Indenture and the Existing Indenture shall be promptly discharged.

(e) Make or permit any payment (or set aside any funds for payment) on, or any distribution in respect of, any Subordinated Debt (including the Mann Group Note Obligations and the Bruce Note Obligations) except to the extent expressly permitted to be made pursuant to the terms of the Subordination Agreement to which such Subordinated Debt is subject.

(f) Make or permit any payment (or set aside any funds for payment) on, or any distribution in respect of, any Milestone Obligation if an Event of Default has occurred and is continuing or would result therefrom.

(g) (i) Amend or modify any provision in any document relating to the Subordinated Debt other than as may be expressly permitted pursuant to the terms of any applicable Subordination Agreement to which such Subordinated Debt is subject, (ii) amend or modify any provision in the Deerfield Milestone Agreement or any material document relating thereto in a manner that is adverse to Borrower or its Subsidiaries or that in a manner that is adverse to Agent or any Lender, or (iii) amend or modify any provision in any Closing Date Convertible Note Document in a manner that is adverse to Borrower or its Subsidiaries or that in a manner that is adverse to Agent or any Lender.

7.10 Compliance. Become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940, as amended or undertake as one of its important activities extending credit to purchase or carry Margin Stock, or use the proceeds of any Credit Extension for that purpose; (i) fail, or permit any ERISA Affiliate to fail, to meet "minimum funding standards" (as defined in Section 412 of the Internal Revenue Code or Section 302 of ERISA), whether or not waived, (ii) permit (with respect to any Credit Party, any Subsidiary of any Credit Party or any ERISA Affiliate thereof) a "reportable event" as defined in Section 4043(c) of ERISA (or the regulations issued thereunder) (other than an event for which the 30-day notice requirement is waived) to occur, (iii) engage in any "prohibited transaction" within the meaning of Section 406 of ERISA or Section 4975 of the Internal Revenue Code that could reasonably be expected to result in liability in excess of $500,000 in the aggregate or that could reasonably be expected to result in a Material Adverse Change; (iv) fail to comply with the Federal Fair Labor Standards Act that could result in liability in excess of $500,000 in the aggregate or that could reasonably be expected to result in a Material Adverse Change; (v) permit (with respect to any Credit Party, any Subsidiary of any Credit Party or any ERISA Affiliate thereof) the withdrawal from participation in any Pension Plan, or (vi) incur, or permit any Credit Party, any Subsidiary of any Credit Party or any ERISA Affiliate thereof to incur, any liability under Title IV of ERISA (other than for PBGC premiums due but not delinquent under Section 4007 of ERISA).

7.11 Amendments to Organization Documents and Material Agreements. Amend, modify or waive any provision of (a) any Material Agreement in a manner that is materially adverse to Borrower or any of its Subsidiaries, that is materially adverse to Agent or any Lender, that pertains to rights to assign or grant a security interest in such Material Agreement or that could or could reasonably be expected to result in a Material Adverse Change, or (b) any of its organizational documents (other than a change in registered agents, or a change that could not adversely affect the rights of Agent or the Lenders hereunder, but, for the avoidance of doubt, under no circumstances a change of its name, type of organization or jurisdiction of organization), in each case, without the prior written consent of Agent. Borrower shall provide to Agent copies of all amendments, waivers and modifications of any Material Agreement or organizational documents.

7.12 Compliance with Anti-Terrorism Laws**.** Directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. Borrower shall immediately notify Agent if Borrower has knowledge that Borrower or any Subsidiary or Affiliate is listed on the OFAC Lists or (a) is convicted on, (b) pleads *nolo contendere* to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering. Borrower will not, nor will Borrower permit any Subsidiary or Affiliate to, directly or indirectly, (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law. Agent hereby notifies Borrower that pursuant to

the requirements of Anti-Terrorism Laws, and Agent's policies and practices, Agent is required to obtain, verify and record certain information and documentation that identifies Borrower and its principals, which information includes the name and address of Borrower and its principals and such other information that will allow Agent to identify such party in accordance with Anti-Terrorism Laws.

7.13 Restricted Foreign Subsidiaries.

(a) Borrower shall not permit, at any time, the total amount of cash and Cash Equivalents held by all Restricted Foreign Subsidiaries to exceed One Hundred Thousand Dollars ($100,000) (or the equivalent thereof in any foreign currency), in the aggregate.

(b) No Restricted Foreign Subsidiary shall own, or have an exclusive license in respect of, any Material Intangible Assets or other material Intellectual Property except, subject to the requirements in the Post-Closing Obligations Schedule, the Intercompany IP Licenses.

(c) No Credit Party shall Transfer any asset (including any Intellectual Property) to or make any Investment in any Restricted Foreign Subsidiary after the Closing Date without Agent's prior written consent other than cash Investments specifically permitted pursuant to clause (i) of the definition of Permitted Investments.

(d) no Borrower will, or will permit any Subsidiary, to commingle any of its assets (including any bank accounts, cash or Cash Equivalents) with the assets of any Person other than a Credit Party.

8. REAL PROPERTY MATTERS

8.1 Leases. Without the prior written consent of Agent (such consent not to be unreasonably withheld, conditioned, or delayed so long as such lease or sublease does not impair the use of the Owned Real Property for the Credit Parties' operations), the Credit Parties shall not: (i) enter into any lease of the Owned Real Property or (ii) modify, amend, renew, surrender, terminate, consent to a sublease of, consent to a transfer of, abate rent or other payments due under or otherwise grant any financial or other concession under any lease that is materially adverse to Agent or any Lender or (iii) enter into any ground lease of any of the Owned Real Property.

8.2 Owned Real Property Use and Operation.

(a) Without the prior written consent of Agent in each instance, which consent shall not be unreasonably withheld, conditioned or delayed, the Credit Parties shall not demolish, remove, construct, or, except as otherwise expressly provided herein, restore, or alter the Owned Real Property or any portion thereof, nor shall the Credit Parties consent to or permit any such action, which would materially diminish the value of the Owned Real Property. The Credit Parties shall, at their expense, (i) take commercially reasonable care of the Owned Real Property and shall keep the same in good, safe and insurable condition and in compliance with all applicable Laws, (ii) promptly make all repairs to the Owned Real Property to the extent reasonably necessary to maintain the Owned Real Property in a manner consistent with their quality and use as required hereby, and (iii) not commit or suffer to be committed any waste of the Owned Real Property or do or suffer to be done anything which will materially increase the risk of fire or other hazard to the Owned Real Property or materially impair the value thereof.

(b) Unless required by applicable Law, the Credit Parties shall not permit or engage in any material changes in the use of any Owned Real Property from the use at the time this Agreement was executed without Agent's prior written consent, which consent shall not be unreasonably withheld.

(c) All of the Credit Parties FF&E necessary or reasonably desirable for their operations at the Owned Real Property shall always be located at such Owned Real Property and shall be kept free and clear of all Liens other than the Permitted Liens. The Credit Parties shall not, without the prior written consent of Agent, which consent shall not be unreasonably withheld, remove or permit to be removed from any Owned Real Property any material portion of such FF&E except to repair or replace the same.

(d) The Credit Parties shall not consent to or initiate the joint assessment of any Owned Real Property (i) with any other real property constituting a separate tax lot and the Credit Parties represent and covenant that each piece of Owned Real Property is are and shall remain a separate tax lot, or (ii) with any portion of the Owned Real Property which may be deemed to constitute personal property, or any other procedure whereby the lien of any taxes which may be levied against such personal property shall be assessed or levied or charged to the Owned Real Property as a single lien.

8.3 Tax Reduction Proceedings. After an Event of Default, the Credit Parties shall be deemed to have appointed Agent as their attorney-in-fact to seek a reduction or reductions in the assessed valuation of the Owned Real Property for real property tax purposes or for any other purpose and to prosecute any action or proceeding in connection therewith. This power, being coupled with an interest, shall be irrevocable for so long as any part of the Obligations remains unpaid and any Event of Default shall be continuing.

8.4 Representations and Warranties. To induce Agent and Lenders to enter into this Agreement and to make the Credit Extensions and other credit accommodations contemplated hereby, each Credit Party hereby represents and warrants to Agent and each Lender the following with respect to each Owned Real Property:

(a) Except as disclosed to Agent in writing, (i) no condemnation of any portion of any Owned Real Property, has commenced or, to any Credit Party's knowledge, is contemplated by any Governmental Authority and (ii) no proceeding to deny access to any Owned Real Property from any point or planned point of access to any Owned Real Property, has commenced or, to any Credit Party's knowledge, is contemplated by any Governmental Authority.

(b) To the Credit Parties' knowledge after due inquiry, the Credit Parties' use of any Owned Real Property does not violate, in any material respects, (i) any Laws, or (ii) any building permits, covenants, conditions and restrictions of record, or agreements affecting any Owned Real Property or any part thereof. Neither the zoning authorizations, subdivision approvals or variances nor any other right to construct or to use any Owned Real Property is to any material extent dependent upon or related to any real estate other than the Owned Real Property. Except as disclosed to Agent on the land title surveys delivered to Agent prior to the Closing Date, no building or other improvement encroaches upon any property line, building line, set back line, side yard line or any recorded or visible easement (or other easement of which Borrowers are aware or has reason to believe may exist) with respect to any Owned Real Property. No Owned Real Property is situated in an area designated as having special flood hazards as defined by the Flood Disaster Protection Act of 1973, as amended, or designated as a wetland by any governmental entity having jurisdiction over such Owned Real Property. All material Required Permits required for the use and occupancy of the Owned Real Property have been obtained. All material Laws relating to the construction of and operation of the Owned Real Property have been complied with in all material respects and all material permits and licenses required for the construction of and operation of the Owned Real Property have been obtained. Each Owned Real Property is accessible through fully improved and dedicated roads, accepted for maintenance and public use by public authority having jurisdiction. Each Owned Real Property has adequate water, gas and electrical supply, storm and sanitary sewerage facilities, telephone facilities, and other required public utilities, fire and police protection for its present use and occupancy; none of the foregoing will be foreseeably impeded by virtue of any requirements under any applicable Laws. Each Owned Real Property includes all property and rights that may be reasonably necessary or desirable to promote the present uses and enjoyment thereof.

(c) Each Owned Real Property is taxed separately without regard to any other property and for all purposes such Owned Real Property may be mortgaged, conveyed and otherwise dealt with as an independent parcel. There are no unpaid or outstanding real estate or other taxes or assessments on or against any Owned Real Property or any part thereof, except general real estate taxes not yet due or payable. To each Credit Party's knowledge, there is no pending or contemplated action pursuant to which any special assessment may be levied against any portion of any Owned Real Property.

(d) There has been no damage or destruction of any part of any Owned Real Property by fire or other casualty that has not been repaired.

9. FINANCIAL COVENANTS

9.1 Minimum Afrezza Net Revenue. Borrower shall not permit Afrezza Net Revenue for the twelve month period immediately preceding (and ending on) each Testing Date to be less than the minimum amount set forth opposite such Testing Date on the **Minimum Afrezza Net Revenue Schedule**. A breach of a financial covenant contained in this Section 9.1 shall be deemed to have occurred as of any date of determination by Agent or as of the applicable Testing Date, regardless of when the financial statements reflecting such breach are delivered to Agent.

9.2 Minimum Cash. Borrower shall not permit Borrower Unrestricted Cash to be less than (i) at all times prior to the funding of Credit Facility #2, Fifteen Million Dollars ($15,000,000) and (ii) at all times following any funding of Credit Extensions under Credit Facility #2 or Credit Facility #3, Twenty Million Dollars ($20,000,000).

9.3 Evidence of Compliance. Borrower shall furnish to Agent, a Compliance Certificate in accordance with Section 6.2(b) as evidence of Borrower compliance with the covenants in this Article 9. The Compliance Certificate shall include, without limitation, (i) a statement and report, on a form approved by Agent, detailing Borrower's calculations, (ii) the monthly cash and Cash Equivalents of Borrower and Borrower and its consolidated Subsidiaries and, if requested by Agent, bank statements and (iii) if reasonably requested by Agent, back-up documentation (including, without limitation, invoices, receipts and other evidence of costs incurred during such quarter as Agent shall reasonably require) evidencing the propriety of the calculations.

10. EVENTS OF DEFAULT

10.1 Events of Default. The occurrence of any of the following conditions and/or events, whether voluntary or involuntary, by operation of law or otherwise, shall constitute an "**Event of Default**" and Credit Parties shall thereupon be in default under this Agreement and each of the other Financing Documents:

(a) Borrower fails to (i) make any payment of principal or interest on any Credit Extension on its due date, or (ii) pay any other Obligations within three (3) Business Days after such Obligations are due and payable (which three (3) Business Day grace period shall not apply to payments due on the Maturity Date or the date of acceleration pursuant to Section 10.2 hereof).

(b) any Credit Party defaults in the performance of or compliance with any term contained in this Agreement or in any other Financing Document (other than occurrences described in other provisions of this Section 10.1 for which a different grace or cure period is specified or for which no grace or cure period is specified and thereby constitute immediate Events of Default) and such default is not remedied by the Credit Party or waived by Agent within thirty (30) days after the earlier of (i) the date of receipt by any Borrower of notice from Agent or the Required Lenders of such default, or (ii) the date an officer of such Credit Party becomes aware, or through the exercise of reasonable diligence should have become aware, of such default (provided; however, if a longer or shorter cure period is provided in the Mortgage with respect to the Owned Real Property, such longer or shorter cure period shall apply);

(c) any Credit Party defaults in the performance of or compliance with any term contained in Section 6.2, 6.4, 6.5, 6.6, 6.7(a), 6.8, 6.9, 6.10, 6.13, 6.15 or 6.16, Article 7 or Article 9;

(d) any representation, warranty, certification or statement made by any Credit Party, or any other Person acting for or on behalf of a Credit Party (i) in any Financing Document or in any certificate, financial statement or other document delivered pursuant to any Financing Document, or (ii) to induce Agent and/or Lenders to enter into this Agreement or any Financing Document is incorrect in any respect (or in any material respect if such representation, warranty, certification or statement is not by its terms already qualified as to materiality) when made (or deemed made);

(e) (i) any Credit Party materially defaults under or materially breaches any Material Agreement (after any applicable grace period contained therein and such default or breach is not effectively and permanently cured or waived by the applicable counterparties to such Material Agreement within ten (10) Business Days of a Responsible Officer of Borrower becoming aware of such default or breach), or a Material Agreement shall be terminated by a third party or parties party thereto prior to the expiration thereof, or there is a loss of a material right of a Credit Party under any Material Agreement to which it is a party, (ii) (A) any Credit Party fails to make (after any applicable grace period) any payment when due (whether due because of scheduled maturity, required prepayment provisions, acceleration, demand or otherwise) on any Indebtedness (other than the Obligations) of such Credit Party or such Subsidiary having an aggregate principal amount (including undrawn committed or available amounts and including amounts owing to all creditors under any combined or syndicated credit arrangement) of more than Five Hundred Thousand Dollars ($500,000) ("**Material Indebtedness**"), (B) any other event shall occur or condition shall exist under any contractual obligation relating to any such Material Indebtedness, if the effect of such event or condition is to accelerate, or to permit the acceleration of (without regard to any subordination terms with respect thereto), the maturity of such Material Indebtedness or (C) any such Material Indebtedness shall become or be declared to be due and payable, or be required to be prepaid, redeemed, defeased or repurchased (other than by a regularly scheduled required prepayment), prior to the stated maturity thereof, (iii) the occurrence of any breach or default under any terms or provisions of any Subordinated Debt Document or any Closing Date Convertible Note Document or under any agreement subordinating the Subordinated Debt to all or any portion of the Obligations, or the occurrence of any event requiring the prepayment of any Subordinated Debt or the Closing Date Convertible Note Obligations, or the delivery of any notice with respect to any Subordinated Debt or pursuant to any Subordination Agreement that triggers the start of any standstill or similar period under any Subordination Agreement, or (iv) any Borrower makes any payment on account of any Indebtedness that has been subordinated to any of the Obligations, other than payments specifically permitted by the terms of such subordination;

(f) (i) any Credit Party shall generally not pay its debts as such debts become due, shall admit in writing its inability to pay its debts generally, shall make a general assignment for the benefit of creditors, or shall cease doing business as a going concern, (ii) any proceeding shall be instituted by or against any Credit Party in any jurisdiction seeking to adjudicate it a bankrupt or insolvent or seeking liquidation, winding up, reorganization, arrangement, adjustment, protection, relief, composition of it or its debts or any similar order, in each case under any law relating to bankruptcy, insolvency or reorganization or relief of debtors or seeking the entry of an order for relief or the appointment of a custodian, receiver, trustee, conservator, liquidating agent, liquidator, other similar official or other official with similar powers, in each case for it or for any substantial part of its property and, in the case of any such proceedings instituted against (but not by or with the consent of) such Credit Party, either such proceedings shall remain undismissed or unstayed for a period of forty-five (45) days or more or any action sought in such proceedings shall occur or (iii) any Credit Party shall take any corporate or similar action or any other action to authorize any action described in clause (i) or (ii) above;

(g) (i) the service of process seeking to attach, execute or levy upon, seize or confiscate any Collateral Account, any Intellectual Property, or any funds of any Credit Party on deposit with Agent, any Lender or any Affiliate of Agent or any Lender, or (ii) a notice of lien, levy, or assessment is filed against any assets of a Credit Party by any government agency, and the same under subclauses (i) and (ii) hereof are not discharged or stayed (whether through the posting of a bond or otherwise) prior to the earlier to occur of twenty (20) days after the occurrence thereof or such action becoming effective;

(h) (i) any court order enjoins, restrains, or prevents Borrower from conducting any material part of its business, (ii) the institution by any Governmental Authority of criminal proceedings against any Credit Party or its Subsidiary, or (iii) one or more judgments or orders for the payment of money (not paid or fully covered by insurance and as to which the relevant insurance company has acknowledged coverage in writing) aggregating in excess of $500,000 shall be rendered against any or all Credit Parties or their Subsidiaries and either (A) enforcement proceedings shall have been commenced and not effectively stayed by any creditor upon any such judgments or orders, or (B) there shall be any period of thirty (30) consecutive days during which a stay of enforcement of any such judgments or orders, by reason of a pending appeal, bond or otherwise, shall not be in effect;

(i) any Lien created by any of the Financing Documents shall at any time fail to constitute a valid and perfected Lien on all of the Collateral purported to be encumbered thereby, subject to no prior or equal Lien except Permitted Liens and other than solely as a result of any action or inaction of Agent or Lenders provided that such action or inaction is not caused by a Credit Party's failure to comply with the terms of the Financing Documents, or any Credit Party shall so assert; any provision of any Financing Document shall fail to be valid and binding on, or enforceable against, a Credit Party, or any Credit Party shall so assert;

(j) a Change in Control occurs;

(k) any Required Permit shall have been (i) revoked, rescinded, suspended, modified in a materially adverse manner or not renewed in the Ordinary Course of Business for a full term, or (ii) subject to any decision by a Governmental Authority that designates a hearing with respect to any applications for renewal of any of such Required Permit or that could result in the Governmental Authority taking any of the actions described in clause (i) above, and such decision or such revocation, rescission, suspension, modification or non-renewal has, or could reasonably be expected to have, a Material Adverse Change;

(l) (i) the voluntary withdrawal or institution of any action or proceeding by the FDA or similar Governmental Authority to order the withdrawal of any Afrezza Product or any other Product (the loss of which could be reasonably be expected to result in a Material Adverse Change) from the market or to enjoin Borrower, its Subsidiaries or any representative of Borrower or its Subsidiaries from manufacturing, marketing, selling or distributing any Product (the loss of which could be reasonably be expected to result in a Material Adverse Change), (ii) the institution of any action or proceeding by any DEA, FDA, or any other Governmental Authority to revoke, suspend, reject, withdraw, limit, or restrict any Regulatory Required Permit held by Borrower, its Subsidiaries or any representative of Borrower or its Subsidiaries, which, in each case, has or would reasonably be expected to result in Material Adverse Change, (iii) the commencement of any enforcement action against Borrower, its Subsidiaries or any representative of Borrower or its Subsidiaries (with respect to the business of Borrower or its Subsidiaries) by DEA, FDA, or any other Governmental Authority which has or would reasonably be expected to result in a Material Adverse Change, or (iv) the occurrence of adverse test results in connection with a Product which would result in Material Adverse Change.

(m) MannKind's equity securities fail to remain registered with the SEC and listed for trading on the NASDAQ Stock Market; or

(n) the occurrence of any fact, event or circumstance that would reasonably be expected to result in a Material Adverse Change.

All cure periods provided for in this Section 10.1 shall run concurrently with any cure period provided for in any applicable Financing Documents under which the default occurred.

10.2 Rights and Remedies.

(a) Upon the occurrence and during the continuance of an Event of Default, Agent may, and at the written direction of any Lender shall, without notice or demand, do any or all of the following: (i) deliver notice of the Event of Default to Borrower, (ii) by notice to any Borrower declare all Obligations immediately due and payable (but if an Event of Default described in Section 10.1(f) occurs all Obligations shall be immediately due and payable without any action by Agent or the Lenders), or (iii) by notice to any Borrower suspend or terminate the obligations, if any, of the Lenders to advance money or extend credit for Borrower's benefit under this Agreement or under any other agreement between any Credit Party and Agent and/or the Lenders (but if an Event of Default described in Section 10.1(f) occurs all obligations, if any, of the Lenders to advance money or extend credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Agent and/or the Lenders shall be immediately terminated without any action by Agent or the Lenders).

(b) Without limiting the rights of Agent and the Lenders set forth in Section 10.2(a) above, upon the occurrence and during the continuance of an Event of Default, Agent shall have the right, without notice or demand, to do any or all of the following:

(i) with or without legal process, enter any premises where the Collateral may be and take possession of and remove the Collateral from the premises or store it on the premises, and foreclose upon and/or sell, lease or liquidate, the Collateral, in whole or in part;

(ii) apply to the Obligations (A) any balances and deposits of any Credit Party that Agent or any Lender or any Affiliate of Agent or a Lender holds or controls, or (B) any amount held or controlled by Agent or any Lender or any Affiliate of Agent or a Lender owing to or for the credit or the account of any Credit Party;

(iii) settle, compromise or adjust and grant releases with respect to disputes and claims directly with Account Debtors for amounts on terms and in any order that Agent considers advisable, notify any Person owing any Credit Party money of Agent's security interest in such funds, and verify the amount of such Account;

(iv) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral. Borrower shall assemble the Collateral if Agent requests and make it available as Agent designates. Agent may also render any or all of the Collateral unusable at a Credit Party's premises and may dispose of such Collateral on such premises without liability for rent or costs. Borrower grants Agent a license to enter and occupy any of its premises, without charge, to exercise any of Agent's rights or remedies;

(v) pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred;

(vi) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, and/or advertise for sale, the Collateral. Agent is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's labels, patents, copyrights, mask works, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral (and including in such license access to all media in which any of the licensed items may be recorded or stored and to all computer software and programs used for the compilation or printout thereof) and, in connection with Agent's exercise of its rights under this Article 10, Borrower's rights under all licenses and all franchise agreements shall be deemed to inure to Agent for the benefit of the Lenders, subject to any rights of third party licensors and licensees, as applicable;

(vii) place a "hold" on any account maintained with Agent or the Lenders or any Affiliate of Agent or a Lender and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(viii) demand and receive possession of the Books of Borrower and the other Credit Parties; and

(ix) exercise all other rights and remedies available to Agent under the Financing Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof).

10.3 Notices. Any notice that Agent is required to give to a Credit Party under the UCC of the time and place of any public sale or the time after which any private sale or other intended disposition of the Collateral is to be made shall be deemed to constitute reasonable notice if such notice is given in accordance with this Agreement at least ten (10) days prior to such action.

10.4 Protective Payments. If any Credit Party fails to pay or perform any covenant or obligation under this Agreement or any other Financing Document, Agent may pay or perform such covenant or obligation, and all amounts so paid by Agent are Protective Advances and immediately due and payable, bearing interest at the then highest applicable rate for the Credit Facilities hereunder, and secured by the Collateral. Agent will endeavor to provide Borrower with notice of Agent making such payment or performance at the time it is paid or performed or within a reasonable time thereafter. No such payments or performance by Agent shall be construed as an agreement to make similar payments or performance in the future or constitute Agent's waiver of any Event of Default.

10.5 Liability for Collateral No Waiver; Remedies Cumulative. So long as Agent and the Lenders comply with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Agent and the Lenders, Agent and the Lenders shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Borrower bears all risk of loss, damage or destruction of the Collateral. Agent's failure, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Financing Document shall not waive, affect, or diminish any right of Agent thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by Agent and then is only effective for the specific instance and purpose for which it is given. Agent's rights and remedies under this Agreement and the other Financing Documents are cumulative. Agent has all rights and remedies provided under the Code, by Law, or in equity. Agent's exercise of one (1) right or remedy is not an election, and Agent's waiver of any Event of Default is not a continuing waiver. Agent's delay in exercising any remedy is not a waiver, election, or acquiescence.

10.6 Application of Payments and Proceeds. Notwithstanding anything to the contrary contained in this Agreement, upon the occurrence and during the continuance of an Event of Default, (i) Borrower, for itself and the other Credit Parties, irrevocably waives the right to direct the application of any and all payments at any time or times thereafter received by Agent from or on behalf of Borrower of all or any part of the Obligations, and, as between Borrower and the Credit Parties on the one hand and Agent and the Lenders on the other, Agent shall have the continuing and exclusive right to apply and to reapply any and all payments received against the Obligations in such manner as Agent may deem advisable notwithstanding any previous application by Agent, and (ii) unless Agent and the Lenders shall agree otherwise, the proceeds of any sale of, or other realization upon all or any part of the Collateral shall be applied: *first*, to the Protective Advances; *second*, to accrued and unpaid interest on the Obligations (including any interest which, but for the provisions of the United States Bankruptcy Code, would have accrued on such amounts); *third*, to the principal amount of the Obligations outstanding; and *fourth*, to any other indebtedness or obligations of the Credit Parties owing to Agent or any Lender under the Financing Documents. Borrower shall remain fully liable for any deficiency. Any balance remaining shall be delivered to Borrower or to whomever may be lawfully entitled to receive such balance or as a court of competent jurisdiction may direct. Unless Agent and the Lenders shall agree otherwise, in carrying out the foregoing, (x) amounts received shall be applied in the numerical order provided until exhausted prior to the application to the next succeeding category, and (y) each of the Persons entitled to receive a payment in any particular category shall receive an amount equal to its pro rata share of amounts available to be applied pursuant thereto for such category.

10.7 Waivers.

(a) Except as otherwise provided for in this Agreement and to the fullest extent permitted by applicable law, each Borrower waives: (i) presentment, demand and protest, and notice of presentment, dishonor, intent to accelerate, acceleration, protest, default, nonpayment, maturity, release, compromise, settlement, extension or renewal of any or all Financing Documents and hereby ratifies and confirms whatever Agent or the Lenders may do in this regard; (ii) all rights to notice and a hearing prior to Agent's or any Lender's entry upon the premises of a Borrower, the taking possession or control of, or to Agent's or any Lender's replevy, attachment or levy upon, any Collateral or any bond or security which might be required by any court prior to allowing Agent or any Lender to exercise any of its remedies; and (iii) the benefit of all valuation, appraisal and exemption Laws. Each Borrower acknowledges that it has been advised by counsel of its choices and decisions with respect to this Agreement, the other Financing Documents and the transactions evidenced hereby and thereby.

(b) Each Borrower for itself and all its successors and assigns, (i) agrees that its liability shall not be in any manner affected by any indulgence, extension of time, renewal, waiver, or modification granted or consented to by any Lender; (ii) consents to any indulgences and all extensions of time, renewals, waivers, or modifications that may be granted by Agent or any Lender with respect to the payment or other provisions of the Financing Documents, and to any substitution, exchange or release of the Collateral, or any part thereof, with or without substitution, and agrees to the addition or release of any Borrower, endorsers, guarantors, or sureties, or whether primarily or secondarily liable, without notice to any other Borrower and without affecting its liability hereunder; (iii) agrees that its liability shall be unconditional and without regard to the liability of any other Borrower, Agent or any Lender for any tax on the indebtedness; and (iv) to the fullest extent permitted by law, expressly waives the benefit of any statute or rule of law or equity now provided, or which may hereafter be provided, which would produce a result contrary to or in conflict with the foregoing.

(c) To the extent that Agent or any Lender may have acquiesced in any noncompliance with any requirements or conditions precedent to the closing of the Credit Facilities or to any subsequent disbursement of Credit Extensions, such acquiescence shall not be deemed to constitute a waiver by Agent or any Lender of such requirements with respect to any future Credit Extensions and Agent may at any time after such acquiescence require Borrower to comply with all such requirements. Any forbearance by Agent or a Lender in exercising any right or remedy under any of the Financing Documents, or otherwise afforded by applicable law, including any failure to accelerate the maturity date of the Credit Facilities, shall not be a waiver of or preclude the exercise of any right or remedy nor shall it serve as a novation of the Financing Documents or as a reinstatement of the Obligations or a waiver of such right of acceleration or the right to insist upon strict compliance of the terms of the Financing Documents. Agent's or any Lender's acceptance of payment of any sum secured by any of the Financing Documents after the due date of such payment shall not be a waiver of Agent's and such Lender's right to either require prompt payment when due of all other sums so secured or to declare a default for failure to make prompt payment. The procurement of insurance or the payment of taxes or other Liens or charges by Agent as the result of an Event of Default shall not be a waiver of Agent's right to accelerate the maturity of the Obligations, nor shall Agent's receipt of any condemnation awards, insurance proceeds, or damages under this Agreement operate to cure or waive any Credit Party's default in payment of sums secured by any of the Financing Documents.

(d) Without limiting the generality of anything contained in this Agreement or the other Financing Documents, each Borrower agrees that if an Event of Default is continuing (i) Agent and the Lenders shall not be subject to any "one action" or "election of remedies" law or rule, and (ii) all Liens and other rights, remedies or privileges provided to Agent or the Lenders shall remain in full force and effect until Agent or the Lenders have exhausted all remedies against the Collateral and any other properties owned by Borrower and the Financing Documents and other security instruments or agreements securing the Obligations have been foreclosed, sold and/or otherwise realized upon in satisfaction of Borrower's obligations under the Financing Documents.

(e) Neither Agent nor any Lender shall be under any obligation to marshal any assets in payment of any or all of the Obligations. Nothing contained herein or in any other Financing Document shall be construed as requiring Agent or any Lender to resort to any part of the Collateral for the satisfaction of any of Borrower's obligations under the Financing Documents in preference or priority to any other Collateral, and Agent may seek satisfaction out of all of the Collateral or any part thereof, in its absolute discretion in respect of Borrower's obligations under the Financing Documents. To the fullest extent permitted by law, each Borrower, for itself and its successors and assigns, waives in the event of foreclosure of any or all of the Collateral any equitable right otherwise available to any Credit Party which would require the separate sale of any of the Collateral or require Agent or the Lenders to exhaust their remedies against any part of the Collateral before proceeding against any other part of the Collateral; and further in the event of such foreclosure each Borrower does hereby expressly consent to and authorize, at the option of Agent, the foreclosure and sale either separately or together of each part of the Collateral.

10.8 Injunctive Relief. The parties acknowledge and agree that, in the event of a breach or written threatened breach of any Credit Party's obligations under any Financing Documents, Agent and the Lenders may have no adequate remedy in money damages and, accordingly, shall be entitled to an injunction (including, without limitation, a temporary restraining order, preliminary injunction, writ of attachment, or order compelling an audit) against such breach or written threatened breach, including, without limitation, maintaining any cash management and collection procedure described herein. However, no specification in this Agreement of a specific legal or equitable remedy shall be construed as a waiver or prohibition against any other legal or equitable remedies in the event of a breach or written threatened breach of any provision of this Agreement. Each Credit Party waives, to the fullest extent permitted by law, the requirement of the posting of any bond in connection with such injunctive relief. By joining in the Financing Documents as a Credit Party, each Credit Party specifically joins in this Section 10.8 as if this Section 10.8 were a part of each Financing Document executed by such Credit Party.

11. NOTICES

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Financing Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by electronic mail (if an email address is specified herein) or facsimile transmission; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, facsimile number, or email address indicated below. Any of Agent, a Lender or Borrower may change its mailing or electronic mail address or facsimile number by giving the other party written notice thereof in accordance with the terms of this Article 11.

If to Borrower:

MannKind Corporation
30930 Russell Ranch Road, Suite 300
Westlake Village, CA 91362
Attn: Steven Binder, CFO
Email:sbinder@mannkindcorp.com

If to Agent or to MidCap (or any of its Affiliates or Approved Funds) as a Lender:

MidCap Financial Trust
c/o MidCap Financial Services, LLC, as servicer
7255 Woodmont Ave, Suite 200
Bethesda, MD 20814
Attn: Account Manager for MannKind transaction
Fax: 301-941-1450
Email: notices@midcapfinancial.com

With a copy to:

MidCap Financial Trust
c/o MidCap Financial Services, LLC, as servicer
7255 Woodmont Ave, Suite 200
Bethesda, MD 20814
Attn: Legal
Fax: 301-941-1450
Email: legalnotices@midcapfinancial.com

If to any Lender other than MidCap: at the address set forth on the signature pages to this Agreement or provided as a notice address for such in connection with any assignment hereunder.

12. CHOICE OF LAW, VENUE AND JURY TRIAL WAIVER; CALIFORNIA WAIVERS

12.1 THIS AGREEMENT, EACH SECURED PROMISSORY NOTE AND EACH OTHER FINANCING DOCUMENT (EXCLUDING THOSE FINANCING DOCUMENTS OR PORTIONS THEREOF THAT BY THEIR OWN TERMS ARE EXPRESSLY GOVERNED BY THE LAWS OF ANOTHER JURISDICTION), AND THE RIGHTS, REMEDIES AND OBLIGATIONS OF THE PARTIES HERETO AND THERETO, AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AGREEMENT OR SUCH FINANCING DOCUMENT (EXCLUDING THOSE FINANCING DOCUMENTS OR PORTIONS THEREOF THAT BY THEIR OWN TERMS ARE EXPRESSLY GOVERNED BY THE LAWS OF ANOTHER JURISDICTION), THE RELATIONSHIP OF THE PARTIES, AND/OR THE INTERPRETATION AND ENFORCEMENT OF THE RIGHTS AND DUTIES OF THE PARTIES AND ALL OTHER MATTERS RELATING HERETO, THERETO OR ARISING THEREFROM (WHETHER SOUNDING IN CONTRACT LAW, TORT LAW OR OTHERWISE), SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK, WITHOUT REFERENCE TO ITS CONFLICT OF LAW PROVISIONS (OTHER THAN SECTION 5-1401 OF THE GENERAL OBLIGATIONS LAW). NOTWITHSTANDING THE FOREGOING, AGENT AND THE LENDERS SHALL HAVE THE RIGHT TO BRING ANY ACTION OR PROCEEDING AGAINST BORROWER OR ITS PROPERTY IN THE COURTS OF ANY OTHER JURISDICTION WHICH AGENT AND THE LENDERS (IN ACCORDANCE WITH THE PROVISIONS OF SECTION 12.1) DEEM NECESSARY OR APPROPRIATE TO REALIZE ON THE COLLATERAL OR TO OTHERWISE ENFORCE AGENT'S AND LENDERS' RIGHTS AGAINST BORROWER OR ITS PROPERTY. BORROWER EXPRESSLY SUBMITS AND CONSENTS IN ADVANCE TO THE JURISDICTION OF THE FEDERAL AND STATE COURTS LOCATED IN THE STATE OF NEW YORK AND ANY SUCH OTHER JURISDICTION IN ANY ACTION OR SUIT COMMENCED IN ANY SUCH COURT, AND BORROWER HEREBY WAIVES ANY OBJECTION THAT IT MAY HAVE BASED UPON LACK OF PERSONAL JURISDICTION, IMPROPER VENUE, OR FORUM NON CONVENIENS AND HEREBY CONSENTS TO THE GRANTING OF SUCH LEGAL OR EQUITABLE RELIEF AS IS DEEMED APPROPRIATE BY SUCH COURT. BORROWER HEREBY WAIVES PERSONAL SERVICE OF THE SUMMONS, COMPLAINTS, AND OTHER PROCESS ISSUED IN SUCH ACTION OR SUIT AND AGREES THAT SERVICE OF SUCH SUMMONS, COMPLAINTS, AND OTHER PROCESS MAY BE MADE BY REGISTERED OR CERTIFIED MAIL ADDRESSED TO BORROWER AT THE ADDRESS SET FORTH IN ARTICLE 11 OF THIS AGREEMENT AND THAT SERVICE SO MADE SHALL BE DEEMED COMPLETED UPON THE EARLIER TO OCCUR OF BORROWER'S ACTUAL RECEIPT THEREOF OR THREE (3) DAYS AFTER DEPOSIT IN THE U.S. MAIL, PROPER POSTAGE PREPAID.

12.2

(a) TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, BORROWER, AGENT AND THE LENDERS EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE FINANCING DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR BOTH PARTIES TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

(b) IN THE EVENT THAT ANY SUCH ACTION IS COMMENCED OR MAINTAINED IN ANY COURT IN THE STATE OF CALIFORNIA, AND THE WAIVER OF JURY TRIAL SET FORTH IN THE SECTION ABOVE IS NOT ENFORCEABLE, AND EACH PARTY TO SUCH ACTION DOES NOT SUBSEQUENTLY WAIVE IN AN EFFECTIVE MANNER UNDER CALIFORNIA LAW ITS RIGHT TO A TRIAL BY JURY, THE PARTIES HERETO HEREBY ELECT TO PROCEED AS FOLLOWS:

(i) WITH THE EXCEPTION OF THE ITEMS SPECIFIED IN **CLAUSE (ii)** BELOW, ANY CONTROVERSY, DISPUTE OR CLAIM (EACH, A "**CONTROVERSY**") BETWEEN THE

PARTIES ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER FINANCING DOCUMENT WILL BE RESOLVED BY A REFERENCE PROCEEDING IN ACCORDANCE WITH THE PROVISIONS OF SECTIONS 638, *ET SEQ*. OF THE CALIFORNIA CODE OF CIVIL PROCEDURE, OR THEIR SUCCESSOR SECTIONS, WHICH SHALL CONSTITUTE THE EXCLUSIVE REMEDY FOR THE RESOLUTION OF ANY CONTROVERSY, INCLUDING WHETHER THE CONTROVERSY IS SUBJECT TO THE REFERENCE PROCEEDING. EXCEPT AS OTHERWISE PROVIDED ABOVE, VENUE FOR THE REFERENCE PROCEEDING WILL BE IN ANY COURT IN WHICH VENUE IS APPROPRIATE UNDER APPLICABLE LAW (THE "**COURT**").

(ii) THE MATTERS THAT SHALL NOT BE SUBJECT TO A REFERENCE PROCEEDING ARE THE FOLLOWING: (A) NON-JUDICIAL FORECLOSURE OF ANY SECURITY INTERESTS IN REAL OR PERSONAL PROPERTY; (B) EXERCISE OF SELF HELP REMEDIES (INCLUDING SET-OFF); (C) APPOINTMENT OF A RECEIVER; AND (D) TEMPORARY, PROVISIONAL OR ANCILLARY REMEDIES (INCLUDING WRITS OF ATTACHMENT, WRITS OF POSSESSION, TEMPORARY RESTRAINING ORDERS OR PRELIMINARY INJUNCTIONS). THIS AGREEMENT DOES NOT LIMIT THE RIGHT OF ANY PARTY TO EXERCISE OR OPPOSE ANY OF THE RIGHTS AND REMEDIES DESCRIBED IN **CLAUSES (A)** AND **(B)** OR TO SEEK OR OPPOSE FROM A COURT OF COMPETENT JURISDICTION ANY OF THE ITEMS DESCRIBED IN **CLAUSES (C)** AND **(D)**. THE EXERCISE OF, OR OPPOSITION TO, ANY OF THOSE ITEMS DOES NOT WAIVE THE RIGHT OF ANY PARTY TO A REFERENCE PROCEEDING PURSUANT TO THIS AGREEMENT.

(iii) THE REFEREE SHALL BE A RETIRED JUDGE OR JUSTICE SELECTED BY MUTUAL WRITTEN AGREEMENT OF THE PARTIES. IF THE PARTIES DO NOT AGREE WITHIN TEN (10) DAYS OF A WRITTEN REQUEST TO DO SO BY ANY PARTY, THEN, UPON REQUEST OF ANY PARTY, THE REFEREE SHALL BE SELECTED BY THE PRESIDING JUDGE OF THE COURT (OR HIS OR HER REPRESENTATIVE). A REQUEST FOR APPOINTMENT OF A REFEREE MAY BE HEARD ON AN *EX PARTE* OR EXPEDITED BASIS, AND THE PARTIES AGREE THAT IRREPARABLE HARM WOULD RESULT IF *EX PARTE* RELIEF IS NOT GRANTED.

(iv) EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE REFEREE SHALL DETERMINE THE MANNER IN WHICH THE REFERENCE PROCEEDING IS CONDUCTED INCLUDING THE TIME AND PLACE OF HEARINGS, THE ORDER OF PRESENTATION OF EVIDENCE, AND ALL OTHER QUESTIONS THAT ARISE WITH RESPECT TO THE COURSE OF THE REFERENCE PROCEEDING. ALL PROCEEDINGS AND HEARINGS CONDUCTED BEFORE THE REFEREE, EXCEPT FOR TRIAL, SHALL BE CONDUCTED WITHOUT A COURT REPORTER, EXCEPT THAT WHEN ANY PARTY SO REQUESTS, A COURT REPORTER WILL BE USED AT ANY HEARING CONDUCTED BEFORE THE REFEREE, AND THE REFEREE WILL BE PROVIDED A COURTESY COPY OF THE TRANSCRIPT. THE PARTY MAKING SUCH A REQUEST SHALL HAVE THE OBLIGATION TO ARRANGE FOR THE COURT REPORTER. SUBJECT TO THE REFEREE'S POWER TO AWARD COSTS TO THE PREVAILING PARTY, THE CREDIT PARTIES WILL PAY THE COST OF THE REFEREE AND ALL COURT REPORTERS.

(v) THE REFEREE SHALL BE REQUIRED TO DETERMINE ALL ISSUES IN ACCORDANCE WITH EXISTING APPLICABLE CASE LAW AND STATUTORY LAW. THE RULES OF EVIDENCE APPLICABLE TO PROCEEDINGS AT LAW IN THE COURT WILL BE APPLICABLE TO THE REFERENCE PROCEEDING. THE REFEREE SHALL BE EMPOWERED TO ENTER EQUITABLE AS WELL AS LEGAL RELIEF, ENTER EQUITABLE ORDERS THAT WILL BE BINDING ON THE PARTIES AND RULE ON ANY MOTION THAT WOULD BE AUTHORIZED IN A COURT PROCEEDING. THE REFEREE SHALL ISSUE A DECISION AT THE CLOSE OF THE REFERENCE PROCEEDING WHICH DISPOSES OF ALL CLAIMS OF THE PARTIES THAT ARE THE SUBJECT OF THE REFERENCE PROCEEDING. PURSUANT TO CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 644, SUCH DECISION SHALL BE ENTERED BY THE COURT AS A JUDGMENT OR AN ORDER IN THE SAME MANNER AS IF THE ACTION HAD BEEN TRIED BY THE COURT AND ANY SUCH DECISION WILL BE FINAL, BINDING AND CONCLUSIVE. THE PARTIES RESERVE THE RIGHT TO APPEAL FROM THE FINAL JUDGMENT

OR ORDER OR FROM ANY APPEALABLE DECISION OR ORDER ENTERED BY THE REFEREE. THE PARTIES RESERVE THE RIGHT TO FINDINGS OF FACT, CONCLUSIONS OF LAWS, A WRITTEN STATEMENT OF DECISION, AND THE RIGHT TO MOVE FOR A NEW TRIAL OR A DIFFERENT JUDGMENT, WHICH NEW TRIAL, IF GRANTED, IS ALSO TO BE A REFERENCE PROCEEDING UNDER THIS PROVISION.

(vi) NEITHER THE INCLUSION OF THIS **SECTION 12.2(b)**, NOR ANY REFERENCE TO CALIFORNIA LAW CONTAINED HEREIN SHALL BE DEEMED TO AFFECT OR LIMIT IN ANY WAY THE PARTIES' CHOICE OF NEW YORK LAW OR IMPLY THAT THE CREDIT PARTIES HAVE AGREED TO VENUE IN CALIFORNIA.

12.3 [Reserved].

12.4 [Reserved].

12.5 California Waiver.

(a) BY SIGNING BELOW, EACH BORROWER WAIVES ANY RIGHT, UNDER CALIFORNIA CIVIL CODE SECTION 2954.10 OR OTHERWISE, TO PREPAY ANY PORTION OF THE OUTSTANDING PRINCIPAL BALANCE UNDER THIS AGREEMENT WITHOUT A PREPAYMENT FEE. EACH BORROWER ACKNOWLEDGES THAT PREPAYMENT OF THE PRINCIPAL BALANCE MAY RESULT IN AGENT AND/OR A LENDER INCURRING ADDITIONAL LOSSES, COSTS, EXPENSES AND LIABILITIES, INCLUDING LOST REVENUE AND LOST PROFITS. EACH BORROWER THEREFORE AGREES TO PAY A PREPAYMENT FEE AND HEREIN IF ANY PRINCIPAL AMOUNT IS PREPAID, WHETHER VOLUNTARILY OR BY REASON OF ACCELERATION, INCLUDING ACCELERATION UPON ANY SALE OR OTHER TRANSFER OF ANY INTEREST IN THE COLLATERAL. EACH BORROWER FURTHER AGREES THAT AGENT'S AND EACH LENDER'S WILLINGNESS TO OFFER THE INTEREST RATE DESCRIBED HEREIN TO BORROWER IS SUFFICIENT AND INDEPENDENT CONSIDERATION, GIVEN INDIVIDUAL WEIGHT BY AGENT AND THE LENDERS FOR THIS WAIVER. EACH BORROWER UNDERSTANDS THAT AGENT AND THE LENDERS WOULD NOT OFFER SUCH AN INTEREST RATE TO THE BORROWER ABSENT THIS WAIVER.

(b) California Waiver; No Hearing Required. Each Borrower waives any right or defense it may have at Law or equity, including California Code of Civil Procedure Section 580a, to a fair market value hearing or action to determine a deficiency judgment after a foreclosure.

(c) Borrower Acknowledgment. California Civil Code Section 2955.5(a) provides as follows: "No lender shall require a borrower, as a condition of receiving or maintaining a loan secured by real property, to provide hazard insurance coverage against risks to the improvements on that real property in an amount exceeding the replacement value of the improvements on the property." For purposes of the foregoing, (i) the term "hazard insurance coverage" means insurance against losses caused by perils which are commonly covered in policies described as a "Homeowner's Policy," "General Property Form," "Guaranteed Replacement Cost Insurance," "Special Building Form," "Standard Fire," "Standard Fire with Extended Coverage," "Standard Fire with Special Form Endorsement," or comparable insurance coverage to protect the real property against loss or damage from fire and other perils covered within the scope of a standard extended coverage endorsement, and (ii) the term "Improvements" means buildings or structures attached to the real property. Each Borrower acknowledges having received this disclosure prior to execution of the Financing Documents to be delivered by Borrower in connection with the Credit Facilities.

13. GENERAL PROVISIONS

13.1 Successors and Assigns.

(a) This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not assign this Agreement or any rights or obligations under it without Agent's prior written consent (which may be granted or withheld in Agent's discretion). Any Lender may at any time assign to one (1) or more Eligible Assignees all or any portion of such Lender's Applicable Commitment and/or Credit Extensions, together with all related obligations of such Lender hereunder. Borrower and Agent shall be entitled to continue to deal solely and directly with such Lender in connection with the interests so assigned until Agent shall have received and accepted an effective assignment agreement in form and substance acceptable to Agent, executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such Eligible Assignee as Agent reasonably shall require. Notwithstanding anything set forth in this Agreement to the contrary, any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank; *provided*, *however,* that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto. If requested by Agent, Borrower agrees to (i) execute any documents reasonably required to effectuate and acknowledge each assignment of an Applicable Commitment or Credit Extension to an assignee hereunder, (ii) make Borrower's management available to meet with Agent and prospective participants and assignees of Applicable Commitments or Credit Extensions and (iii) assist Agent or the Lenders in the preparation of information relating to the financial affairs of Borrower as any prospective participant or assignee of an Applicable Commitment or Credit Extension reasonably may request.

(b) From and after the date on which the conditions described above have been met, (i) such Eligible Assignee shall be deemed automatically to have become a party hereto and, to the extent of the interests assigned to such Eligible Assignee pursuant to such assignment agreement, shall have the rights and obligations of a Lender hereunder, and (ii) the assigning Lender, to the extent that rights and obligations hereunder have been assigned by it pursuant to such assignment agreement, shall be released from its rights and obligations hereunder (other than those that survive termination). Upon the request of the Eligible Assignee (and, as applicable, the assigning Lender) pursuant to an effective assignment agreement, each Borrower shall execute and deliver to Agent for delivery to the Eligible Assignee (and, as applicable, the assigning Lender) secured notes in the aggregate principal amount of the Eligible Assignee's Credit Extensions or Applicable Commitments (and, as applicable, secured promissory notes in the principal amount of that portion of the principal amount of the Credit Extensions or Applicable Commitments retained by the assigning Lender).

(c) Agent, acting solely for this purpose as an agent of Borrower, shall maintain at its offices located in Bethesda, Maryland a copy of each assignment agreement delivered to it and a register for the recordation of the names and addresses of each Lender, and the commitments of, and principal amount (and stated interest) of the Credit Extensions owing to, such Lender pursuant to the terms hereof (the "**Register**"). The entries in such Register shall be conclusive, absent manifest error, and Borrower, Agent and the Lenders may treat each Person whose name is recorded therein pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. Such Register shall be available for inspection by Borrower and any Lender, at any reasonable time upon reasonable prior notice to Agent. Each Lender that sells a participation shall, acting solely for this purpose as an agent of Borrower maintain a register on which it enters the name and address of each participant and the principal amounts (and stated interest) of each participant's interest in the Obligations (each, a "**Participant Register**"). The entries in the Participant Registers shall be conclusive, absent manifest error. Each Participant Register shall be available for inspection by Borrower and Agent at any reasonable time upon reasonable prior notice to the applicable Lender; *provided* that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any participant or any information relating to a participant's interest in any commitments, loans, letters of credit or its other obligations under any Financing Document) to any Person (including Borrower) except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. For the avoidance of doubt, Agent (in its capacity as Agent) shall have no responsibility for maintaining a participant register.

(d) Notwithstanding anything to the contrary contained in this Agreement, the Credit Extensions (including any Secured Promissory Notes evidencing such Credit Extensions) are intended to be

registered obligations, the right, title and interest of the Lenders and their assignees in and to such Credit Extensions shall be transferable only upon notation of such transfer in the Register (or an applicable Participant Register) and no assignment thereof shall be effective until recorded therein. It is intended that this Agreement be construed so that the Credit Extensions are at all times maintained in "registered form" within the meaning of Sections 163(f), 871(h)(2) and 881(c)(2) of the IRC and Section 5f.103-1(c) of the United States Treasury Regulations.

13.2 Indemnification.

(a) Borrower hereby agrees to promptly pay (i) (A) all reasonable and documented costs and expenses of Agent (including, without limitation, the costs, expenses and reasonable fees of counsel to, and independent appraisers and consultants retained by, Agent) in connection with the examination, review, due diligence investigation, documentation, negotiation, closing and syndication of the transactions contemplated by the Financing Documents, and in connection with the continued administration of the Financing Documents including (1) any amendments, modifications, consents and waivers to and/or under any and all Financing Documents, and (2) any periodic public record searches conducted by or at the request of Agent (including, without limitation, title investigations, UCC searches, fixture filing searches, judgment, pending litigation and tax lien searches and searches of applicable corporate, limited liability, partnership and related records concerning the continued existence, organization and good standing of certain Persons), and (B) reasonable and documented costs and expenses of Agent in connection with the performance by Agent of its rights and remedies under the Financing Documents; (ii) without limitation of the preceding clause (i), all reasonable and documented costs and expenses of Agent in connection with the creation, perfection and maintenance of Liens pursuant to the Financing Documents; (iii) without limitation of the preceding clause (i), all costs and expenses of Agent in connection with (A) protecting, storing, insuring, handling, maintaining or selling any Collateral, (B) any litigation, dispute, suit or proceeding relating to any Financing Document, and (C) any workout, collection, bankruptcy, insolvency and other enforcement proceedings under any and all of the Financing Documents; (iv) without limitation of the preceding clause (i), all reasonable and documented costs and expenses of Agent in connection with Agent's reservation of funds in anticipation of the funding of the Credit Extensions to be made hereunder; and (v) all costs and expenses incurred by Agent or the Lenders in connection with any litigation, dispute, suit or proceeding relating to any Financing Document and in connection with any workout, collection, bankruptcy, insolvency and other enforcement proceedings under any and all Financing Documents, whether or not Agent or the Lenders are a party thereto.

(b) Borrower hereby agrees to indemnify, pay and hold harmless Agent and the Lenders and the officers, directors, employees, trustees, agents, investment advisors, collateral managers, servicers, and counsel of Agent and the Lenders (collectively called the "**Indemnitees**") from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, expenses and disbursements of any kind or nature whatsoever (including the disbursements and reasonable fees of counsel for such Indemnitee) in connection with any investigative, response, remedial, administrative or judicial matter or proceeding, whether or not such Indemnitee shall be designated a party thereto and including any such proceeding initiated by or on behalf of a Credit Party, and the reasonable expenses of investigation by engineers, environmental consultants and similar technical personnel and any commission, fee or compensation claimed by any broker (other than any broker retained by Agent or the Lenders) asserting any right to payment for the transactions contemplated hereby, which may be imposed on, incurred by or asserted against such Indemnitee as a result of or in connection with the transactions contemplated hereby and the use or intended use of the proceeds of the Credit Facilities, except that Borrower shall have no obligation hereunder to an Indemnitee with respect to any liability resulting from the gross negligence or willful misconduct of such Indemnitee, as determined by a final non-appealable judgment of a court of competent jurisdiction. To the extent that the undertaking set forth in the immediately preceding sentence may be unenforceable, Borrower shall contribute the maximum portion which it is permitted to pay and satisfy under applicable Law to the payment and satisfaction of all such Indemnified Liabilities incurred by the Indemnitees or any of them. No Indemnitee shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed by it through telecommunications, electronic or other information transmission systems in connection with this Agreement or the other Financing Documents or the transactions contemplated hereby or thereby. This Section 13.2 shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

(c) Notwithstanding any contrary provision in this Agreement, the obligations of Borrower under this Section 13.2 shall survive the payment in full of the Obligations and the termination of this Agreement. NO INDEMNITEE SHALL BE RESPONSIBLE OR LIABLE TO ANY CREDIT PARTY OR TO ANY OTHER PARTY TO ANY FINANCING DOCUMENT, ANY SUCCESSOR, ASSIGNEE OR THIRD PARTY BENEFICIARY OR ANY OTHER PERSON ASSERTING CLAIMS DERIVATIVELY THROUGH SUCH PARTY, FOR INDIRECT, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES WHICH MAY BE ALLEGED AS A RESULT OF CREDIT HAVING BEEN EXTENDED, SUSPENDED OR TERMINATED UNDER THIS AGREEMENT OR ANY OTHER FINANCING DOCUMENT OR AS A RESULT OF ANY OTHER TRANSACTION CONTEMPLATED HEREUNDER OR THEREUNDER.

13.3 Time of Essence. Time is of the essence for the payment and performance of the Obligations in this Agreement.

13.4 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

13.5 Correction of Financing Documents. Agent and the Lenders may correct patent errors and fill in any blanks in this Agreement and the other Financing Documents consistent with the agreement of the parties.

13.6 Integration. This Agreement and the other Financing Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Agreement and the Financing Documents merge into this Agreement and the Financing Documents.

13.7 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement. Delivery of an executed signature page of this Agreement by facsimile transmission or electronic transmission shall be as effective as delivery of a manually executed counterpart hereof.

13.8 Survival. All covenants, representations and warranties made in this Agreement continue in full force until this Agreement has terminated pursuant to its terms and all Obligations (other than inchoate indemnity obligations for which no claim has yet been made and any other obligations which, by their terms, are to survive the termination of this Agreement) have been satisfied. The obligation of Borrower in Section 13.2 to indemnify each Lender and Agent shall survive until the statute of limitations with respect to such claim or cause of action shall have run. All powers of attorney and appointments of Agent or any Lender as Borrower's attorney in fact hereunder, and all of Agent's and Lenders' rights and powers in respect thereof, are coupled with an interest, are irrevocable until all Obligations (other than inchoate indemnity obligations for which no claim has yet been made and any other obligations which, by their terms, are to survive the termination of this Agreement) have been fully repaid and performed and Agent's and the Lenders' obligation to provide Credit Extensions terminates.

13.9 Confidentiality. In handling any confidential information of Borrower, each of the Lenders and Agent shall use all reasonable efforts to maintain, in accordance with its customary practices, the confidentiality of information obtained by it pursuant to any Financing Document and designated in writing by any Credit Party as confidential, but disclosure of information may be made: (a) to the Lenders' and Agent's Subsidiaries or Affiliates; (b) to prospective transferees or purchasers of any interest in the Credit Extensions, provided, however, that any such Persons are bound by obligations of confidentiality substantially the same or more stringent than those set forth in this Section 13.9; (c) as required by Law, regulation, subpoena, order or other legal, administrative, governmental or regulatory request; (d) to regulators or as otherwise required in connection with an examination, audit or similar investigation by any Governmental Authority, or to any nationally recognized rating agency; (e) as Agent or any Lender considers appropriate in exercising remedies under the Financing Documents; (f) to financing sources that are advised of the confidential nature of such information and are instructed to keep such information confidential; (g) to third party service providers of the Lenders and/or Agent so long as such service providers are bound to such Lender or Agent by obligations of confidentiality; and (h) in connection with any litigation or other proceeding to which such Lender or Agent or any of their Affiliates is a party or bound, or to the extent necessary to respond to

public statements or disclosures by Credit Parties or their Affiliates referring to a Lender or Agent or any of their Affiliates. Confidential information does not include information that either: (i) is in the public domain or in the Lenders' and/or Agent's possession when disclosed to the Lenders and/or Agent, or becomes part of the public domain after disclosure to the Lenders and/or Agent; or (ii) is disclosed to the Lenders and/or Agent by a third party, if the Lenders and/or Agent does not know that the third party is prohibited from disclosing the information. Agent and/or the Lenders may use confidential information for the development of client databases, reporting purposes, and market analysis, so long as Agent and/or the Lenders, as applicable, do not disclose Borrower's identity or the identity of any Person associated with Borrower unless otherwise permitted by this Agreement. The provisions of the immediately preceding sentence shall survive the termination of this Agreement. The agreements provided under this Section 13.9 supersede all prior agreements, understanding, representations, warranties, and negotiations between the parties about the subject matter of this Section 13.9.

13.10 Right of Set-off. Borrower hereby grants to Agent and to each Lender, a lien, security interest and right of set-off as security for all Obligations to Agent and each Lender hereunder, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Agent or the Lenders or any entity under the control of Agent or the Lenders (including an Agent or Lender Affiliate) or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Agent or the Lenders may set-off the same or any part thereof and apply the same to any liability or obligation of Borrower even though unmatured and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE AGENT TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SET-OFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER, ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

13.11 Publicity. Borrower will not directly or indirectly publish, disclose or otherwise use in any public disclosure, advertising material, promotional material, press release or interview, any reference to the name, logo or any trademark of Agent or any Lender or any of their Affiliates or any reference to this Agreement or the financing evidenced hereby, in any case except as required by applicable Law, subpoena or judicial or similar order, in which case Borrower shall endeavor to give Agent prior written notice of such publication or other disclosure, or with such Agent's or Lender's, as applicable, prior written consent. Each Lender and Borrower hereby authorize each Lender to publish the name of such Lender and Borrower, the existence of the financing arrangements referenced under this Agreement, the primary purpose and/or structure of those arrangements, the amount of credit extended under each facility, the title and role of each party to this Agreement, and the total amount of the financing evidenced hereby in any "tombstone", comparable advertisement or press release which such Lender elects to submit for publication. In addition, each Lender and Borrower agree that each Lender may provide lending industry trade organizations with information necessary and customary for inclusion in league table measurements after the Closing Date. With respect to any of the foregoing, such authorization shall be subject to such Lender providing Borrower and the other Lenders with an opportunity to review and confer with such Lender regarding, and approve, the contents of any such tombstone, advertisement or information, as applicable, prior to its initial submission for publication, but subsequent publications of the same tombstone, advertisement or information shall not require Borrower's approval.

13.12 No Strict Construction**.** The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

13.13 Approvals. Unless expressly provided herein to the contrary, any approval, consent, waiver or satisfaction of Agent or the Lenders with respect to any matter that is the subject of this Agreement or the other Financing Documents may be granted or withheld by Agent and the Lenders in their sole and absolute discretion and credit judgment.

13.14 Amendments; Required Lenders; Inter-Lender Matters.

(a) No amendment, modification, termination or waiver of any provision of this Agreement or any other Financing Document, no approval or consent thereunder, or any consent to any departure by Borrower therefrom (in each case, other than amendments, waivers, approvals or consents deemed ministerial by Agent), shall in any event be effective unless the same shall be in writing and signed by Borrower, Agent and the Required Lenders. Except as set forth in clause (b) below, all such amendments, modifications, terminations or waivers requiring the consent of the "Lenders" shall require the written consent of Required Lenders.

(b) No amendment, modification, termination or waiver of any provision of this Agreement or any other Financing Document shall, unless in writing and signed by Agent and by each Lender directly affected thereby: (i) increase or decrease the Applicable Commitment of any Lender (which shall be deemed to affect all Lenders), (ii) reduce the principal of or rate of interest on any Obligation or the amount of any fees payable hereunder, (iii) postpone the date fixed for or waive any payment of principal of or interest on any Credit Extension, or any fees or reimbursement obligation hereunder, (iv) release all or substantially all of the Collateral, or consent to a transfer of any of the Intellectual Property, in each case, except as otherwise expressly permitted in the Financing Documents (which shall be deemed to affect all Lenders), (v) subordinate the lien granted in favor of Agent securing the Obligations (which shall be deemed to affect all Lenders, except as otherwise provided below), (vi) release a Credit Party from, or consent to a Credit Party's assignment or delegation of, such Credit Party's obligations hereunder and under the other Financing Documents or any Guarantor from its guaranty of the Obligations (which shall be deemed to affect all Lenders) or (vii) amend, modify, terminate or waive this Section 13.14(b) or the definition of "Required Lenders" or "Pro Rata Share" or any other provision hereof specifying the number or percentage of Lenders required to amend, waive or otherwise modify any rights hereunder or make any determination or grant any consent hereunder, without the consent of each Lender. For purposes of the foregoing, no Lender shall be deemed affected by (i) waiver of the imposition of the Default Rate or imposition of the Default Rate to only a portion of the Obligations, (ii) waiver of the accrual of late charges, (iii) waiver of any fee solely payable to Agent under the Financing Documents, (iv) subordination of a lien granted in favor of Agent; *provided* that such subordination is limited to equipment being financed by a third party providing Permitted Indebtedness. Notwithstanding any provision in this Section 13.14 to the contrary, no amendment, modification, termination or waiver affecting or modifying the rights or obligations of Agent hereunder shall be effective unless signed by Agent and the Required Lenders.

(c) Agent shall not grant its written consent to any deviation or departure by Borrower or any Credit Party from the provisions of Article 7 without the prior written consent of the Required Lenders. Required Lenders shall have the right to direct Agent to take any action described in Section 10.2(b). Upon the occurrence of any Event of Default, Agent shall have the right to exercise any and all remedies referenced in Section 10.2 without the written consent of Required Lenders following the occurrence of an "Exigent Circumstance" (as defined below). All matters requiring the satisfaction or acceptance of Agent in the definition of Subordinated Debt shall further require the satisfaction and acceptance of each Required Lender. Any reference in this Agreement to an allocation between or sharing by the Lenders of any right, interest or obligation "ratably," "proportionally" or in similar terms shall refer to Pro Rata Share unless expressly provided otherwise. As used in this Section, "**Exigent Circumstance**" means any event or circumstance that, in the reasonable judgment of Agent, imminently threatens the ability of Agent to realize upon all or any material portion of the Collateral, such as, without limitation, fraudulent removal, concealment, or abscondment thereof, destruction or material waste thereof, or failure of Borrower after reasonable demand to maintain or reinstate adequate casualty insurance coverage, or which, in the judgment of Agent, could result in a material diminution in value of the Collateral.

13.15 Borrower Liability. If there is more than one (1) entity comprising Borrower, then (a) any Borrower may, acting singly, request Credit Extensions hereunder, (b) each Borrower hereby appoints the other as agent for the other for all purposes hereunder, including with respect to requesting Credit Extensions hereunder, (c) each Borrower shall be jointly and severally obligated to pay and perform all obligations under the Financing Documents, including, but not limited to, the obligation to repay all Credit Extensions made hereunder and all other Obligations, regardless of which Borrower actually receives said Credit Extensions, as if each Borrower directly received all Credit Extensions, and (d) each Borrower waives (1) any suretyship defenses available to it under the Code or any other applicable law, and (2) any right to require the Lenders or Agent to: (A) proceed against any Borrower or any other person; (B) proceed against or exhaust any security; or (C) pursue any other remedy. The

Lenders or Agent may exercise or not exercise any right or remedy they have against any Credit Party or any security (including the right to foreclose by judicial or non-judicial sale) without affecting any other Credit Party's liability or any Lien against any other Credit Party's assets. Notwithstanding any other provision of this Agreement or other related document, until the indefeasible payment in cash in full of the Obligations (other than inchoate indemnity obligations for which no claim has yet been made) and termination of the Applicable Commitments, each Borrower irrevocably waives all rights that it may have at law or in equity (including, without limitation, any law subrogating Borrower to the rights of the Lenders and Agent under this Agreement) to seek contribution, indemnification or any other form of reimbursement from any other Credit Party, or any other Person now or hereafter primarily or secondarily liable for any of the Obligations, for any payment made by any Credit Party with respect to the Obligations in connection with this Agreement or otherwise and all rights that it might have to benefit from, or to participate in, any security for the Obligations as a result of any payment made by a Credit Party with respect to the Obligations in connection with this Agreement or otherwise. Any agreement providing for indemnification, reimbursement or any other arrangement prohibited under this Section shall be null and void. If any payment is made to a Credit Party in contravention of this Section, such Credit Party shall hold such payment in trust for the Lenders and Agent and such payment shall be promptly delivered to Agent for application to the Obligations, whether matured or unmatured.

13.16 Reinstatement. This Agreement shall remain in full force and effect and continue to be effective should any petition or other proceeding be filed by or against any Credit Party for liquidation or reorganization, should any Credit Party become insolvent or make an assignment for the benefit of any creditor or creditors or should an interim receiver, receiver, receiver and manager or trustee be appointed for all or any significant part of any Credit Party's assets, and shall continue to be effective or to be reinstated, as the case may be, if at any time payment and performance of the Obligations, or any part thereof, is, pursuant to applicable law, rescinded or reduced in amount, or must otherwise be restored or returned by any obligee of the Obligations, whether as a fraudulent preference reviewable transaction or otherwise, all as though such payment or performance had not been made. In the event that any payment, or any part thereof, is rescinded, reduced, restored or returned, the Obligations shall be reinstated and deemed reduced only by such amount paid and not so rescinded, reduced, restored or returned.

13.17 USA PATRIOT Act Notification. Agent (for itself and not on behalf of any Lender) and each Lender hereby notifies each Borrower that pursuant to the requirements of the USA PATRIOT Act, it is required to obtain, verify and record certain information and documentation that identifies Borrower, which information includes the name and address of Borrower and such other information that will allow Agent or such Lender, as applicable, to identify Borrower in accordance with the USA PATRIOT Act.

13.18 Non-Disturbance. Upon Borrower's reasonable request, Agent agrees to enter into non-disturbance and similar agreements, in each case on terms and conditions reasonably satisfactory to Agent, in connection with Permitted Licenses of Intellectual Property.

14. AGENT

14.1 Appointment and Authorization of Agent. Each Lender hereby irrevocably appoints, designates and authorizes Agent to take such action on its behalf under the provisions of this Agreement and each other Financing Document and to exercise such powers and perform such duties as are expressly delegated to it by the terms of this Agreement or any other Financing Document, together with such powers as are reasonably incidental thereto. The provisions of this Article are solely for the benefit of Agent and the Lenders and none of Credit Parties nor any other Person shall have any rights as a third party beneficiary of any of the provisions hereof. The duties of Agent shall be mechanical and administrative in nature. Notwithstanding any provision to the contrary contained elsewhere herein or in any other Financing Document, Agent shall not have any duties or responsibilities, except those expressly set forth herein, nor shall Agent have or be deemed to have any fiduciary relationship with any Lender or participant, and no implied covenants, functions, responsibilities, duties, obligations or liabilities shall be read into this Agreement or any other Financing Document or otherwise exist against Agent. Without limiting the generality of the foregoing sentence, the use of the term "agent" herein and in the other Financing Documents with reference to Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under

agency doctrine of any applicable Law. Instead, such term is used merely as a matter of market custom, and is intended to create or reflect only an administrative relationship between independent contracting parties. Without limiting the generality of the foregoing, Agent shall have the sole and exclusive right and authority (to the exclusion of the Lenders), and is hereby authorized, to (a) act as collateral agent for Agent and each Lender for purposes of the perfection of all liens created by the Financing Documents and all other purposes stated therein, (b) manage, supervise and otherwise deal with the Collateral, (c) take such other action as is necessary or desirable to maintain the perfection and priority of the liens created or purported to be created by the Financing Documents, (d) except as may be otherwise specified in any Financing Document, exercise all remedies given to Agent and the other Lenders with respect to the Collateral, whether under the Financing Documents, applicable law or otherwise and (e) execute any amendment, consent or waiver under the Financing Documents on behalf of any Lender that has consented in writing to such amendment, consent or waiver; *provided*, *however*, that Agent hereby appoints, authorizes and directs each Lender to act as collateral sub-agent for Agent and the Lenders for purposes of the perfection of all liens with respect to the Collateral, including any deposit account maintained by a Credit Party with, and cash and Cash Equivalents held by, such Lender, and may further authorize and direct the Lenders to take further actions as collateral sub-agents for purposes of enforcing such liens or otherwise to transfer the Collateral subject thereto to Agent, and each Lender hereby agrees to take such further actions to the extent, and only to the extent, so authorized and directed.

14.2 Successor Agent.

(a) Agent may at any time assign its rights, powers, privileges and duties hereunder to (i) another Lender or an Affiliate of Agent or any Lender or any Approved Fund, or (ii) any Person to whom Agent, in its capacity as a Lender, has assigned (or will assign, in conjunction with such assignment of agency rights hereunder) fifty percent (50%) or more of the Credit Extensions or Applicable Commitments then held by Agent (in its capacity as a Lender), in each case without the consent of the Lenders or Borrower. Following any such assignment, Agent shall give notice to the Lenders and Borrower. An assignment by Agent pursuant to this subsection (a) shall not be deemed a resignation by Agent for purposes of subsection (b) below.

(b) Without limiting the rights of Agent to designate an assignee pursuant to subsection (a) above, Agent may at any time give notice of its resignation to the Lenders and Borrower. Upon receipt of any such notice of resignation, Required Lenders shall have the right to appoint a successor Agent. If no such successor shall have been so appointed by Required Lenders and shall have accepted such appointment within ten (10) Business Days after the retiring Agent gives notice of its resignation, then the retiring Agent may, on behalf of the Lenders, appoint a successor Agent; *provided, however,* that if Agent shall notify Borrower and the Lenders that no Person has accepted such appointment, then such resignation shall nonetheless become effective in accordance with such notice from Agent that no Person has accepted such appointment and, from and following delivery of such notice, (i) the retiring Agent shall be discharged from its duties and obligations hereunder and under the other Financing Documents, and (ii) all payments, communications and determinations provided to be made by, to or through Agent shall instead be made by or to each Lender directly, until such time as Required Lenders appoint a successor Agent as provided for above in this subsection (b).

(c) Upon (i) an assignment permitted by subsection (a) above, or (ii) the acceptance of a successor's appointment as Agent pursuant to subsection (b) above, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring (or retired) Agent, and the retiring Agent shall be discharged from all of its duties and obligations hereunder and under the other Financing Documents (if not already discharged therefrom as provided above in this subsection (c)). The fees payable by Borrower to a successor Agent shall be the same as those payable to its predecessor unless otherwise agreed between Borrower and such successor. After the retiring Agent's resignation hereunder and under the other Financing Documents, the provisions of this Article shall continue in effect for the benefit of such retiring Agent and its sub-agents in respect of any actions taken or omitted to be taken by any of them while the retiring Agent was acting or was continuing to act as Agent.

14.3 Delegation of Duties. Agent may execute any of its duties under this Agreement or any other Financing Document by or through its, or its Affiliates', agents, employees or attorneys-in-fact and shall be entitled

to obtain and rely upon the advice of counsel and other consultants or experts concerning all matters pertaining to such duties. Agent shall not be responsible for the negligence or misconduct of any agent or attorney-in-fact that it selects in the absence of gross negligence or willful misconduct. Any such Person to whom Agent delegates a duty shall benefit from this Article 14 to the extent provided by Agent.

14.4 Liability of Agent. Except as otherwise provided herein, no "Agent-Related Person" (as defined below) shall (a) be liable for any action taken or omitted to be taken by any of them under or in connection with this Agreement or any other Financing Document or the transactions contemplated hereby (except for its own gross negligence or willful misconduct in connection with its duties expressly set forth herein), or (b) be responsible in any manner to any Lender or participant for any recital, statement, representation or warranty made by any Credit Party or any officer thereof, contained herein or in any other Financing Document, or in any certificate, report, statement or other document referred to or provided for in, or received by Agent under or in connection with, this Agreement or any other Financing Document, or the validity, effectiveness, genuineness, enforceability or sufficiency of this Agreement or any other Financing Document, or for any failure of any Credit Party or any other party to any Financing Document to perform its obligations hereunder or thereunder. No Agent-Related Person shall be under any obligation to any Lender or participant to ascertain or to inquire as to the observance or performance of any of the agreements contained in, or conditions of, this Agreement or any other Financing Document, or to inspect the Collateral, other properties or books or records of any Credit Party or any Affiliate thereof. The term "**Agent-Related Person**" means Agent, together with its Affiliates, and the officers, directors, employees, agents, advisors, auditors and attorneys-in-fact of such Persons; *provided*, *however*, that no Agent-Related Person shall be an Affiliate of Borrower.

14.5 Reliance by Agent. Agent shall be entitled to rely, and shall be fully protected in relying, upon any writing, communication, signature, resolution, representation, notice, consent, certificate, affidavit, letter, telegram, facsimile, telex or telephone message, electronic mail message, statement or other document or conversation believed by it to be genuine and correct and to have been signed, sent or made by the proper Person or Persons, and upon advice and statements of legal counsel (including counsel to Borrower), independent accountants and other experts selected by Agent. Agent shall be fully justified in failing or refusing to take any action under any Financing Document (a) if such action would, in the opinion of Agent, be contrary to law or any Financing Document, (b) if such action would, in the opinion of Agent, expose Agent to any potential liability under any law, statute or regulation or (c) if Agent shall not first have received such advice or concurrence of all Lenders as it deems appropriate and, if it so requests, it shall first be indemnified to its satisfaction by the Lenders against any and all liability and expense which may be incurred by it by reason of taking or continuing to take any such action. Agent shall in all cases be fully protected in acting, or in refraining from acting, under this Agreement or any other Financing Document in accordance with a request or consent of all Lenders (or Required Lenders where authorized herein) and such request and any action taken or failure to act pursuant thereto shall be binding upon all the Lenders.

14.6 Notice of Default. Agent shall not be deemed to have knowledge or notice of the occurrence of any Default and/or Event of Default, unless Agent shall have received written notice from a Lender or Borrower, describing such default or Event of Default. Agent will notify the Lenders of its receipt of any such notice. While an Event of Default has occurred and is continuing, Agent may (but shall not be obligated to) take such action, or refrain from taking such action, with respect to such Event of Default as Agent shall deem advisable or in the best interests of the Lenders, including without limitation, satisfaction of other security interests, liens or encumbrances on the Collateral not permitted under the Financing Documents, payment of taxes on behalf of Borrower or any other Credit Party, payments to landlords, warehouseman, bailees and other Persons in possession of the Collateral and other actions to protect and safeguard the Collateral, and actions with respect to insurance claims for casualty events affecting a Credit Party and/or the Collateral.

14.7 Credit Decision; Disclosure of Information by Agent. Each Lender acknowledges that no Agent-Related Person has made any representation or warranty to it, and that no act by Agent hereafter taken, including any consent to and acceptance of any assignment or review of the affairs of Borrower or any Affiliate thereof, shall be deemed to constitute any representation or warranty by any Agent-Related Person to any Lender as to any matter, including whether Agent-Related Persons have disclosed material information in their possession. Each Lender represents to Agent that it has, independently and without reliance upon any Agent-Related Person and based on

such documents and information as it has deemed appropriate, made its own appraisal of, and investigation into, the business, prospects, operations, property, financial and other condition and creditworthiness of the Credit Parties, and all applicable bank or other regulatory Laws relating to the transactions contemplated hereby, and made its own decision to enter into this Agreement and to extend credit to Borrower hereunder. Each Lender also represents that it will, independently and without reliance upon any Agent-Related Person and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit analysis, appraisals and decisions in taking or not taking action under this Agreement and the other Financing Documents, and to make such investigations as it deems necessary to inform itself as to the business, prospects, operations, property, financial and other condition and creditworthiness of Borrower. Except for notices, reports and other documents expressly required to be furnished to the Lenders by Agent herein, Agent shall not have any duty or responsibility to provide any Lender with any credit or other information concerning the business, prospects, operations, property, financial and other condition or creditworthiness of any Credit Party which may come into the possession of any Agent-Related Person.

14.8 Indemnification of Agent. Whether or not the transactions contemplated hereby are consummated, each Lender shall, severally and pro rata based on its respective Pro Rata Share, indemnify upon demand each Agent-Related Person (to the extent not reimbursed by or on behalf of Borrower and without limiting the obligation of Borrower to do so), and hold harmless each Agent-Related Person from and against any and all Indemnified Liabilities (which shall not include legal expenses of Agent incurred in connection with the closing of the transactions contemplated by this Agreement) incurred by it; *provided, however*, that no Lender shall be liable for the payment to any Agent-Related Person of any portion of such Indemnified Liabilities to the extent determined in a judgment by a court of competent jurisdiction to have resulted from such Agent-Related Person's own gross negligence or willful misconduct; *provided, however*, that no action taken in accordance with the directions of the Required Lenders shall be deemed to constitute gross negligence or willful misconduct for purposes of this Section. Without limitation of the foregoing, each Lender shall, severally and pro rata based on its respective Pro Rata Share, reimburse Agent upon demand for its ratable share of any costs or out-of-pocket expenses (including Protective Advances incurred after the closing of the transactions contemplated by this Agreement) incurred by Agent (in its capacity as Agent, and not as a Lender) in connection with the preparation, execution, delivery, administration, modification, amendment or enforcement (whether through negotiations, legal proceedings or otherwise) of, or legal advice in respect of rights or responsibilities under, this Agreement, any other Financing Document, or any document contemplated by or referred to herein, to the extent that Agent is not reimbursed for such expenses by or on behalf of Borrower. The undertaking in this Section shall survive the payment in full of the Obligations, the termination of this Agreement and the resignation of Agent. The term "Indemnified Liabilities" means those liabilities described in Section 13.2(a) and Section 13.2(b).

14.9 Agent in its Individual Capacity. With respect to its Credit Extensions, MidCap shall have the same rights and powers under this Agreement as any other Lender and may exercise such rights and powers as though it were not Agent, and the terms "Lender" and "Lenders" include MidCap in its individual capacity. MidCap and its Affiliates may lend money to, invest in, and generally engage in any kind of business with, any Credit Party and any of their Affiliates and any person who may do business with or own securities of any Credit Party or any of their Affiliates, all as if MidCap were not Agent and without any duty to account therefor to Lenders. MidCap and its Affiliates may accept fees and other consideration from a Credit Party for services in connection with this Agreement or otherwise without having to account for the same to the Lenders. Each Lender acknowledges the potential conflict of interest between MidCap as a Lender holding disproportionate interests in the Credit Extensions and MidCap as Agent, and expressly consents to, and waives, any claim based upon, such conflict of interest.

14.10 Agent May File Proofs of Claim. In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to any Credit Party, Agent (irrespective of whether the principal of any Credit Extension, shall then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether Agent shall have made any demand on such Credit Party) shall be entitled and empowered, by intervention in such proceeding or otherwise:

(a) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Credit Extensions and all other Obligations that are owing and unpaid and to file such other

documents as may be necessary or advisable in order to have the claims of the Lenders and Agent (including any claim for the reasonable compensation, expenses, disbursements and advances of the Lenders and Agent and their respective agents and counsel and all other amounts due the Lenders and Agent allowed in such judicial proceeding); and

(b) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender to make such payments to Agent and, in the event that Agent shall consent to the making of such payments directly to the Lenders, to pay to Agent any amount due for the reasonable compensation, expenses, disbursements and advances of Agent and its agents and counsel, including Protective Advances. To the extent that Agent fails timely to do so, each Lender may file a claim relating to such Lender's claim.

14.11 Collateral and Guaranty Matters. The Lenders irrevocably authorize Agent, at its option and in its discretion, to release (a) any Credit Party and any Lien on any Collateral granted to or held by Agent under any Financing Document upon the date that all Obligations (other than inchoate indemnity obligations for which no claim has yet been made and any other obligations which, by their terms, are to survive the termination of this Agreement) due hereunder have been fully and indefeasibly paid in full and no Applicable Commitments or other obligations of any Lender to provide funds to Borrower under this Agreement remain outstanding, and (b) any Lien on any Collateral that is transferred or to be transferred as part of or in connection with any transfer permitted hereunder or under any other Financing Document. Upon request by Agent at any time, all Lenders will confirm in writing Agent's authority to release its interest in particular types or items of Collateral pursuant to this Section 14.11.

14.12 Advances; Payments; Non-Funding Lenders.

(a) Advances; Payments. If Agent receives any payment for the account of the Lenders on or prior to 11:00 a.m. (New York time) on any Business Day, Agent shall pay to each applicable Lender such Lender's Pro Rata Share of such payment on such Business Day. If Agent receives any payment for the account of the Lenders after 11:00 a.m. (New York time) on any Business Day, Agent shall pay to each applicable Lender such Lender's Pro Rata Share of such payment on the next Business Day. To the extent that any Lender has failed to fund any Credit Extension (a "**Non-Funding Lender**"), Agent shall be entitled to set-off the funding short-fall against that Non-Funding Lender's Pro Rata Share of all payments received from Borrower.

(b) Return of Payments.

(i) If Agent pays an amount to a Lender under this Agreement in the belief or expectation that a related payment has been or will be received by Agent from a Credit Party and such related payment is not received by Agent, then Agent will be entitled to recover such amount (including interest accruing on such amount at the Federal Funds Rate for the first Business Day and thereafter, at the rate otherwise applicable to such Obligation) from such Lender on demand without set-off, counterclaim or deduction of any kind.

(ii) If Agent determines at any time that any amount received by Agent under this Agreement must be returned to a Credit Party or paid to any other person pursuant to any insolvency law or otherwise, then, notwithstanding any other term or condition of this Agreement or any other Financing Document, Agent will not be required to distribute any portion thereof to any Lender. In addition, each Lender will repay to Agent on demand any portion of such amount that Agent has distributed to such Lender, together with interest at such rate, if any, as Agent is required to pay to a Credit Party or such other person, without set-off, counterclaim or deduction of any kind.

14.13 Miscellaneous.

(a) Neither Agent nor any Lender shall be responsible for the failure of any Non-Funding Lender to make a Credit Extension or make any other advance required hereunder. The failure of any Non-Funding Lender to make any Credit Extension or any payment required by it hereunder shall not relieve any other Lender (each such other Lender, an "**Other Lender**") of its obligations to make the Credit Extension or payment required by it, but neither any Other Lender nor Agent shall be responsible for the failure of any Non-Funding Lender to make a Credit Extension or make any other payment required hereunder. Notwithstanding anything set forth herein to the contrary, a Non-Funding Lender shall not have any voting or consent rights under or with respect to any Financing Document or constitute a "Lender" (or be included in the calculation of "Required Lender" hereunder) for any voting or consent rights under or with respect to any Financing Document. At Borrower's request, Agent or a person reasonably acceptable to Agent shall have the right with Agent's consent and in Agent's sole discretion (but shall have no obligation) to purchase from any Non-Funding Lender, and each Non-Funding Lender agrees that it shall, at Agent's request, sell and assign to Agent or such person, all of the Applicable Commitments and all of the outstanding Credit Extensions of that Non-Funding Lender for an amount equal to the principal balance of the Credit Extensions held by such Non-Funding Lender and all accrued interest and fees with respect thereto through the date of sale, such purchase and sale to be consummated pursuant to an executed assignment agreement reasonably acceptable to Agent.

(b) Each Lender shall promptly remit to the other Lenders such sums as may be necessary to ensure the ratable repayment of each Lender's portion of any Credit Extension and the ratable distribution of interest, fees and reimbursements paid or made by any Credit Party. Notwithstanding the foregoing, if this Agreement requires payments of principal and interest to be made directly to the Lenders, a Lender receiving a scheduled payment shall not be responsible for determining whether the other Lenders also received their scheduled payment on such date; *provided*, *however*, if it is determined that a Lender received more than its ratable share of scheduled payments made on any date or dates, then such Lender shall remit to Agent (for Agent to redistribute to itself and the Lenders in a manner to ensure the payment to Agent of any sums due Agent hereunder and the ratable repayment of each Lender's portion of any Credit Extension and the ratable distribution of interest, fees and reimbursements) such sums as may be necessary to ensure the ratable payment of such scheduled payments, as instructed by Agent. If any payment or distribution of any kind or character, whether in cash, properties or securities and whether voluntary, involuntary, through the exercise of any right of set-off, or otherwise, shall be received by a Lender in excess of its ratable share, then (i) the portion of such payment or distribution in excess of such Lender's ratable share shall be received by such Lender in trust for application to the payments of amounts due on the other Lender's claims, or, in the case of Collateral, shall hold such Collateral for itself and as agent and bailee for Agent and other Lenders and (ii) such Lender shall promptly advise Agent of the receipt of such payment, and, within five (5) Business Days of such receipt and, in the case of payments and distributions, such Lender shall purchase (for cash at face value) from the other Lenders (through Agent), without recourse, such participations in the Credit Extension made by the other Lenders as shall be necessary to cause such purchasing Lender to share the excess payment ratably with each of them in accordance with the respective Pro Rata Shares of the Lenders; *provided*, *however*, that if all or any portion of such excess payment is thereafter recovered by or on behalf of a Credit Party from such purchasing Lender, the purchase shall be rescinded and the purchase price restored to the extent of such recovery, but without interest; *provided*, *further*, that the provisions of this Section shall not be construed to apply to (x) any payment made by a Credit Party pursuant to and in accordance with the express terms of this Agreement or the other Financing Documents, or (y) any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Applicable Commitment pursuant to Section 13.1. Borrower agrees that any Lender so purchasing a participation from another Lender pursuant to this Section may exercise all of its rights of payment (including the right of set-off) with respect to such participation as fully as if such Lender were the direct creditor of Borrower in the amount of such participation. No documentation other than notices and the like shall be required to implement the terms of this Section. Agent shall keep records (which shall be conclusive and binding in the absence of manifest error) of participations purchased pursuant to this Section and shall in each case notify the Lenders following any such purchases.

15. DEFINITIONS

In addition to any terms defined elsewhere in this Agreement, or in any schedule or exhibit attached hereto, as used in this Agreement, the following terms have the following meanings:

"**Access Agreement**" means a landlord consent, bailee letter or warehouseman's letter, in form and substance reasonably satisfactory to Agent, in favor of Agent executed by such landlord, bailee or warehouseman, as applicable, for any third party location.

"**Account**" means any "account", as defined in the Code, with such additions to such term as may hereafter be made, and includes, without limitation, all accounts receivable and other sums owing to Borrower.

"**Account Debtor**" means any "account debtor", as defined in the Code, with such additions to such term as may hereafter be made.

"**Acquisition**" means any transaction or series of related transactions for the purpose of or resulting, directly or indirectly, in (a) the acquisition of all or substantially all of the assets of a Person, or of any business, line of business or division or other unit of operation of a Person, (b) the acquisition of fifty percent (50%) or more of the equity interests of any Person, whether or not involving a merger or consolidation with such other Person, or otherwise causing any Person to become a Subsidiary of a Credit Party, (c) any merger or consolidation or any other combination with another Person or (d) the acquisition (including through licensing) of any product, product line or Intellectual Property of or from any other Person.

"**Affiliate**" means, with respect to any Person, a Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person's senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person's managers and members.

"**Afrezza Net Revenue**" means, for any applicable period, (a) the gross revenues of Borrowers generated solely through the commercial sale of Borrower's Afrezza Products by Borrowers during such period, less (b)(i) trade, quantity and cash discounts allowed by Borrower in respect of such Afrezza Products, (ii) discounts, refunds, rebates, charge backs, retroactive price adjustments and any other allowances which effectively reduce net selling price of such Afrezza Products, (iii) product returns and allowances in respect of such Afrezza Products, (iv) allowances for shipping or other distribution expenses in respect of such Afrezza Products, (iv) set-offs and counterclaims in respect of such Afrezza Products, and (v) any other similar and customary deductions used by Borrower in determining net revenues attributable to such Afrezza Products, all, in respect of (a) and (b), as determined in accordance with GAAP and in the Ordinary Course of Business.

"**Afrezza Products**" means AFREZZA® (insulin human rDNA origin) inhalation powder and any bioequivalent thereto.

"**Agent**" means, MidCap, not in its individual capacity, but solely in its capacity as agent on behalf of and for the benefit of the Lenders, together with its successors and assigns.

"**Agreement**" has the meaning given it in the preamble of this Agreement.

"**Anti-Terrorism Laws**" means any Laws relating to terrorism or money laundering, including Executive Order No. 13224 (effective September 24, 2001), the USA PATRIOT Act, the Laws comprising or implementing the Bank Secrecy Act, and the Laws administered by OFAC.

"**Applicable Commitment**" has the meaning given it in Section 2.2

"**Applicable Floor**" means for each Credit Facility the per annum rate of interest specified on the Credit Facility Schedule.

"**Applicable Index Rate**" means, for any Applicable Interest Period, the rate per annum determined by Agent equal to the Applicable Libor Rate; *provided*, *however*, that in the event that any change in market conditions or any law, regulation, treaty, or directive, or any change therein or in the interpretation of application thereof, shall at any time after the date hereof, in the reasonable opinion of Agent or any Lender, make it unlawful or impractical

for Agent or such Lender to fund or maintain Obligations bearing interest based upon the Applicable Libor Rate, Agent or such Lender shall give notice of such changed circumstances to Agent and Borrower and the Applicable Index Rate for Obligations outstanding or thereafter extended or made by Agent or such Lender shall thereafter be the Applicable Prime Rate until Agent or such Lender determines (as to the portion of the Credit Extensions or Obligations owed to it) that it would no longer be unlawful or impractical to fund or maintain such Obligations or Credit Extensions at the Applicable Libor Rate. In the event that Agent shall have determined (which determination shall be final and conclusive and binding upon all parties hereto), as of any Applicable Interest Rate Determination Date, that adequate and fair means do not exist for ascertaining the interest rate applicable to any Credit Facility on the basis provided for herein, then Agent may select a comparable replacement index and corresponding margin.

"**Applicable Interest Period**" for each Credit Facility has the meaning specified for that Credit Facility in the Credit Facility Schedule; *provided*, *however*, that, at any time that the Applicable Prime Rate is the Applicable Index Rate, Applicable Interest Period shall mean the period commencing as of the most recent Applicable Interest Rate Determination Date and continuing until the next Applicable Interest Rate Determination Date or such earlier date as the Applicable Prime Rate shall no longer be the Applicable Index Rate; and *provided*, *further*, that, at any time the Libor Rate Index is adjusted as set forth in the definition thereof, or re-implemented following invocation of the Applicable Prime Rate as permitted herein, the Applicable Interest Period shall mean the period commencing as of such adjustment or re-implementation and continuing until the next Applicable Interest Rate Determination Date, if any.

"Applicable Interest Rate" means a per annum rate of interest equal to the Applicable Index Rate plus the Applicable Margin.

"**Applicable Interest Rate Determination Date**" means the second (2nd) Business Day prior to the first (1st) day of the related Applicable Interest Period; *provided*, *however*, that, at any time that the Applicable Prime Rate is the Applicable Index Rate, Applicable Interest Rate Determination Date means the date of any change in the Base Rate Index; and *provided*, *further*, that, at any time the Libor Rate Index is adjusted as set forth in the definition thereof, the Applicable Interest Rate Determination Date shall mean the date of such adjustment or the second (2nd) Business Day prior to the first (1st) day of the related Applicable Interest Period, as elected by Agent.

"**Applicable Libor Rate**" means, for any Applicable Interest Period, the rate per annum, determined by Agent (rounded upwards, if necessary, to the next 1/100th%), equal to the greater of (a) the Applicable Floor and (b) the Libor Rate Index.

"**Applicable Margin**" for each Credit Facility has the meaning specified for that Credit Facility in the Credit Facility Schedule.

"**Applicable Prepayment Fee**", for each Credit Facility, has the meaning given it in the Credit Facility Schedule for such Credit Facility.

"**Applicable Prime Rate**" means, for any Applicable Interest Period, the rate per annum, determined by Agent (rounded upwards, if necessary, to the next 1/100th%), equal to the greater of (a) the Applicable Floor and (b) the Base Rate Index.

"**Approved Fund**" means any (a) investment company, fund, trust, securitization vehicle or conduit that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the Ordinary Course of Business, or (b) any Person (other than a natural person) which temporarily warehouses loans for any Lender or any entity described in the preceding clause (a) and that, with respect to each of the preceding clauses (a) and (b), is administered or managed by (i) a Lender, (ii) an Affiliate of a Lender or (iii) a Person (other than a natural person) or an Affiliate of a Person (other than a natural person) that administers or manages a Lender.

"**Base Rate Index**" means, for any Applicable Interest Period, the rate per annum, determined by Agent (rounded upwards, if necessary, to the next 1/100th%) as being the rate of interest announced, from time to time,

within Wells Fargo Bank, N.A. ("**Wells Fargo**") at its principal office in San Francisco as its "prime rate," with the understanding that the "prime rate" is one of Wells Fargo's base rates (not necessarily the lowest of such rates) and serves as the basis upon which effective rates of interest are calculated for those loans making reference thereto and is evidenced by the recording thereof after its announcement in such internal publications as Wells Fargo may designate; *provided*, *however*, that Agent may, upon prior written notice to any Borrower and in consultation with Borrower, choose a reasonably comparable index or source to use as the basis for the Base Rate Index.

"**Blocked Person**" means: (a) any Person listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (c) a Person with whom any Lender is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law, (d) a Person that commits, threatens or conspires to commit or supports "terrorism" as defined in Executive Order No. 13224, or (e) a Person that is named a "specially designated national" or "blocked person" on the most current list published by OFAC or other similar list.

"**Books**" means all books and records of a Person, including ledgers, federal and state tax returns, records regarding the Person's assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

"**Borrower**" mean the entity(ies) described in the first paragraph of this Agreement and each of their successors and permitted assigns. The term "each Borrower" shall refer to each Person comprising the Borrower if there is more than one (1) such Person, or the sole Borrower if there is only one (1) such Person. The term "any Borrower" shall refer to any Person comprising the Borrower if there is more than one (1) such Person, or the sole Borrower if there is only one (1) such Person.

"Borrower Unrestricted Cash" means unrestricted cash and Cash Equivalents of Borrower that (a) are subject to Agent's first priority perfected lien and held in the name of Borrower in a Deposit Account or Securities Account that is subject to a Control Agreement in favor of Agent at a bank or financial institution located in the United States, (b) is not subject to any Lien (other than a Lien in favor of Agent), and (c) are not funds for the payment of a drawn or committed but unpaid draft, ACH or EFT transaction.

"**Borrowing Resolutions**" means, with respect to any Person, those resolutions, in form and substance satisfactory to Agent, adopted by such Person's Board of Directors or other appropriate governing body and delivered by such Person to Agent approving the Financing Documents to which such Person is a party and the transactions contemplated thereby, as well as any other approvals as may be necessary or desired to approve the entering into the Financing Documents or the consummation of the transactions contemplated thereby or in connection therewith.

"**Bruce Notes**" means, collectively, (i) that certain Promissory Note due June 30, 2020, dated as of the date hereof, in the initial principal amount of $2,630,750 issued in favor of Bruce Fund, Inc. (the "**June 30, 2020 Bruce Note**") and (ii) that certain Promissory Note dated as of the date hereof in the initial principal amount of $2,630,750 due December 31, 2020 issued in favor of Bruce Fund, Inc. (the "**December 31, 2020 Bruce Note**"), in each case, as amended, supplemented or restated from time to time in accordance with the Bruce Note Subordination Agreement.

"**Bruce Note Obligations**" means the obligations, liabilities and Indebtedness owing by Borrower under or pursuant to the Bruce Notes.

"**Bruce Note Subordination Agreement**" means that certain Subordination Agreement dated as of the date hereof by and between Agent and Bruce Fund, Inc., as the same may be amended, restated, supplemented or otherwise modified from time to time.

"**Business Day**" means any day that is not (a) a Saturday or Sunday or (b) a day on which Agent is closed.

"**Cash Collateral Accounts**" means, collectively, (a) the Credit Card Cash Collateral Accounts and (b) the LC Cash Collateral Account.

"**Cash Equivalents**" means (a) any readily-marketable securities (i) issued by, or directly, unconditionally and fully guaranteed or insured by the United States federal government or (ii) issued by any agency of the United States federal government the obligations of which are fully backed by the full faith and credit of the United States federal government, (b) any readily-marketable direct obligations issued by any other agency of the United States federal government, any state of the United States or any political subdivision of any such state or any public instrumentality thereof, in each case having a rating of at least "A-1" from S&P or at least "P-1" from Moody's, (c) any commercial paper rated at least "A-1" by S&P or "P-1"by Moody's and issued by any Person organized under the laws of any state of the United States, and any corporate notes and corporate bonds with long-term ratings of at least "A" by S&P or "A2" by Moody's and issued by any Person organized under the laws of any state of the United States (d) any United States dollar-denominated time deposit, insured certificate of deposit, overnight bank deposit or bankers' acceptance issued or accepted by (i) any Lender or (ii) any commercial bank that is (A) organized under the laws of the United States, any state thereof or the District of Columbia, (B) "adequately capitalized" (as defined in the regulations of its primary federal banking regulators) and (C) has Tier 1 capital (as defined in such regulations) in excess of $25,000,000 and (e) shares of any United States money market fund that (i) has substantially all of its assets invested continuously in the types of investments referred to in clause (a), (b), (c) or (d) above with maturities as set forth in the proviso below, (ii) has net assets in excess of $500,000,000 and (iii) has obtained from either S&P or Moody's the highest rating obtainable for money market funds in the United States; *provided*, *however*, that the remaining maturities of all obligations specified in any clauses (a), (b), (c) or (d) above shall not exceed one year.

"**Change in Control**" means an event or series of events by which: (a) any "person" or "group" (as such terms are used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934) becomes the "beneficial owner" (as defined in Rules 13d-3 and 13d-5 under the Securities Exchange Act of 1934, except that a person or group shall be deemed to have "beneficial ownership" of all securities that such person or group has the right to acquire, whether such right is exercisable immediately or only after the passage of time (such right, an "option right")), directly or indirectly, of forty percent (40%) or more of the combined voting power of all voting stock of MannKind or any other Borrower (as applicable) on a fully-diluted basis (and taking into account all such securities that such person or group has the right to acquire pursuant to any option right); (b) during any period of twelve (12) consecutive months, a majority of the members of the board of directors or other equivalent governing body of Borrower cease to be composed of individuals (i) who were members of that board or equivalent governing body on the first day of such period, (ii) whose election or nomination to that board or equivalent governing body was approved by individuals referred to in clause (i) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body or (iii) whose election or nomination to that board or other equivalent governing body was approved by individuals referred to in clauses (i) and (ii) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body; (c) Borrower ceases to own and control, directly or indirectly, all of the economic and voting rights associated with the outstanding securities of each of its Subsidiaries, or (d) the occurrence of any "change in control", "fundamental change" or any term or provision of similar effect under any Subordinated Debt Document, the Closing Date Convertible Note Documents, or Borrower's Operating Documents.

"**Closing Date**" has the meaning given it in the preamble of this Agreement.

"**Closing Date Convertible Note(s)**" means that certain 5.75% Convertible Senior Subordinated Exchange Note Due 2024, by MannKind in favor of Bruce Fund, Inc., in an original principal amount equal to $5,000,000.

"**Closing Date Convertible Note Documents**" means (i) that certain Indenture in respect of 5.75% Convertible Senior Subordinated Exchange Notes, dated as of the date hereof between MannKind, as issuer and U.S. Bank National Association as Trustee, (ii) the Closing Date Convertible Notes, (iii) the Closing Date Convertible Notes Exchange Agreement, and (iv) all other agreements and instruments entered into in connection with the foregoing, as the same may be amended, modified, supplemented, replaced or refinanced from time to time on or prior to the Closing Date.

"**Closing Date Convertible Notes Exchange Agreement**" means that certain Exchange Agreement, dated as of the date hereof, by Bruce Fund, Inc., for itself and on behalf of the beneficial owners set forth therein and MannKind.

"**Closing Date Convertible Note Obligations**" means the unsecured obligations, liabilities and Indebtedness owing by Borrower under the Closing Date Convertible Note Documents.

"**Code**" means the Uniform Commercial Code in effect on the date hereof, as the same may, from time to time, be enacted and in effect in the State of New York; *provided*, *however*, that to the extent that the Code is used to define any term herein or in any Financing Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; and *provided*, *further*, that in the event that, by reason of mandatory provisions of Law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Agent's Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State of New York, the term "**Code**" shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

"**Collateral**" means all property, now existing or hereafter acquired, mortgaged or pledged to, or purported to be subjected to a Lien in favor of, Agent, for the benefit of Agent and the Lenders, pursuant to this Agreement and the other Financing Documents (but excluding Excluded Property), including, without limitation, all of the property described in **Exhibit A** hereto.

"**Collateral Account**" means any Deposit Account, Securities Account or Commodity Account.

"**Commitment Commencement Date**" has the meaning given it in the Credit Facility Schedule.

"**Commitment Termination Date**" has the meaning given it in the Credit Facility Schedule.

"**Commodity Account**" means any "commodity account", as defined in the Code, with such additions to such term as may hereafter be made.

"**Competitor**" means, at any time of determination, any Person engaged in the same or substantially the same line of business as the Borrower and the other Credit Parties and such business accounts for all or substantially all of the revenue or net income of such Person at the time of determination.

"**Compliance Certificate**" means a certificate, duly executed by an authorized officer of Borrower, appropriately completed and substantially in the form of **Exhibit B**.

"**Contingent Obligation**" means, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but "Contingent Obligation" does not include endorsements in the Ordinary Course of Business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"**Control Agreement**" means any control agreement, each of which shall be in form and substance satisfactory to Agent, entered into among the depository institution at which Borrower maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower maintains a Securities Account or a Commodity Account, Borrower, and Agent pursuant to which Agent obtains control (within the meaning of the Code) for the benefit of the Lenders over such Deposit Account, Securities Account or Commodity Account.

"**Credit Card Cash Collateral Accounts**" means, collectively, each segregated Deposit Account from time to time identified to Agent in writing established by Borrower for the sole purpose of securing Borrower's obligations under clause (n) of the definition Permitted Indebtedness and containing only such cash or Cash Equivalents that have been required to be pledged to secure such obligations of Borrower; *provided*, that the aggregate amount of cash or Cash Equivalents deposited in such Credit Card Cash Collateral Accounts does not, at any time, exceed One Million Dollars ($1,000,000) in the aggregate.

"**Credit Extension**" means an advance or disbursement of proceeds to or for the account of Borrower in respect of a Credit Facility.

"**Credit Extension Form**" means that certain form attached hereto as **Exhibit C**, as the same may be from time to time revised by Agent.

"**Credit Facility**" means a term loan credit facility specified on the Credit Facility Schedule.

"**Credit Party**" means any Borrower, any Guarantor under a guarantee of the Obligations or any part thereof, and any other Person (other than Agent, a Lender or a participant of a Lender), whether now existing or hereafter acquired or formed, that becomes obligated as a borrower, guarantor, surety, indemnitor, pledgor, assignor or other obligor under any Financing Document; and "**Credit Parties**" means all such Persons, collectively; *provided*, *however*, prior to a Restricted Foreign Subsidiary satisfying the Joinder Requirements in accordance with Section 6.8, such Restricted Foreign Subsidiary shall not be a "Credit Party" for purposes of this Agreement or the other Financing Documents.

"**DEA**" means the Drug Enforcement Administration of the United States of America, any comparable state or local Governmental Authority, any comparable Governmental Authority in any non-United States jurisdiction, and any successor agency of any of the foregoing.

"**Deerfield Milestone Agreement**" means that certain Milestone Rights Purchase Agreement by and among MannKind, Deerfield Private Design Fund II, L.P., and Horizon Sante FLML SARL, dated as of July 1, 2013 as in effect on the Closing Date and without giving effect to any further amendments or modifications thereto.

"**Default**" means any fact, event or circumstance which with notice or passage of time or both, would constitute an Event of Default.

"**Default Rate**" has the meaning given it in Section 2.6(b).

"**Deposit Account**" means any "deposit account" as defined in the Code with such additions to such term as may hereafter be made.

"**Designated Funding Account**" is Borrower's Deposit Account, account number 4123713448, maintained with Wells Fargo and over which Agent has been granted a Control Agreement.

"**Disclosure Letter**" means that certain Disclosure Letter, dated as of the date hereof, to which each of the Disclosure Schedule, Intangible Assets Schedule, Products Schedule, and Required Permits Schedule referenced herein is attached and as updated from time to time in accordance with the terms of this Agreement. Each reference in this Agreement to the Disclosure Schedule, Intangible Assets Schedule, Products Schedule, or Required Permits Schedule shall refer to the applicable Schedule attached to the Disclosure Letter.

"**Disqualified Stock**" means, with respect to any Person, any equity interest in such Person that, within less than 91 days after the Maturity Date, either by its terms (or by the terms of any security or other equity interests into which it is convertible or for which it is exchangeable) or upon the happening of any event or condition, (a) matures

or is mandatorily redeemable (other than solely for Permitted Indebtedness or other equity interests in such Person or of MannKind that do not constitute Disqualified Stock and cash in lieu of fractional shares of such equity interests), pursuant to a sinking fund obligation or otherwise, (b) is redeemable at the option of the holder thereof, in whole or in part (other than solely for Permitted Indebtedness or other equity interests in such Person or of MannKind that do not constitute Disqualified Stock and cash in lieu of fractional shares of such equity interests), (c) provides for the scheduled payments of dividends or distributions in cash, or (d) is or becomes convertible into or exchangeable for Indebtedness (other than Permitted Indebtedness) or any other equity interests that would constitute Disqualified Stock.

"**Dollars**," "**dollars**" and "**$**" each means lawful money of the United States.

"**Draw Period**" means, for each Credit Facility, the period commencing on the Commitment Commencement Date and ending on the Commitment Termination Date.

"**Drug Application**" means a new drug application, an abbreviated drug application, or a product license application for any Product, as appropriate, as those terms are defined in the FDCA.

"**Eligible Assignee**" means (a) a Lender, (b) an Affiliate of a Lender, (c) an Approved Fund, and (d) any other Person (other than a natural person) approved by Agent; *provided*, *however*, that notwithstanding the foregoing, "Eligible Assignee" shall not include (x) any Credit Party or any Subsidiary of a Credit Party or (y) so long as no Event of Default has occurred and is continuing, (i) any vulture hedge fund (other than any Affiliate of a Lender or an Approved Fund) or (ii) a Person known by Agent to be a Competitor, in each case of (i) and (ii) as reasonably determined by Agent. Notwithstanding the foregoing, in connection with assignments by a Lender due to a forced divestiture at the request of any regulatory agency, the restrictions set forth herein shall not apply and Eligible Assignee shall mean any Person or party becoming an assignee incident to such forced divestiture.

"**Environmental Law**" means each present and future law (statutory or common), ordinance, treaty, rule, regulation, order, policy, other legal requirement or determination of an arbitrator or of a Governmental Authority and/or Required Permits imposing liability or standards of conduct for or relating to the regulation and protection of human health, safety, the workplace, the environment and natural resources, and including public notification requirements and environmental transfer of ownership, notification or approval statutes.

"**Equipment**" means all "equipment", as defined in the Code, with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

"**ERISA**" means the Employee Retirement Income Security Act of 1974, and all regulations promulgated thereunder.

"**ERISA Affiliate**" has the meaning given it in Section 5.6.

"**Event of Default**" has the meaning given it in Section 10.1.

"**Excluded Accounts**" means (a) Cash Collateral Accounts, and (b) Collateral Accounts held in jurisdictions outside the United States with an aggregate amount on deposit therein not to exceed $50,000 at any time with respect to all such Collateral Accounts.

"**Excluded Property**" means:

(a) any "intent-to-use" trademark or service mark application for which an amendment to allege use or statement of use has not been filed under 15 U.S.C. § 1051(c) or 15 U.S.C. § 1051(d), respectively, or if filed, has not been deemed in conformance with 15 U.S.C. § 1051(a) or examined and accepted, respectively by the United States Patent and Trademark Office;

(b) any lease, license, contract, permit, letter of credit, purchase money arrangement, instrument or agreement to which any Credit Party is a party or any of its rights or interests thereunder if and to the extent that the grant of such security interest shall constitute or result in (i) the abandonment, invalidation or unenforceability of any right, title or interest of any Credit Party therein or (ii) result in a breach or termination pursuant to the terms of, or default under, any such lease, license, contract, permit, letter of credit, purchase money arrangement, instrument or agreement;

(c) any governmental licenses or state or local franchises, charters and authorizations, to the extent that Agent may not validly possess a security interest in any such license, franchise, charter or authorization under applicable Law; and

(d) more than 65% the voting capital stock of any Restricted Foreign Subsidiary; provided that immediately upon April 1, 2020 (or such earlier date on which such Restricted Foreign Subsidiary becomes a Guarantor), "Collateral" shall automatically and without further action required by, and without notice to, any Person include all of the equity interests of each Restricted Foreign Subsidiary from that time forward and Borrower shall take all such action as is reasonably requested by Agent in order to effect such greater pledged amount.

provided that (x) any such limitation described in the foregoing clauses (b) and (c) on the security interests granted hereunder shall apply only to the extent that any such prohibition could not be rendered ineffective pursuant to the Code or any other applicable Law (including Sections 9-406, 9-407 and 9-408 of the Code) or principles of equity, (y) in the event of the termination or elimination of any such prohibition or the requirement for any consent contained in such contract, agreement, permit, lease or license or in any applicable Law, to the extent sufficient to permit any such item to become Collateral hereunder, or upon the granting of any such consent, or waiving or terminating any requirement for such consent, a security interest in such contract, agreement, permit, lease, license, franchise, authorization or asset shall be automatically and simultaneously granted hereunder and shall be included as Collateral hereunder, and (z) all rights to payment of money due or to become due pursuant to, and all rights to the proceeds from the sale of, all Excluded Property shall be and at all times remain subject to the security interests created by this Agreement (unless such proceeds would independently constitute Excluded Property).

"**Excluded Taxes**" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Credit Extension or Applicable Commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Credit Extension or Applicable Commitment or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 2.6(h)(i) or 2.6(h)(iii), amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) Taxes attributable to such Recipient's failure to comply with Sections 2.6(h)(vi), (vii) or (viii) and (d) any withholding Taxes imposed under FATCA.

"**Exercise Price**" means the ten (10) day trailing volume weighted average of MannKind's common stock price, as determined as of the close of business two (2) Business Days immediately prior to the Closing Date or the funding date for any Credit Extension made thereafter (as applicable).

"**Exigent Circumstance**" has the meaning given it in Section 13.14.

"**Existing Indenture**" means that certain Indenture in respect of 5.75% Convertible Senior Subordinated Exchange Notes, dated as of October 30, 2017 between MannKind, as issuer and U.S. Bank National Association as Trustee.

"**FATCA**" means Sections 1471 through 1474 of the IRC, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the IRC and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention between the United States Internal Revenue Service, the U.S. Government and any governmental or taxation authority under any other jurisdiction which implementing such sections of the IRC..

"**FDA**" means the Food and Drug Administration of the United States of America, any comparable state or local Governmental Authority, any comparable Governmental Authority in any non-United States jurisdiction, and any successor agency of any of the foregoing.

"**FDCA**" means the Federal Food, Drug and Cosmetic Act, as amended, 21 U.S.C. Section 301 et seq., and all regulations promulgated thereunder.

"**Federal Funds Rate**" means, for any day, the rate per annum equal to the weighted average of the rates on overnight Federal funds transactions with members of the Federal Reserve System arranged by Federal funds brokers on such day, as published by the Federal Reserve Bank of New York on the Business Day next succeeding such day, *provided* that if no such rate is so published on such next succeeding Business Day, the Federal Funds Rate for such day shall be the average rate quoted to Agent on such day on such transactions as determined by Agent in a commercially reasonable manner.

"**Fee Letters**" means, collectively, the fee letter agreements among Borrower and Agent and Borrower and each Lender.

"**FF&E**" means personal property delivered upon, attached to, used or required to be used in connection with the operation of any Owned Real Property.

"**Financing Documents**" means, collectively, this Agreement, the Perfection Certificate, the Mortgage and the other Security Documents, the Disclosure Letter, each Subordination Agreement and any subordination or intercreditor agreement pursuant to which any Indebtedness and/or any Liens securing such Indebtedness is subordinated to all or any portion of the Obligations, the Fee Letter(s), each note and guarantee executed by one (1) or more Credit Parties in connection with the indebtedness governed by this Agreement, and each other present or future agreement executed by one (1) or more Credit Parties and, or for the benefit of, the Lenders and/or Agent in connection with this Agreement, all as amended, restated, or otherwise modified from time to time.

"**Foreign Lender**" means a Lender that is not a U.S. Person.

"**Funding Date**" means any date on which a Credit Extension is made to or on account of Borrower which shall be a Business Day.

"**GAAP**" means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession in the United States, which are applicable to the circumstances as of the date of determination.

"**General Intangibles**" means all "general intangibles", as defined in the Code, with such additions to such term as may hereafter be made, and includes without limitation, all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work, whether published or unpublished, any patents, trademarks, service marks and, to the extent permitted under applicable Law, any applications therefor, whether registered or not, any trade secret rights, including any rights to unpatented inventions, payment intangibles, royalties, contract rights, goodwill, franchise agreements, purchase orders, customer lists, route lists, telephone numbers, domain names, claims, income and other tax refunds, security and

other deposits, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including, without limitation, key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

"**Governmental Authority**" means any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

"**Guarantor**" means any present or future guarantor of the Obligations.

"**Hazardous Materials**" means petroleum and petroleum products and compounds containing them, including gasoline, diesel fuel and oil; explosives, flammable materials; radioactive materials; polychlorinated biphenyls and compounds containing them; lead and lead-based paint; asbestos or asbestos-containing materials; underground or above-ground storage tanks, whether empty or containing any substance; any substance the presence of which is prohibited by any Laws; toxic mold, any substance that requires special handling; and any other material or substance now or in the future defined as a "hazardous substance," "hazardous material," "hazardous waste," "toxic substance," "toxic pollutant," "contaminant," "pollutant" or other words of similar import within the meaning of any Environmental Law, including: (a) any "hazardous substance" defined as such in (or for purposes of) CERCLA, or any so-called "superfund" or "superlien" Law, including the judicial interpretation thereof; (b) any "pollutant or contaminant" as defined in 42 U.S.C.A. § 9601(33); (c) any material now defined as "hazardous waste" pursuant to 40 C.F.R. Part 260; (d) any petroleum or petroleum by-products, including crude oil or any fraction thereof; (e) natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel; (f) any "hazardous chemical" as defined pursuant to 29 C.F.R. Part 1910; (g) any toxic or harmful substances, wastes, materials, pollutants or contaminants (including, without limitation, asbestos, polychlorinated biphenyls, flammable explosives, radioactive materials, infectious substances, materials containing lead-based paint or raw materials which include hazardous constituents); and (h) any other toxic substance or contaminant that is subject to any Environmental Laws or other past or present requirement of any Governmental Authority.

"**Hazardous Materials Contamination**" means contamination (whether now existing or hereafter occurring) of the improvements, buildings, facilities, personalty, soil, groundwater, air or other elements on or of the relevant property by Hazardous Materials, or any derivatives thereof, or on or of any other property as a result of Hazardous Materials, or any derivatives thereof, generated on, emanating from or disposed of in connection with the relevant property.

"**Healthcare Laws**" means all applicable Laws relating to the procurement, development, provision, clinical and non-clinical evaluation or investigation, product approval or clearance, manufacture, production, distribution, importation, exportation, use, handling, quality, reimbursement, sale, labeling, advertising, promotion, or postmarket requirements of any product produced by a Credit Party or any Subsidiary thereof (including, without limitation, any component of, or accessory to, the foregoing products) subject to regulation under the Federal Food, Drug, and Cosmetic Act (21 U.S.C. et seq.) or FDCA), and similar state or foreign laws, controlled substances laws, and all laws, policies, procedures, requirements and regulations pursuant to which Required Permits are issued, in each case, as the same may be amended from time to time.

"**Hedging Obligations"** means all liabilities under any interest rate swaps, caps, floors, collars and other interest hedge or protection agreements, treasury locks, equity forward contracts, currency agreements or commodity purchase or option agreements or other interest or exchange rate or commodity price hedging agreements and any other derivative instruments, in each case, whether the Borrower and its Subsidiaries are liable contingently or otherwise, as obligor, guarantor or otherwise.

"**Indebtedness**" means (a) indebtedness for borrowed money (including the Obligations) or the deferred price of, or payment for, property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations, (d) non-contingent obligations of such Person to reimburse any bank or other Person in respect of

amounts paid under a letter of credit, banker's acceptance or similar instrument, (e) equity securities of such Person subject to repurchase or redemption other than at the sole option of such Person, including all Disqualified Stock, (f) obligations secured by a Lien on any asset of such Person, whether or not such obligation is otherwise an obligation of such Person, (g) "earnouts", purchase price adjustments, profit sharing arrangements, deferred purchase money amounts and similar payment obligations or continuing obligations of any nature of such Person arising out of purchase and sale contracts, (h) all Indebtedness of others guaranteed by such Person, (i) off-balance sheet liabilities and/or pension plan or multiemployer plan liabilities of such Person, (j) obligations arising under non-compete agreements, (k) obligations in respect of litigation settlement agreements or similar arrangements, (l) obligations arising under bonus, deferred compensation, incentive compensation or similar arrangements, other than those arising in the Ordinary Course of Business, and (m) Contingent Obligations.

"**Indemnified Liabilities**" has the meaning given it in Section 14.8.

"**Indemnified Taxes**" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of Borrower under this Agreement and (b) to the extent not otherwise described in (a), Other Taxes.

"**Indemnitees**" has the meaning given it in Section 13.2(b).

"**Insolvency Proceeding**" means any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency Law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"**Intellectual Property**" means all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work, whether published or unpublished, any patents, patent applications and like protections, including improvements, divisions, continuations, renewals, reissues, extensions, and continuations-in-part of the same, trademarks, trade names, service marks, mask works, rights of use of any name, domain names, or any other similar rights, any applications therefor, whether registered or not, know-how, operating manuals, trade secret rights, clinical and non-clinical data, rights to unpatented inventions, and any claims for damage by way of any past, present, or future infringement of any of the foregoing.

"**Intercompany IP Licenses**" means that certain Sale and Purchase Agreement, dated as of June 1, 2009 between MannKind to Technospehere International C.V., the Intangible Development Costs and Risk Sharing Agreement, between MannKind to Technospehere International C.V. and all material agreements, documents and instruments relating to the foregoing, in each case without giving effect to any amendments or modifications thereto.

"**Inventory**" means all "inventory", as defined in the Code, with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of Borrower's custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

"**Investment**" means, with respect to any Person, directly or indirectly, (a) to purchase or acquire any stock or stock equivalents, or any obligations or other securities of, or any interest in, any Person, including the establishment or creation of a Subsidiary, (b) to make or commit to make any Acquisition or (c) to make or purchase any advance, loan, extension of credit or capital contribution to, or any other investment in, any Person.

"**IP Security Agreement**" means any security agreement executed by Borrower that grants (or is prepared as a notice filing or recording with respect to) a Lien or security interest in favor of Agent and/or Lenders on Intellectual Property, each as amended, restated, or otherwise modified from time to time.

"**IRC**" means the Internal Revenue Code of 1986, as amended, and any successor provisions.

"**IRS**" means the United States Internal Revenue Service.

"**Joinder Requirements**" has the meaning given it in Section 6.8.

"**Laws**" means any and all federal, state, provincial, territorial, local and foreign statutes, laws, judicial decisions, regulations, guidance, guidelines, ordinances, rules, judgments, orders, decrees, codes, plans, injunctions, permits, concessions, grants, franchises, governmental agreements and governmental restrictions, whether now or hereafter in effect, which are applicable to any Credit Party in any particular circumstance.

"**LC Cash Collateral Account**" means each Deposit Account from time to time identified to Agent in writing established by Borrower for the sole purpose of securing Borrower's obligations under clause (g) of the definition Permitted Contingent Obligations and containing only such cash or cash equivalents that have been required to be pledged to secure such obligations of Borrower; *provided*, that the aggregate amount of cash or Cash Equivalents deposited in such LC Cash Collateral Accounts does not, at any time, exceed Five Hundred Thousand Dollars ($500,000) in the aggregate.

"**Lenders**" means each of the Persons identified on the Credit Facility Schedule as amended from time to time to reflect assignments made in accordance with this Agreement.

"**Libor Rate Index**" means, for any Applicable Interest Period, the rate per annum, determined by Agent (rounded upwards, if necessary, to the next 1/100th%) by dividing (a) the rate per annum, determined by Agent in accordance with its customary procedures, and utilizing such electronic or other quotation sources as it considers appropriate (rounded upwards, if necessary, to the next 1/100%), to be the rate at which Dollar deposits (for delivery on the first (1st) day of such Applicable Interest Period) in the amount of One Million Dollars ($1,000,000) are offered to major banks in the London interbank market on or about 11:00 a.m. (London time) on the Applicable Interest Rate Determination Date, for a period of thirty (30) days, which determination shall be conclusive in the absence of manifest error, by (b) one hundred percent (100%) minus the Reserve Percentage; *provided*, *however*, that Agent may, upon prior written notice to any Borrower and in consultation with Borrower, choose a reasonably comparable index or source to use as the basis for the Libor Rate Index; provided, further, that if (a) the administrator responsible for determining and publishing such rate per annum, determined by Agent in accordance with its customary procedures, has made a public announcement identifying a date certain on or after which such rate shall no longer be provided or published, as the case may be; or (b) timely, adequate and reasonable means do not exist for ascertaining such rate and the circumstances giving rise to the Agent's inability to ascertain LIBOR are unlikely to be temporary as determined in Agent's reasonable discretion, then Agent may, upon prior written notice to Borrower, choose, in consultation with Borrower, a reasonably comparable index or source together with corresponding adjustments to "Applicable Margin" or scale factor or floor to such index that Agent, in its reasonable discretion, has determined is necessary to preserve the current all-in yield (including interest rate margins, any interest rate floors, original issue discount and upfront fees, but without regard to future fluctuations of such alternative index, it being acknowledged and agreed that neither Agent nor any Lender shall have any liability whatsoever from such future fluctuations) to use as the basis for the LIBOR Rate Index. The Libor Rate Index may be adjusted by Agent with respect to any Lender on a prospective basis to take into account any additional or increased costs to such Lender of maintaining or obtaining any eurodollar deposits or increased costs, in each case, due to changes in applicable Law occurring subsequent to the commencement of the then Applicable Interest Period, including changes in tax laws (except changes of general applicability in corporate income tax laws) and changes in the reserve requirements imposed by the Board of Governors of the Federal Reserve System (or any successor), which additional or increased costs would increase the cost of funding loans bearing interest based upon the Libor Rate Index; *provided*, *however*, that notwithstanding anything in this Agreement to the contrary, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (ii) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a "change in applicable Law", regardless of the date enacted, adopted or issued. In any such event, the affected Lender shall give Borrower and Agent notice of such a determination and adjustment and Agent promptly shall transmit the notice to each other Lender and, upon its receipt of the notice from the affected Lender, Borrower may, by notice to such affected Lender require such Lender to furnish to Borrower a statement setting forth the basis for adjusting such Libor Rate Index and the method for determining the amount of such adjustment.

"**Lien**" means a claim, mortgage, deed of trust, lien, levy, charge, pledge, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of Law or otherwise against any property.

"**Mann Group Note Documents**" means (a) that certain Promissory Note, dated as of the date hereof, by MannKind in favor of The Mann Group LLC in an original aggregate principal amount equal to $35,050,750, (b) that certain Convertible Promissory Note, dated as of the date hereof, by MannKind in favor of The Mann Group LLC in an original aggregate principal amount equal to $35,000,000 (the "**Mann Group Convertible Note**"), and (c) all agreements and instruments entered into in connection therewith, as the same may be amended, modified, supplemented, replaced or refinanced from time to time on or prior to the Closing Date or thereafter in accordance with the terms hereof and thereof and the Mann Group Note Subordination Agreement.

"**Mann Group Note Obligations**" means the obligations, liabilities and Indebtedness owing by Borrower under the Mann Group Note Documents. As of the Closing Date, the aggregate outstanding principal amount of the Mann Group Note Obligations is equal to $70,050,750.

"**Mann Group Note Subordination Agreement**" means that certain Subordination Agreement dated as of the date hereof by and between Agent and The Mann Group LLC, as the same may be amended, restated, supplemented or otherwise modified from time to time.

"**Margin Stock**" means "margin stock" as such term is defined in Regulation T, U, or X of the Board of Governors of the Federal Reserve System.

"**Material Adverse Change**" means (a) a material impairment in the perfection or priority of Agent's Lien (or any Lender's Lien therein to the extent provided for in the Financing Documents) in the Collateral; (b) a material impairment in the value of the Collateral; (c) a material adverse change in the business, operations, or financial condition of the Credit Parties taken as a whole; or (d) a material impairment of the prospect of repayment of any portion of the Obligations.

"**Material Agreement**" means (a) the agreements listed in the **Disclosure Schedule** to the **Disclosure Letter**, (b) the United Therapeutics License, (c) each other agreement or contract that is filed with the SEC as a material agreement, including pursuant to Item 601(b)(10) of Regulation S-K, and (d) each agreement or contract to which such Credit Party or its Subsidiaries is a party the termination of which could reasonably be expected to result in a Material Adverse Change.

"**Material Indebtedness**" has the meaning given it in Section 10.1(e).

"**Material Intangible Assets**" means (a) all of Borrower's and its Subsidiaries Intellectual Property and (b) each license or sublicense agreements or other agreements with respect to rights in Intellectual Property, that, in the case of each of clauses (a) and (b), is material to the condition (financial or other), business or operations of Borrower and its Subsidiaries.

"**Maturity Date**" means August 1, 2024.

"**Maximum Lawful Rate**" has the meaning given it in Section 2.6(g).

"**MidCap**" has the meaning given it in the preamble of this Agreement.

"**Milestone Obligations**" has the meaning given it in clause (h) of the definition of Permitted Contingent Obligations.

"**Mortgage**" means that certain Open-End Mortgage Deed, Assignment of Leases and Rents, Security Agreement and Fixture Filing, entered into following the Closing Date in accordance with the terms of this Agreement, in favor of Agent with respect to the Owned Real Property, as the same may be amended, restated, supplemented or otherwise modified from time to time.

"**Multiemployer Plan**" means any employee benefit plan of the type described in Section 4001(a)(3) or ERISA, to which any Credit Party or any ERISA Affiliate has at any time (whether presently or in the past) sponsored, maintained, contributed to, or had an obligation to make contributions to or to which any Credit Party or any ERISA Affiliate has any liability, contingent or otherwise.

"**Obligations**" means all of Borrower's obligations to pay when due any debts, principal, interest, Protective Advances, fees, indemnities and other amounts Borrower owes Agent or the Lenders now or later, under this Agreement or the other Financing Documents, including, without limitation, interest accruing after Insolvency Proceedings begin (whether or not allowed) and debts, liabilities, or obligations of Borrower assigned to the Lenders and/or Agent, and the payment and performance of each other Credit Party's covenants and obligations under the Financing Documents. "Obligations" does not include obligations under any warrants issued to Agent or a Lender.

"**OFAC**" means the U.S. Department of Treasury Office of Foreign Assets Control.

"**OFAC Lists**" means, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

"**Oncology Licenses**" means (a) that certain License and Joint Development Agreement, dated as of November 12, 2012, between MannKind and Colby Pharmaceutical Company, a Delaware corporation, and (b) that certain License and Collaboration Agreement, dated as of April 27, 2012, between MannKind and Tolero Pharmaceuticals, Inc., a Delaware corporation.

"**Operating Documents**" means, for any Person, such Person's formation documents, as certified with the Secretary of State of such Person's state of formation on a date that is no earlier than thirty (30) days prior to the Closing Date, and (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

"**Ordinary Course of Business**" means, in respect of any transaction involving any Credit Party, the ordinary course of business of such Credit Party, as conducted by such Credit Party in accordance with past practices or then current business practices set forth in the most recent operating plan of Borrower to the extent approved by Agent, or reasonably related thereto, which shall in any event be at arms-length.

"**Other Connection Taxes**" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising solely from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Financing Document, or sold or assigned an interest in any Obligation hereunder).

"**Other Tax Certification**" means such certification or evidence, in each case in form and substance reasonably satisfactory to Agent and Borrower, that any Lender or prospective Lender is exempt from, or eligible for a reduction in, U.S. federal withholding tax or backup withholding tax, including evidence supporting the basis for such exemption or reduction.

"**Other Taxes**" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or

registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, this Agreement, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 2.6(h)(xi)).

"**Owned Real Property**" means the real property owned by Borrower located in Danbury, Connecticut, as more fully described on **Exhibit D**.

"**Participant Register**" has the meaning given it in Section 13.1(c).

"**Payment Date**" means the first (1st) calendar day of each calendar month.

"**PBGC**" means the Pension Benefit Guaranty Corporation, or any successor entity thereto.

"**Pension Plan**" means any employee benefit pension plan that is subject to the minimum funding standards under Section 412 of the IRC or is covered by Title IV of ERISA (including a Multiemployer Plan) that any Credit Party or any ERISA Affiliate has, at any time (whether presently or in the past) sponsored, maintained, contributed to, or had an obligation to make contributions to or to which any Credit Party or any ERISA Affiliate has any liability (contingent or otherwise).

"**Perfection Certificate**" means the Perfection Certificate delivered to Agent as of the Closing Date, together with any amendments thereto required under this Agreement.

"**Permitted Contest**" has the meaning given it in Section 6.4.

"**Permitted Contingent Obligations**" means:

(a) Contingent Obligations resulting from endorsements for collection or deposit in the Ordinary Course of Business;

(b) Contingent Obligations incurred in the Ordinary Course of Business with respect to surety and appeal bonds, performance bonds and other similar obligations not to exceed Five Hundred Thousand Dollars ($500,000) in the aggregate at any time outstanding;

(c) Contingent Obligations arising under indemnity agreements with title insurers;

(d) Contingent Obligations arising with respect to customary indemnification obligations in favor of purchasers in connection with dispositions of personal property assets permitted under Article 7;

(e) Contingent Obligations arising under the Financing Documents;

(f) so long as there exists no Event of Default both immediately before and immediately after giving effect to any such obligations, Hedging Obligations, *provided*, *however*, that such obligations are (or were) entered into by a Borrower or a Subsidiary thereof in the Ordinary Course of Business for the purpose of directly mitigating risks associated with liabilities, commitments, investments, assets, or property held or reasonably anticipated by such Person and not for purposes of speculation;

(g) Contingent Obligations existing or arising in connection with any security deposit or letter of credit obtained for the sole purpose of securing a lease of real property, securing obligations of Borrower to Enterprise Rent-a-Car in connection with their fleet management services, or in connection with ancillary bank services, *provided* that the aggregate face amount of all such security deposits, letters of credit and ancillary bank services does not at any time exceed Five Hundred Thousand Dollars ($500,000);

(h) unsecured milestone obligations in an aggregate amount not to exceed $75,000,000 to the extent payment of such milestone obligations is required under the terms and conditions of the Deerfield Milestone Agreement, as in effect on the Closing Date ("**Milestone Obligations**");

(i) Guaranties by a Credit Party of Permitted Indebtedness of another Credit Party incurred in the Ordinary Course of Business; provided, any such Guaranty shall be subordinated to the Obligations to the same extent and on the same terms and conditions as the Indebtedness guaranteed has been subordinated to the Obligations; and

(j) other Contingent Obligations not permitted by clauses (a) through (i) above, not to exceed Five Hundred Thousand Dollars ($500,000) in the aggregate at any time outstanding.

"**Permitted Distributions**" means:

(a) dividends payable solely in common stock;

(b) repurchases of stock of former or current employees, directors, officers or consultants pursuant to stock purchase agreements, employee stock purchase plans, employee restricted stock agreements or similar plans in an aggregate amount not to exceed Two Hundred and Fifty Thousand Dollars ($250,000) each fiscal year;

(c) payment of dividends or the making of distributions by any Subsidiary to Borrower;

(d) conversions of convertible securities (including warrants and options) into other equity securities (other than Disqualified Stock) pursuant to the terms of such convertible securities or otherwise in exchange thereof;

(e) issuance of other non-cash equity compensation (and acceleration of vesting thereof), including retention bonuses, to its officers, directors and other employees to the extent not constituting Disqualified Stock;

(f) income taxes paid by Mannkind, in the Ordinary Course of Business, on behalf of employee equity award recipients in respect of restricted stock units issued by MannKind to such employees prior to the Closing Date;

(g) income taxes paid by MannKind, in the Ordinary Course of Business, on behalf of employee equity award recipients in respect of restricted stock units issued by MannKind to such employees after the Closing Date, but only to the extent that (i) such restricted stock units were issued to the applicable employees in lieu of cash bonuses that would otherwise have been payable by MannKind to such employee, and (ii) the value at issuance of such restricted stock units is equivalent to the amount of the cash bonus that would have otherwise been payable to the applicable employees;

(h) repurchases of stock of former or current employees, directors, officers or consultants pursuant to stock repurchase agreements by the cancellation of indebtedness owed by such former employees, directors, officers or consultants;

(i) de minimis cash payable in lieu of issuing fractional shares made in connection with a conversion otherwise permitted thereunder; and

(j) repurchases of stock deemed to occur upon exercise of stock options or warrants if such stock represents a portion of the exercise price of such options or warrants and repurchases of stock deemed to occur upon the withholding of a portion of the stock granted or awarded; provided that no cash or Cash Equivalents shall be paid by any Credit Party in connection with such repurchase expect to the extent otherwise constituting a Permitted Distribution.

"**Permitted Indebtedness**" means:

(a) Borrower's Indebtedness to the Lenders and Agent under this Agreement and the other Financing Documents;

(b) Indebtedness existing on the Closing Date and described on the **Disclosure Schedule** to the **Disclosure Letter**;

(c) Indebtedness secured by Liens permitted pursuant to clause (b) of the definition of "Permitted Liens" so long as before and immediately after giving effect to the incurrence of such Indebtedness, no Event of Default has occurred and is continuing;

(d) Subordinated Debt so long as it is subject to a Subordination Agreement;

(e) the Closing Date Convertible Note Obligations, which, for the avoidance of doubt, shall at all times be unsecured and subordinated to the Obligations pursuant to the terms thereof;

(f) unsecured Indebtedness to trade creditors incurred in the Ordinary Course of Business;

(g) Permitted Contingent Obligations;

(h) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness set forth in (b) and (c) above, *provided, however*, that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon the obligors thereunder;

(i) Indebtedness in respect of netting services, overdraft protections, payment processing, automatic clearinghouse arrangements, arrangements in respect of pooled deposit or sweep accounts, check endorsement guarantees, and otherwise in connection with the deposit accounts or cash management services, in each case so long as such Indebtedness is incurred in the Ordinary Course of Business and is unsecured;

(j) Indebtedness owed to any Person providing workers' compensation, health, disability or other employee benefits (other than ERISA) pursuant to reimbursement or indemnification obligations to such Person , in each case in the Ordinary Course of Business;

(k) Indebtedness to finance insurance premiums financed through the applicable insurance company or other finance companies not to exceed One Million Dollars ($1,000,000) at any time outstanding;

(l) Unsecured Indebtedness consisting of customary take-or-pay obligations contained in supply agreements entered into in the Ordinary Course of Business; and

(m) Indebtedness consisting of unsecured intercompany loans and advances incurred by (i) any Borrower owing to any other Borrower, (ii) any Guarantor owing to any other Guarantor, (iii) any Subsidiary that is not a Credit Party owing to any other Subsidiary that is not a Credit Party, or (iv) any Restricted Foreign Subsidiary owing to any Credit Party solely to the extent constituting a Permitted Investment by such Credit Party pursuant to clause (i) of the definition thereof; *provided, however*, that (x) upon the request of Agent at any time, any such Indebtedness owed to a Borrower or Guarantor shall be evidenced by promissory notes having terms reasonably satisfactory to Agent, the sole originally executed counterparts of which shall be pledged and delivered to Agent, for the benefit of itself and the Lenders, as security for the Obligations and (y) any such Indebtedness owed by a Credit Party shall be subordinated to the payment in full of the Obligations pursuant to documentation in form and substance reasonably satisfactory to Agent;

(n) unsecured Indebtedness or Indebtedness secured solely by cash collateral in a Credit Card Cash Collateral Account, in an aggregate amount not to exceed One Million Dollars ($1,000,000) at any time outstanding, in respect of all corporate credit cards issued to or on behalf of Borrowers or their Subsidiaries;

(o) The deferred purchase price of assets or services (other than trade payables, obligations in respect of benefit plans and employment and severance arrangements, other than deferred compensation obligations to employees and directors arising in the ordinary course of business and not related to any financing) which in accordance with GAAP would be shown as a liability (or on the liability side of a balance sheet) incurred in the Ordinary Course of Business;

(p) Indebtedness incurred as a result of endorsing negotiable instruments received in the Ordinary Course of Business;

(q) Indebtedness in respect custom duties relating to the importation or exportation of goods incurred in the Ordinary Course of Business;

(r) the Accrued Interest Consideration; and

(s) Other unsecured Indebtedness not to exceed Five Hundred Thousand Dollars ($500,000) in the aggregate principal amount at any time.

"**Permitted Investments**" means:

(a) Investments existing on the Closing Date and described on the **Disclosure Schedule**;

(b) the holding of Cash Equivalents to the extent constituting an Investment;

(c) any Investments in liquid assets permitted by Borrower's investment policy, as amended from time to time, *provided* that such investment policy (and any such amendment thereto) has been approved in writing by Agent (*provided* that, under no circumstances shall Borrower be permitted to invest in or hold Margin Stock);

(d) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of any Credit Party;

(e) Investments consisting of deposit accounts or securities accounts in which Agent has a first priority perfected security interest except as otherwise provided by Section 6.6;

(f) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the Ordinary Course of Business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower's board of directors in an aggregate amount not to exceed Two Hundred and Fifty Thousand Dollars ($250,000) outstanding at any time;

(g) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the Ordinary Course of Business;

(h) Investments consisting of note receivables of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the Ordinary Course of Business;

(i) Investments of cash and cash equivalents by (i) a Credit Party in any other Credit Party and (ii) the Credit Parties in the Restricted Foreign Subsidiaries not to exceed Fifty Thousand Dollars ($50,000) in the aggregate with respect to all Restricted Foreign Subsidiaries in any fiscal year, and (iii) a Subsidiary in a Credit Party;

(j) so long as no Event of Default exists or results therefrom, the granting of Permitted Licenses;

(k) so long as no Event of Default exists or results therefrom, Investments of cash and Cash Equivalents in Myabetic LLC after the Closing Date in an aggregate amount not to exceed Two Hundred Thousand Dollars ($200,000);

(l) so long as no Event of Default exists at the time of such Investment or after giving effect to such Investment, other Investments of cash and Cash Equivalents in an amount not exceeding One Million Dollars ($1,000,000) in the aggregate during the term of this Agreement.

"**Permitted License**" means (a) any non-exclusive license of Intellectual Property rights of Borrower or its Subsidiaries so long as all such Permitted Licenses are granted to third parties in the Ordinary Course of Business, do not result in a legal transfer of title to the licensed property, and have been granted in exchange for fair consideration, (b) any exclusive license or granting of Intellectual Property rights of Borrower or its Subsidiaries so long as such Permitted License (i) has been granted to third parties in the Ordinary Course of Business, (ii) does not result in a legal transfer of title to the licensed property, (iii) has been granted in exchange for fair consideration as determined by Borrower in its reasonable business judgement, (iv) is exclusive solely as to (A) discrete geographical areas outside of North America or (B) except in all cases with respect to Afrezza (as to which no exclusive licenses shall be permitted pursuant to this clause (B)), discrete Products, indications, or classes of compounds in respect of any platform (and not, for the avoidance of doubt, multiple Products, indications, or classes of compounds in any one or series of related transactions), and (v) no Event of Default is existing at the time such license is granted or would result from the granting thereof; and (c) the licenses granted by Borrower pursuant to the United Therapeutics License, the Receptor License, and the Oncology Licenses by Borrower prior to the Closing Date and without giving effect to any amendments thereto after the Closing Date.

"**Permitted Liens**" means:

(a) Liens existing on the Closing Date and shown on the **Disclosure Schedule** to the **Disclosure Letter** or arising under this Agreement and the other Financing Documents;

(b) so long as before and immediately after giving effect to the incurrence of such Liens, no Event of Default has occurred and is continuing, purchase money Liens or capital leases securing no more than five hundred thousand dollars ($500,000.00) in the aggregate amount outstanding (i) on Equipment acquired or held by a Credit Party incurred for financing the acquisition of the Equipment, or (ii) existing on Equipment when acquired, if the Lien is confined to the property and improvements and the proceeds of the Equipment;

(c) Liens for taxes, fees, assessments or other government charges or levies, either not delinquent or are the subject of a Permitted Contest for which adequate reserves are maintained on the Books of the Credit Party against whose asset such Lien exists;

(d) carrier's, warehousemen's, mechanic's, workmen's, materialmen's or other like Liens on Collateral arising in the Ordinary Course of Business with respect to obligations which are not due, or which are being contested pursuant to a Permitted Contest, or which are bonded, discharged, or otherwise contested in compliance with the terms of the Mortgage with respect to like Liens on the Owned Real Property;

(e) leases or subleases of real property granted in the Ordinary Course of Business, and leases, subleases, non-exclusive licenses or sublicenses of property (other than real property or Intellectual Property) granted in the Ordinary Course of Business, if the leases, subleases, licenses and sublicenses do not prohibit granting Agent a security interest;

(f) banker's liens, rights of set-off and Liens in favor of financial institutions incurred made in the Ordinary Course of Business arising in connection with a Credit Party's Collateral Accounts *provided* that such Collateral Accounts are subject to a Control Agreement to the extent required hereunder;

(g) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the Ordinary Course of Business (other than Liens imposed by ERISA);

(h) Liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default;

(i) easements, reservations, rights-of-way, restrictions, minor defects or irregularities in title and similar charges or encumbrances affecting real property not constituting a Material Adverse Change;

(j) purported Liens evidenced by the filing of precautionary UCC financing statements relating solely to operating leases or consignments of personal property entered into the Ordinary Course of Business;

(k) Liens that are rights of set-off, bankers' liens or similar non-consensual Liens relating to deposit or securities accounts in favor of banks, other depositary institutions and securities intermediaries arising in the Ordinary Course of Business;

(l) Liens in favor of customs and revenue authorities arising as a matter of Law to secure payment of customs duties in connection with the importation of goods in the Ordinary Course of Business;

(m) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) and (b) above, but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness may not increase;

(n) to the extent constituting a Lien, the granting of a Permitted License;

(o) Liens granted in the Ordinary Course of Business on the unearned portion of insurance premiums securing the financing of insurance premiums to the extent the financing is permitted in clause (k) of the definition of Permitted Indebtedness;

(p) customary indemnification obligations relating to any disposition expressly permitted pursuant to the terms of this Agreement;

(q) good faith deposits in connection with any Acquisition constituting a Permitted Investment;

(r) deposits as security for taxes subject to a Permitted Contest or import or customs duties being contested in good faith;

(s) Liens consisting of (y) any agreement, grant or option to sell, transfer or dispose of any asset to the extent such sale, transfer or disposition is permitted pursuant to the Financing Documents or (z) cash advances in favor of the seller of any property to be acquired (to the extent such acquisition is not prohibited pursuant to the terms of the Financing Documents);

(t) (i) Liens solely in respect of the LC Cash Collateral Accounts and amounts deposited therein to the extent securing obligations permitted pursuant to clause (g) of the definition of Permitted Contingent Obligations and (ii) Liens solely in respect of the Credit Card Cash Collateral Accounts and the amounts deposited therein to the extent securing obligations permitted pursuant to clause (n) of the definition of Permitted Indebtedness; and

(u) all Schedule B, Part II Exceptions set forth in that certain Loan Policy of Title Insurance issued by First American Title Insurance Company with respect to the Owned Real Property dated as of the Closing Date.

"**Person**" means any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"**Pledge Agreement**" means that certain Pledge Agreement, dated as of the date hereof, executed by Borrower in favor of Agent, for the benefit of Lenders, covering all the equity interests respectively owned by the Credit Parties, as amended, restated, or otherwise modified from time to time.

"**Pro Rata Share**" means, as determined by Agent, with respect to each Credit Facility and Lender holding an Applicable Commitment or Credit Extensions in respect of such Credit Facility, a percentage (expressed as a decimal, rounded to the ninth decimal place) determined by *dividing* (a) in the case of fully-funded Credit Facilities, the amount of Credit Extensions held by such Lender in such Credit Facility *by* the aggregate amount of all outstanding Credit Extensions for such Credit Facility, and (b) in the case of Credit Facilities that are not fully-funded, the amount of Credit Extensions and unfunded Applicable Commitments held by such Lender in such Credit Facility *by* the aggregate amount of all outstanding Credit Extensions and unfunded Applicable Commitments for such Credit Facility.

"**Products**" means any products manufactured, sold, developed, tested or marketed by any Borrower or any of its Subsidiaries, including without limitation, those products set forth on the **Products Schedule** to the **Disclosure Letter** (as updated from time to time in accordance with Section 6.16); *provided* that, for the avoidance of doubt, any new Product not disclosed on the **Products Schedule** to the **Disclosure Letter** shall still constitute a "Product" as herein defined.

"**Protective Advances**" means all documented audit fees and expenses, costs, and expenses (including reasonable attorneys' fees and expenses) of Agent and the Lenders for preparing, amending, negotiating, administering, defending and enforcing the Financing Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred or advanced by Agent or the Lenders in connection with the Financing Documents.

"**Receptor License**" means that certain Collaboration and License Agreement dated as of January 20, 2016, among MannKind, certain Restricted Foreign Subsidiaries and Receptor Life Sciences, Inc., as amended, restated, supplemented or otherwise modified prior to the Closing Date or thereafter in accordance with the terms of this Agreement

"**Recipient**" means Agent and any Lender, as applicable.

"**Register**" has the meaning given it in Section 13.1(c).

"**Registered Intellectual Property**" means any registered patent, registered trademark or servicemark, registered copyright, registered mask work, or any pending application for any of the foregoing.

"**Registered Organization**" means any "registered organization" as defined in the Code, with such additions to such term as may hereafter be made.

"**Regulatory Reporting Event**" has the meaning given it in Section 6.16(a).

"**Regulatory Required Permit**" means any and all licenses, approvals and permits issued by the FDA, DEA or any other applicable Governmental Authority, including without limitation Drug Applications, necessary for the testing, manufacture, marketing or sale of any Product by any applicable Borrower(s) and its Subsidiaries as such activities are being conducted by such Borrower and its Subsidiaries with respect to such Product at such time and any drug listings and drug establishment registrations under 21 U.S.C. Section 510, registrations issued by DEA under 21 U.S.C. Section 823 (if applicable to any Product), and those issued by State governments for the conduct of Borrower's or any Subsidiary's business.

"**Required Lenders**" means, unless all of the Lenders and Agent agree otherwise in writing, Lenders having (a) more than sixty percent (60%) of the Applicable Commitments of all Lenders, or (b) if such Applicable Commitments have expired or been terminated, more than sixty percent (60%) of the aggregate outstanding principal amount of the Credit Extensions.

"**Required Permit**" means all licenses, certificates, accreditations, product clearances or approvals, provider numbers or provider authorizations, supplier numbers, provider numbers, marketing authorizations, other authorizations, registrations, permits, consents and approvals of a Credit Party issued or required under Laws applicable to the business of Borrower or any of its Subsidiaries or necessary in the manufacturing, importing, exporting, possession, ownership, warehousing, marketing, promoting, sale, labeling, furnishing, distribution or delivery of goods or services under Laws applicable to the business of Borrower or any of its Subsidiaries. Without limiting the generality of the foregoing, "**Required Permits**" includes any Regulatory Required Permit.

"**Reserve Percentage**" means, on any day, for any Lender, the maximum percentage prescribed by the Board of Governors of the Federal Reserve System (or any successor Governmental Authority) for determining the reserve requirements (including any basic, supplemental, marginal, or emergency reserves) that are in effect on such date with respect to eurocurrency funding (currently referred to as "eurocurrency liabilities") of that Lender, but so long as such Lender is not required or directed under applicable regulations to maintain such reserves, the Reserve Percentage shall be zero.

"**Responsible Officer**" means any of the President and Chief Executive Officer or Chief Financial Officer of Borrower.

"**Restricted Foreign Subsidiary**" means (a) Technosphere International C.V., (b) MannKind Netherlands B.V., and (c) MannKind Deutschland GmbH.

"**Secretary's Certificate**" means, with respect to any Person, a certificate, in form and substance satisfactory to Agent, executed by such Person's secretary (or other appropriate officer acceptable to Agent in its sole but reasonable discretion) on behalf of such Person certifying (a) that such Person has the authority to execute, deliver, and perform its obligations under each of the Financing Documents to which it is a party, (b) that attached to such certificate is a true, correct, and complete copy of the Borrowing Resolutions then in full force and effect authorizing and ratifying the execution, delivery, and performance by such Person of the Financing Documents to which it is a party, (c) the name(s) of the Person(s) authorized to execute the Financing Documents on behalf of such Person, together with a sample of the true signature(s) of such Person(s), (d) that attached to such certificate are true, correct, and complete copies of the Operating Documents of Borrower and good standing certificates of Borrower certified by the Secretary of State of the state(s) of organization of Borrower as of a date no earlier than thirty (30) days prior to the Closing Date and (e) that a true, correct, and complete copy of each of the Borrower's Registration Rights Agreement/Investors' Rights Agreement, voting agreements or other agreements among shareholders and any amendments to the foregoing has been delivered to Agent.

"**Secured Promissory Note**" has the meaning given it in Section 2.7.

"**Securities Account**" means any "securities account", as defined in the Code, with such additions to such term as may hereafter be made.

"**Security Documents**" means, collectively, the Mortgage, the Pledge Agreement, each IP Security Agreement, each Control Agreement, and each other agreement, document or instrument executed concurrently herewith or at any time hereafter pursuant to which one (1) or more Credit Parties or any other Person provides, as security for all or any portion of the Obligations, a Lien on any of its assets in favor of Agent for its own benefit and the benefit of the Lenders, as any or all of the same may be amended, supplemented, restated or otherwise modified from time to time.

"**Stated Rate**" has the meaning given it in Section 2.6(g).

"**Subordinated Debt**" means (i) the Mann Group Note Obligations, (ii) the Bruce Note Obligations, and (iii) other indebtedness incurred by Borrower, which in each case, shall be (a) in an amount satisfactory to Agent, (b) made pursuant to documents in form and substance satisfactory to Agent, and (c) subordinated to all of Borrower's now or hereafter indebtedness to Agent and the Lenders pursuant to a Subordination Agreement.

"**Subordinated Debt Documents**" means the Mann Group Note Documents, the Bruce Notes and each other document or agreement evidencing Subordinated Debt.

"**Subordinated Debt Common Stock Payment**" means any payment made in common stock of MannKind in respect of (a) the Mann Group Note Obligations pursuant to Section 7.9(a), (b) the Closing Date Convertible Note Obligations pursuant to Section 7.9(b)(i), or (c) the Bruce Note Obligations pursuant to Section 7.9(c); *provided* that, for the avoidance of doubt, Subordinated Debt Common Stock Payments shall not include any conversion of the Mann Group Convertible Notes or the Closing Date Convertible Note into common stock in accordance with their terms.

"**Subordination Agreement**" means (i) the Mann Group Note Subordination Agreement, (ii) the Bruce Note Subordination Agreement, and (iii) each other subordination, intercreditor, or other similar agreement in form and substance, and on terms, approved by Agent in writing.

"**Subsidiary**" means, with respect to any Person, any Person of which more than fifty percent (50.0%) of the voting stock or other equity interests (in the case of Persons other than corporations) is owned or controlled, directly or indirectly, by such Person. Unless the context otherwise requires, each reference to a Subsidiary shall be a reference to a Subsidiary of a Borrower.

"**Taxes**" means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

"**Technosphere**" means Technosphere International C.V., a Dutch limited partnership.

"**Testing Date**" means each date identified as a "Testing Date" on the **Minimum Afrezza Net Revenue Schedule**.

"**Transfer**" has the meaning given it in Section 7.1.

"**United Therapeutics**" means United Therapeutics Corporation, a Delaware Corporation.

"**United Therapeutics License**" means that certain License and Collaboration Agreement, dated as of September 3, 2018, between MannKind and United Therapeutics, as amended, restated, supplemented or otherwise modified prior to the Closing Date or thereafter in accordance with the terms of this Agreement.

"**U.S. Person**" means any Person that is a "United States person" as defined in Section 7701(a)(30) of the IRC.

"**Withholding Agent**" means Borrower and Agent.

[SIGNATURES APPEAR ON FOLLOWING PAGES]

IN WITNESS WHEREOF, intending that this instrument constitute an instrument executed and delivered under seal, the parties hereto have caused this Agreement to be executed as of the Closing Date.

BORROWER:

MANNKIND CORPORATION

By: /s/ Steven Binder
Name: Steven Binder
Title: Chief Financial Officer

MANNKIND LLC

By: /s/ Steven Binder
Name: Steven Binder
Title: Chief Financial Officer

AGENT:

MIDCAP FINANCIAL TRUST

By: Apollo Capital Management, L.P.,
its investment manager

By: Apollo Capital Management GP, LLC,
its general partner

By: /s/ Maurice Amsellem
Name: Maurice Amsellem
Title: Authorized Signatory

LENDERS:

MIDCAP FINANCIAL TRUST

By: Apollo Capital Management, L.P.,
its investment manager

By: Apollo Capital Management GP, LLC,
its general partner

By: /s/ Maurice Amsellem
Name: Maurice Amsellem
Title: Authorized Signatory

LENDERS:

APOLLO INVESTMENT CORPORATION

By: Apollo Investment Management, L.P., as Advisor

By: ACC Management, LLC, as its General Partner

By: /s/ Joseph D. Glatt
Name: Joseph D. Glatt
Title: Vice President

EXHIBITS

Exhibit A	Collateral
Exhibit B	Form of Compliance Certificate
Exhibit C	Credit Extension Form
Exhibit D	Owned Real Property

SCHEDULES

Credit Facility Schedule
Amortization Schedule (for each Credit Facility)
Post-Closing Obligations Schedule
Closing Deliveries Schedule
Minimum Afrezza Net Revenue Schedule

Midcap / MannKind / Credit and Security Agreement

EXHIBIT A

COLLATERAL

The Collateral consists of all assets of the Credit Parties (other than Excluded Property), including, without limitation, all of each Credit Party's right, title and interest in and to the following, whether now owned or hereafter created, acquired or arising:

(a) all Goods, Accounts (including health-care insurance receivables), Equipment, Inventory, Contracts together with all Contract Rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles, Intellectual Property, Commercial Tort Claims (including each such claim listed on the Disclosure Schedule to the Disclosure Letter), Documents, Instruments (including any promissory notes), Chattel Paper (whether tangible or electronic), Vehicles and title documents with respect to Vehicles, cash, Deposit Accounts, Securities Accounts, Commodity Accounts and other Collateral Accounts, all certificates of deposit, Fixtures, Letters of Credit Rights (whether or not the letter of credit is evidenced by a writing), Securities, and all other Investment Property, Supporting Obligations, and Financial Assets, whether now owned or hereafter acquired, wherever located; and

(b) all of each Credit Party's Books relating to the foregoing and all rights of access to such Credit Party's Books, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

EXHIBIT B

COMPLIANCE CERTIFICATE

TO: MidCap Financial Trust, as Agent
FROM:
DATE: , 20

The undersigned authorized officer of MannKind Corporation, a Delaware corporation ("**Borrower**") certifies that under the terms and conditions of the Credit and Security Agreement between Borrower, Agent and the Lenders (as amended, restated, supplemented, replaced or otherwise modified from time to time, the "**Agreement**"):

(1) Borrower is in complete compliance with all required covenants for the month ending , 20 , except as noted below;

(2) there are no Events of Default, except as set forth in Schedule 1 hereto, which includes a description of the nature and period of existence of such Event of Default and what action Borrowers have taken, are undertaking and propose to take with respect thereto;

(3) all representations and warranties in the Agreement are true and correct in all material respects on this date except as noted below; *provided, however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and *provided, further,* that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date;

(4) Each of Borrower and the other Credit Parties has timely filed all required tax returns and reports, and has timely paid all foreign, federal, state and local taxes, assessments, deposits and contributions owed except as otherwise permitted pursuant to the terms of the Agreement;

(5) no Liens have been levied or claims made against Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Agent; and

(6) attached hereto is an updated [Disclosure Schedule][Required Permits Schedule][Products Schedule][Intangible Assets Schedule][INSERT AS APPROPRIATE] as required to be updated pursuant to the terms of the Credit and Security Agreement.

(7) the aggregate amount of cash and Cash Equivalents held by the Borrowers as of the date hereof is $.

(8) The aggregate amount of Borrower Unrestricted Cash as of the date hereof is $.

(9) the aggregate amount of cash and Cash Equivalents held by the Restricted Foreign Subsidiaries as of the date hereof $ (or the equivalent thereof in foreign currency).

Attached are the required documents supporting the certifications set forth in this Compliance Certificate. The undersigned certifies, in his/her capacity as an officer of Borrower, that these are prepared in accordance with GAAP consistently applied from one period to the next except as explained in an accompanying letter or footnotes. The undersigned acknowledges, in his/her capacity as an officer of Borrower, that no borrowings may be requested at any time or date of determination that Borrower is not in compliance with any of the terms of the Agreement, and that compliance is determined not just at the date this certificate is delivered. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

Please indicate compliance status by circling Yes/No under "Complies" column.

Reporting Covenant	Required	Complies	
Monthly Financial Statements	Monthly within 45 days	Yes	No
Audited Financial Statements	Annually within 90 days after FYE	Yes	No
Board Approved Projections	Annually within 60 days after FYE	Yes	No
Compliance Certificate	Monthly within 45 days	Yes	No
Minimum Afrezza Net Revenue (per Section 9.1) equals	Monthly within 45 days	Yes	No
Compliance at all times during the applicable month with minimum Borrower Unrestricted Cash covenant in Section 9.2	Monthly within 45days	Yes	No

The following are the exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions to note.")

MANNKIND CORPORATION

By: _____

Name: _____

Title: _____

AGENT USE ONLY

Received by: _____

AUTHORIZED SIGNER

Date: _____

Verified: _____

AUTHORIZED SIGNER

Date: _____

Compliance Status: Yes No

EXHIBIT C

CREDIT EXTENSION FORM

DEADLINE IS NOON NEW YORK TIME

Date: _____, 20__

LOAN ADVANCE:

Complete *Outgoing Wire Request* section below if all or a portion of the funds from this loan advance are for an outgoing wire.

From Account #_____ (Loan Account #)

To Account #_____ (Deposit Account #)

Amount of Advance $_____

Requested Date of Advance (subject to requirements of Credit and Security Agreement): _____

All of Borrower's representations and warranties in the Credit and Security Agreement are true, correct and complete in all material respects on the date of the request for an advance; *provided, however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and *provided, further*, that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date:

Authorized Signature:_____ Phone Number: _____

Print Name/Title:_____

OUTGOING WIRE REQUEST:

Complete only if all or a portion of funds from the loan advance above is to be wired.

Beneficiary Name: _____

Amount of Wire: $_____

Beneficiary Lender: _____

Account Number:_____

City and State:_____

Beneficiary Lender Transit (ABA) #:_____ Beneficiary Lender Code (Swift, Sort, Chip, etc.):_____

(For International Wire Only)

Intermediary Lender:_____ Transit (ABA) #:_____

For Further Credit to:_____

Special Instruction:_____

By signing below, I (we) acknowledge and agree that my (our) funds transfer request shall be processed in accordance with and subject to the terms and conditions set forth in the agreements(s) covering funds transfer service(s), which agreements(s) were previously received and executed by me.

Authorized Signature: _____ 2nd Signature (if required): _____

Print Name/Title: _____ Print Name/Title: _____

Telephone #: _____ Telephone #:

CREDIT FACILITY SCHEDULE

The following Credit Facilities are specified on this Credit Facility Schedule:

Credit Facility #1:

Credit Facility and Type: Term, Tranche 1

Lenders for and their respective Applicable Commitments to this Credit Facility:

Lender	Applicable Commitment
Midcap Financial Trust	$26,133,333.33
Apollo Investment Corporation	$13,866,666.67
Total:	**Forty Million Dollars ($40,000,000)**

The following defined terms apply to this Credit Facility:

Applicable Interest Period: means the one-month period starting on the first (1st) day of each month and ending on the last day of such month; *provided*, *however*, that the first (1st) Applicable Interest Period for each Credit Extension under this Credit Facility shall commence on the date that the applicable Credit Extension is made and end on the last day of such month.

Applicable Floor: means two percent (2.00%) per annum for the Applicable Libor Rate.

Applicable Margin: a rate of interest equal to six and three quarters percent (6.75%) per annum.

Applicable Prepayment Fee: means the following amount, calculated as of the date (the "**Accrual Date**") that the Applicable Prepayment Fee becomes payable in the case of prepayments required under the Financing Documents or the date any voluntary prepayment is made: (a) for an Accrual Date on or after the Closing Date through and including the date which is twelve (12) months after the Closing Date, three percent (3.0%) multiplied by the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater); (b) for an Accrual Date on or after the date which is twelve (12) months after the Closing Date through and including the date which is twenty-four (24) months after the Closing Date, two percent (2.0%) multiplied by the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater); and (c) for an Accrual Date on or after the date which is twenty-four (24) months after the Closing Date through and including the date immediately preceding the Maturity Date, one percent (1.0%) multiplied by the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater).

Commitment Commencement Date: Closing Date.

Commitment Termination Date: the close of the Business Day following the Closing Date.

Minimum Credit Extension Amount: $40,000,000.00

Credit Facility #2:

Credit Facility and Type: Term, Tranche 2

Lenders for and their respective Applicable Commitments to this Credit Facility:

Lender	Applicable Commitment
Midcap Financial Trust	$6,533,333.33
Apollo Investment Corporation	$3,466,666.67
Total:	**Ten Million Dollars ($10,000,000)**

The following defined terms apply to this Credit Facility:

Applicable Funding Conditions: means the following:

Agent has received evidence reasonably satisfactory to Agent that Afrezza Net Revenue for the preceding twelve (12) calendar months ending on the last day of the month for which Borrower delivered (or was required to deliver pursuant to Section 6.2(b) hereof) a Compliance Certificate is greater than or equal to $30,000,000.

Applicable Interest Period: means the one-month period starting on the first (1st) day of each month and ending on the last day of such month; *provided*, *however*, that the first (1st) Applicable Interest Period for each Credit Extension under this Credit Facility shall commence on the date that the applicable Credit Extension is made and end on the last day of such month.

Applicable Floor: means two percent (2.00%) per annum for the Applicable Libor Rate.

Applicable Margin: a rate of interest equal to six and three quarters percent (6.75%) per annum.

Applicable Prepayment Fee: means the following amount, calculated as of the date (the "**Accrual Date**") that the Applicable Prepayment Fee becomes payable in the case of prepayments required under the Financing Documents or the date any voluntary prepayment is made: (a) for an Accrual Date on or after the Closing Date through and including the date which is twelve (12) months after the Closing Date, three percent (3.0%) multiplied by the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater); (b) for an Accrual Date after the date which is twelve (12) months after the Closing Date through and including the date which is twenty-four (24) months after the Closing Date, two percent (2.0%) multiplied by the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater); and (c) for an Accrual Date after the date which is twenty-four (24) months after the Closing Date through and including the date immediately preceding the Maturity Date, one percent (1.0%) multiplied by the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater).

Commitment Commencement Date: The satisfaction of the Applicable Funding Conditions for this Credit Facility.

Commitment Termination Date: the earliest to occur of (a) April 15, 2020, and (b) the delivery of a written notice by Agent to Borrower terminating the Applicable Commitments following an Event of Default that has not been waived or cured at the time such notice is delivered.

Minimum Credit Extension Amount: $10,000,000.00

Credit Facility #3:

Credit Facility and Type: Term, Tranche 3

Lenders for and their respective Applicable Commitments to this Credit Facility:

Lender	Applicable Commitment
Midcap Financial Trust	$16,333,333.34
Apollo Investment Corporation	$8,666,666.66
Total:	**Twenty Five Million Dollars ($25,000,000)**

The following defined terms apply to this Credit Facility:

Applicable Funding Conditions: means the following:

(a) (x) Agent has received evidence satisfactory to it, in its discretion, that [***]; and

(b) (x) Agent has received evidence satisfactory to it (in its discretion) that [***].

Applicable Interest Period: means the one-month period starting on the first (1st) day of each month and ending on the last day of such month; *provided, however*, that the first (1st) Applicable Interest Period for each Credit Extension under this Credit Facility shall commence on the date that the applicable Credit Extension is made and end on the last day of such month.

Applicable Floor: means two percent (2.00%) per annum for the Applicable Libor Rate.

Applicable Margin: a rate of interest equal to six and three quarters percent (6.75%) per annum.

Applicable Prepayment Fee: means the following amount, calculated as of the date (the "**Accrual Date**") that the Applicable Prepayment Fee becomes payable in the case of prepayments required under the Financing Documents or the date any voluntary prepayment is made: (a) for an Accrual Date on or after the Closing Date through and including the date which is twelve (12) months after the Closing Date, three percent (3.0%) multiplied by the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater); (b) for an Accrual Date after the date which is twelve (12) months after the Closing Date through and including the date which is twenty-four (24) months after the Closing Date, two percent (2.0%) multiplied by the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater); and (c) for an Accrual Date after the date which is twenty-four (24) months after the Closing Date through and including the date immediately preceding the Maturity Date, one percent (1.0%) multiplied by the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater).

Commitment Commencement Date: The satisfaction of the Applicable Funding Conditions for this Credit Facility.

Commitment Termination Date: the earliest to occur of (a) June 30, 2021, and (b) the delivery of a written notice by Agent to Borrower terminating the Applicable Commitments following an Event of Default that has not been waived or cured at the time such notice is delivered.

Minimum Credit Extension Amount: $25,000,000.00

AMORTIZATION SCHEDULE (FOR EACH CREDIT FACILITY)

Credit Facility #1

Commencing on the first day of September 1, 2021 (the "**Amortization Start Date**") and continuing on the first day of each calendar month thereafter, an amount equal to the aggregate principal amount advanced under Credit Facility #1 *divided by* thirty-six (36).

Credit Facility #2:

Commencing on the first day of the Amortization Start Date and continuing on the first day of each calendar month thereafter, an amount equal to the aggregate principal amount advanced under Credit Facility #2 *divided by* thirty-six (36).

Credit Facility #3:

Commencing on the later of (a) the Amortization Start Date and (b) the first day of the first full calendar month immediately following such Credit Extension and, in each case, continuing on the first day of each calendar month thereafter, an amount equal the outstanding Credit Extension in respect of Credit Facility #3 divided by the number of full calendar months remaining (including such first full calendar month) before the occurrence of the Maturity Date.

Notwithstanding anything to the contrary contained in the foregoing, the entire remaining outstanding principal balance under all Credit Extensions shall mature and be due and payable upon the Maturity Date.

POST CLOSING OBLIGATIONS SCHEDULE

Borrower shall satisfy and complete each of the following obligations, or provide Agent with each of the items listed below, as applicable, on or before the date indicated below, all to the satisfaction of Agent in its sole and absolute discretion:

1. By the date that is five (5) Business Days following the Closing Date (or such later date as Agent may agree in writing), Borrower shall provide Agent with evidence reasonably satisfactory to Agent that the Intercompany IP Licenses (and all rights and obligations thereunder) have been terminated in full and all rights to the Intellectual Property rights that were the subject of the Intercompany IP Licenses shall have reverted in full to MannKind without any payments or other obligations being made or incurred by any Credit Party to Technosphere or any other Person.

2. Borrower shall, within three (3) Business Days after the Closing Date (or such later date as Agent may agree in writing), deliver the following with respect to the Owned Real Property: (a) a Mortgage, in form and substance acceptable to Agent, duly executed and delivered by the applicable Borrower, together with the funds necessary to record the Mortgage in the land records of City of Danbury Connecticut, (b) an Environmental Indemnity Agreement, in form and substance acceptable to Agent, duly executed and delivered by the applicable Borrower, (c) a pro-forma title policy, in form and substance reasonably satisfactory to Agent, with endorsements reasonably satisfactory to Agent, (d) a duly executed survey affidavit, in form and substance reasonably satisfactory to Agent, sufficient for the pro-forma title policy to contain customary survey coverage; (e) flood certificates, in form and substance acceptable to Agent, (f) a Phase 1 environmental report, in form and substance acceptable to Agent, and (g) a legal opinion from Borrower's Connecticut counsel relating to the Mortgage in form and substance satisfactory to Agent. Not later than thirty (30) days after the Closing Date, Borrower shall deliver to Agent the final lender's policy of title insurance in the form of the pro-forma title policy insuring that the Mortgage is a first priority lien on the Owned Real Property, with all premiums paid by Borrower.

3. Borrower shall, within thirty (30) days after the Closing Date (or such later date as Agent may agree in writing), deliver to Agent a landlord's consent, in form and substance reasonably satisfactory to Agent, executed in favor of Agent in respect of Borrower's facilities at 30930 Russell Ranch Road, Suite 300, Westlake Village, CA 91362.

4. Borrower shall, within thirty (30) days after the Closing Date (or such later date as Agent may agree in writing), provide Agent with endorsements to Borrowers' property insurance policies naming Agent as lender loss payee and endorsements to Borrowers' liability insurance policies naming Agent as additional insured in accordance Section 6.5.

Borrower's failure to complete and satisfy any of the above obligations on or before the date indicated above, or Borrower's failure to deliver any of the above listed items on or before the date indicated above, shall constitute an immediate and automatic Event of Default.

CLOSING DELIVERIES SCHEDULE

1. duly executed signatures to the Financing Documents to which Borrower is a party.

2. duly executed signatures to the Control Agreements with Wells Fargo Bank, N.A. and U.S. Bank, N.A.;

3. the Operating Documents of Borrower and good standing certificates of Borrower certified by the Secretary of State of the state(s) of organization of Borrower as of a date no earlier than thirty (30) days prior to the Closing Date;

4. good standing certificates dated as of a date no earlier than thirty (30) days prior to the Closing Date to the effect that Borrower is qualified to transact business in all states in which the nature of Borrower's business so requires;

5. duly executed Borrowing Resolutions for Borrower;

6. a duly executed payoff letter from Deerfield Private Design Fund II, L.P. and Deerfield Private Design International II, L.P. and evidence that the "Exchange" under the Exchange Agreement among Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P. and MannKind, dated as of August 6, 2019 has been consummated;

7. evidence that (i) the Liens securing Indebtedness owed by Borrower to Deerfield Private Design Fund II, L.P. and Deerfield Private Design International II, L.P. will be terminated and (ii) the documents and/or filings evidencing the perfection of such Liens, including without limitation any financing statements, mortgages and/or control agreements, have or will, concurrently with the initial Credit Extension, be terminated;

8. certified copies, dated as of a recent date, of financing statement searches, as Agent shall request, accompanied by written evidence (including any UCC termination statements) that the Liens indicated in any such financing statements either constitute Permitted Liens or have been or, in connection with the initial Credit Extension, will be terminated or released;

9. the Perfection Certificate executed by Borrower;

10. a duly executed legal opinion of Borrower's counsel dated as of the Closing Date;

11. evidence satisfactory to Agent that the insurance policies required by Article 6 are in full force and effect, together with appropriate evidence showing loss payable and/or additional insured clauses or endorsements in favor of Agent, for the ratable benefit of the Lenders;

12. payment of the fees and expenses of Agent and the Lenders then accrued, including pursuant to the Fee Letters;

13. a duly executed original Secretary's Certificate dated as of the Closing Date which includes copies of the completed Borrowing Resolutions for Borrower;

14. timely receipt by Agent of an executed disbursement letter;

15. a certificate executed by a Responsible Officer of Borrower, in form and substance satisfactory to Agent, which shall certify as to certain conditions to the funding of the Credit Extensions on the Closing Date;

16. an executed copy of the Mann Group Note Subordination Agreement;

17. executed copies of the Bruce Notes and an executed copy of the Bruce Note Subordination Agreement.

18. executed copies of the Closing Date Convertible Notes and evidence that the "Closing" under the Closing Date Convertible Notes Exchange Agreement has occurred;

19. executed copies of the Mann Group Note Documents and evidence that the "Closing" under the Exchange Agreement between Mann Group LLC and MannKind, dated as of August 6, 2019 has occurred;

20. Lenders (or their designated affiliates) shall have received executed warrants to purchase shares of MannKind's common stock in an amount equal to three percent (3.25%) of the aggregate Applicable Commitments of such lender in respect of Credit Facility #1, divided by the Exercise Price, which warrants shall be in form and substance reasonably satisfactory to Agent; and

21. all possessory collateral required to be delivered to Agent with corresponding endorsements pursuant to Section 4.2(b).

MINIMUM AFREZZA NET REVENUE SCHEDULE

Testing Date	Minimum Afrezza Net Revenue Amount
July 31, 2019	$21,000,000
August 31, 2019	$21,500,000
September 30, 2019	$22,500,000
October 31, 2019	$24,000,000
November 30, 2019	$25,500,000
December 31, 2019	$27,000,000
January 31, 2020	$28,000,000
February 29, 2020	$29,000,000
March 31, 2020	$30,000,000
April 30, 2020	$31,000,000
May 31, 2020	$32,000,000
June 30, 2020	$33,000,000
July 31, 2020	$34,000,000
August 31, 2020	$35,000,000
September 30, 2020	$36,000,000
October 31, 2020	$37,000,000
November 30, 2020	$38,000,000
December 31, 2020	$40,000,000
January 31, 2021	$41,250,000
February 28, 2021	$42,500,000
March 31, 2021	$43,750,000
April 30, 2021	$45,000,000
May 31, 2021	$46,250,000
June 30, 2021	$47,500,000
July 31, 2021	$48,750,000
August 31, 2021	$50,000,000
September 30, 2021	$51,250,000
October 31, 2021	$52,500,000
November 30, 2021	$53,750,000
December 31, 2021	$55,000,000
January 31, 2022	$55,916,667
February 28, 2022	$56,833,333
March 31, 2022	$57,750,000
April 30, 2022	$58,666,667
May 31, 2022	$59,583,333

June 30, 2022	$60,500,000
July 31, 2022	$61,416,667
August 31, 2022	$62,333,333
September 30, 2022	$63,250,000
October 31, 2022	$64,166,667
November 30, 2022	$65,083,333
December 31, 2022	$66,000,000
January 31, 2023	$67,100,000
February 28, 2023	$68,200,000
March 31, 2023	$69,300,000
April 30, 2023	$70,400,000
May 31, 2023	$71,500,000
June 30, 2023	$72,600,000
July 31, 2023	$73,700,000
August 31, 2023	$74,800,000
September 30, 2023	$75,900,000
October 31, 2023	$77,000,000
November 30, 2023	$78,100,000
December 31, 2023	$79,200,000
January 31, 2024	$80,300,000
February 29, 2024	$81,400,000
March 31, 2024	$82,500,000
April 30, 2024	$83,600,000
May 31, 2024	$84,700,000
June 30, 2024	$85,800,000
July 31, 2024	$86,900,000

Exhibit 99.2

Execution Version

EXCHANGE AGREEMENT

Bruce Fund, Inc. (the "**Undersigned**"), for itself and on behalf of the beneficial owners listed on Exhibit A hereto ("**Accounts**") for whom the Undersigned holds contractual and investment authority (each Account, as well as the Undersigned if it is exchanging Notes (as defined below) hereunder, a "**Holder**"), enters into this Exchange Agreement (this "**Agreement**") with MannKind Corporation (the "**Company**") on August 6, 2019 whereby the Holders will exchange the Company's 5.75% Convertible Senior Subordinated Exchange Notes due 2021 (the "**Existing Notes**") for (i) the cash amount as specified below payable on the Closing Date (as defined below) (the "**Closing Date Cash Payment**"), (ii) shares of the Company's common stock, par value $0.01 per share (the "**Common Stock**") to be issued as of the Closing Date (the "**Closing Date Share Payment**"), (iii) the Company's new 5.75% Convertible Senior Subordinated Exchange Notes due 2024 (the "**New Notes**") that will be issued pursuant to the provisions of an Indenture (the "**Indenture**") to be dated as of the Closing Date (the "**Note Exchange,**" and together with the Closing Date Cash Payment and the Closing Date Share Payment, the "**Closing Date Consideration**"), (iv) shares of Common Stock to be issued on August 15, 2019 for payment of accrued and unpaid interest on the Existing Notes owed as of the Closing Date (the "**Accrued Interest Consideration**"), (v) one or more promissory notes issued by the Company memorializing additional payments of an aggregate amount equal to $2,630,750 on or prior to June 30, 2020 to be dated as of the Closing Date (the "**June Note**"), and (v) one or more promissory notes issued by the Company memorializing additional payments of an aggregate amount equal to $2,630,750 on or prior to December 31, 2020 to be dated as of the Closing Date (the "**December Note**," and together with the June Note, the "**Additional Notes**").

On and subject to the terms and conditions set forth in this Agreement, the parties hereto agree as follows:

Article I: Exchange of the Existing Notes

At the Closing (as defined herein), the Undersigned hereby agrees to cause the Holders to exchange and deliver to the Company the following aggregate principal amount of Existing Notes, and in exchange therefor the Company hereby agrees to issue or pay, as the case may be, to the Holders the consideration described below (such exchange, the "**Exchange**"):

Aggregate principal amount of Existing Notes to be Exchanged:	$18,690,000 (the "**Exchanged Notes**")
Closing Date Consideration	
Closing Date Share Payment:	4,017,857 shares of Common Stock
Closing Date Cash Payment:	$1,470,147.92
Aggregate principal amount of New Notes to be issued in the Exchange	$5,000,000
Accrued Interest Consideration	
August 15 Interest Payment Consideration:	$537,337.5 (payable in shares of Common Stock as calculated pursuant to the terms hereof)
Additional Notes	
June Note	$2,630,750
December Note	$2,630,750

The closing of the Exchange (the "**Closing**") shall occur on a date (the "**Closing Date**") that is no later than five business days after the date of this Agreement; *provided* that the Closing shall take place concurrently with the consummation of those certain credit facilities to be provided under that certain Credit and Security Agreement, expected to be dated as of August 6, 2019, by and between the Company, MannKind LLC, the lenders party thereto and MidCap Financial Trust as administrative agent for such lenders (in such capacity, the "**MidCap Agent**").

At the Closing, (a) each Holder shall (i) deliver or cause to be delivered to the Company all right, title and interest in and to its Exchanged Notes (and no other consideration) free and clear of any mortgage, lien, pledge, charge, security interest, encumbrance, title retention agreement, option, equity or other adverse claim thereto (collectively, "**Liens**"), together with any documents of conveyance or transfer that the Company may deem necessary or desirable to transfer to and confirm in the Company all right, title and interest in and to the Exchanged Notes free and clear of any Liens; and (ii) sign a subordination agreement with the MidCap Agent in the form of Exhibit B hereto, and (b) the Company shall: (i) pay to each Holder the cash amount set forth opposite such Holder's name on Exhibit A; (ii) deliver to each Holder a Physical Note (as defined in the Indenture), registered in the name of such Holder or in such other name as such Holder shall request, in the aggregate principal amount of the New Notes set forth opposite such Holder's name on Exhibit A hereto, duly executed by the Company and authenticated by the Trustee pursuant to the terms of the Indenture (or, if there are no Accounts, the Company shall deliver to the Undersigned, as the sole Holder, all of the New Notes); (iii) issue to each Holder a number of shares of Common Stock (the "**Closing Date Shares**") equal to the number of shares set forth opposite such Holder's name on Exhibit A hereto; (iv) issue and deliver to each Holder the June Note, substantially in the form of Exhibit D hereto; and (v) issue and deliver to each Holder the December Note, substantially in the form of Exhibit E hereto; *provided*, *however*, that the parties acknowledge that the delivery of the Closing Date Shares to the Holders may be delayed due to procedures and mechanics within the system of the Depository Trust Company or The NASDAQ Global Market or other events beyond the Company's control and that such delay will not be a default under this Agreement so long as (i) the Company is using its commercially reasonable efforts to effect the issuance of the Common Stock, and (ii) such delay is no longer than five business days. Notwithstanding the foregoing, for the avoidance of doubt, as of the Closing, the Holder shall be deemed for all corporate purposes to have become the legal and record holder of Closing Date Shares without any further action by any party. In the event that any Closing Date Shares are not delivered on a timely basis in accordance herewith, the Holder shall have all available remedies available at law or in equity.

For the avoidance of doubt, in the event of any delay in the Closing pursuant to the prior paragraph, the Holders shall not be required to deliver the Exchanged Notes until the Closing occurs. The cancellation of the Exchanged Notes shall be effected via physical delivery to the trustee under the Indenture pursuant to the instructions to be provided by the Company. The issuance of the New Shares (as defined below) shall be effected via DWAC (or other book-entry procedures) pursuant to the instructions to be provided by each Holder (in the case of the New Shares) after the execution of this Agreement. The delivery of New Notes shall be effected pursuant to the instructions to be provided by each Holder after the execution of this Agreement. The Company and each Holder shall provide such respective instructions to the Undersigned for settlement of the Exchange.

Further, on August 15, 2019, the Company shall pay to each Holder the amount of Accrued Interest Consideration payable on August 15, 2019 set forth opposite such Holder's name on Exhibit A in validly issued, fully paid and non-assessable shares of Common Stock (the "**Accrued Interest Shares**" together with the Closing Date Shares, the "**New Shares**") so long as each of the Equity Conditions (as defined in the Indenture, as if the Accrued Interest Shares were "Interest Shares," the applicable payment date was an "Interest Payment Date" and the "Interest Share Payment Notice" was deemed to have been given pursuant to this Exchange Agreement) are satisfied on each day during the Equity Conditions Measuring Period applicable to such payment date. Accrued Interest Consideration shall be paid in a number of validly issued, fully paid and non-assessable shares of Common Stock equal to the quotient of (1) the amount of the Accrued Interest Consideration payable on such payment date less any such payment paid in cash, divided by (2) the Last Reported Sale Price (as defined in the Indenture) on the Trading Day immediately prior to August 15, 2019. If the issuance of Accrued Interest Shares would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock to the nearest whole share (with 0.5 being rounded up). On August 15, 2019, the Company shall (A) provided that the Company's stock transfer agent is participating in the DTC Fast Automated Securities Transfer Program, upon the request of a Holder, credit such

aggregate number of Accrued Interest Shares to which such Holder shall be entitled to such Holder's or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system, or (B) if the stock transfer agent is not participating in the DTC Fast Automated Securities Transfer Program, or upon request of a Holder, issue and deliver to the Trustee no later than the second (2) Business Day after the applicable payment date certificates registered in the name of each registered Holder for the number of Accrued Interest Shares to which each Holder shall be entitled, (C) deposit such Accrued Interest Shares with the Depositary in accordance with the Applicable Procedures (as defined in the Indenture), or (D) otherwise deliver the applicable Accrued Interest Shares in accordance with procedures reasonably acceptable to the Holder.

Article II: Covenants, Representations and Warranties of the Holders

Each Holder (and, where specified below, the Undersigned) hereby covenants (solely as to itself) as follows, and makes the following representations and warranties (solely as to itself), each of which is and shall be true and correct on the date hereof and at the Closing, to the Company and all such covenants, representations and warranties shall survive the Closing.

Section 2.1 Power and Authorization. The Holder is duly organized, validly existing and in good standing, and has the power, authority and capacity to execute and deliver this Agreement, to perform its obligations hereunder, and to consummate the Exchange contemplated hereby. If the Undersigned is executing this Agreement on behalf of Accounts, (a) the Undersigned has all requisite discretionary and contractual authority to enter into this Agreement on behalf of, and bind, each Account, and (b) Exhibit A hereto is a true, correct and complete list of (i) the name of each Account, (ii) the principal amount of such Account's Exchanged Notes, (iii) the amount of the Closing Date Cash Payment and the number of Closing Date Shares to be issued to such Account in respect of its Exchanged Notes, (iv) the principal amount of New Notes to be delivered in respect of its Exchanged Notes, (v) the amount of the Accrued Interest Consideration in respect of the Exchange Notes, and (vi) the amount of the Deferred Consideration payable to such Account in respect of each of June 30, 2020 and December 31, 2020 Deferred Consideration Due Dates in respect of its Exchange Notes.

Section 2.2 Valid and Enforceable Agreement; No Violations. This Agreement has been duly executed and delivered by the Undersigned and the Holder and constitutes a legal, valid and binding obligation of the Undersigned and the Holder, enforceable against the Undersigned and the Holder in accordance with its terms, except that such enforcement may be subject to (a) bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium or other similar laws affecting or relating to enforcement of creditors' rights generally, and (b) general principles of equity, whether such enforceability is considered in a proceeding at law or in equity (the "**Enforceability Exceptions**"). This Agreement and consummation of the Exchange will not violate, conflict with or result in a breach of or default under (i) the Undersigned's or the Holder's organizational documents, (ii) any agreement or instrument to which the Undersigned or the Holder is a party or by which the Undersigned or the Holder or any of their respective assets are bound, or (iii) any laws, regulations or governmental or judicial decrees, injunctions or orders applicable to the Undersigned or the Holder.

Section 2.3 Title to the Exchanged Notes. The Holder is the sole legal and beneficial owner of the Exchanged Notes set forth opposite its name on Exhibit A hereto (or, if there are no Accounts, the Undersigned is the sole legal and beneficial owner of all of the Exchanged Notes). The Holder has good, valid and marketable title to its Exchanged Notes, free and clear of any Liens (other than pledges or security interests that the Holder may have created in favor of a prime broker under and in accordance with its prime brokerage agreement with such broker). The Holder has not, in whole or in part, except as described in the preceding sentence, (a) assigned, transferred, hypothecated, pledged, exchanged or otherwise disposed of any of its Exchanged Notes or its rights in its Exchanged Notes, or (b) given any person or entity any transfer order, power of attorney or other authority of any nature whatsoever with respect to its Exchanged Notes. Upon the Holder's delivery of its Exchanged Notes to the Company pursuant to the Exchange, such Exchanged Notes shall be free and clear of all Liens created by the Holder.

Section 2.4 **Qualified Institutional Buyer.** The Holder is an "accredited investor" within the meaning of Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended (the "**Securities Act**"), and a "qualified institutional buyer" within the meaning of Rule 144A promulgated under the Securities Act and is acquiring the New Notes and the shares of Common Stock hereunder for investment for its own respective account and not with a view to, or for resale in connection with, any distribution thereof in a manner that would violate the registration requirements of the Securities Act.

Section 2.5 **No Affiliate Status.** The Holder is not, and has not been during the consecutive three month period preceding the date hereof, a director, officer or "affiliate" within the meaning of Rule 144 promulgated under the Securities Act (an "**Affiliate**") of the Company. To its knowledge, the Holder did not acquire any of the Exchanged Notes, directly or indirectly, from an Affiliate of the Company. The Holder and its Affiliates collectively beneficially own and will beneficially own as of the Closing Date (but without giving effect to the Exchange) (i) less than 5% of the outstanding Common Stock and (ii) less than 5% of the aggregate number of votes that may be cast by holders of those outstanding securities of the Company that entitle the holders thereof to vote generally on all matters submitted to the Company's stockholders for a vote (the "**Voting Power**"). Immediately after the receipt by the Holder of the New Notes and the Common Stock in the Exchange on the Closing Date, the aggregate number of shares of Common Stock owned by the Holder and its Affiliates, together with the aggregate number of shares equal to the notional value of any "long" derivative transaction relating to such Common Stock to which the Holder or its Affiliate is a party (excluding derivative transactions relating to broad based indices and any interest in the Existing Notes), will not exceed 4.9% of the outstanding Common Stock. The Holder is not a subsidiary, affiliate or, to its knowledge, otherwise closely-related to any director or officer of the Company or beneficial owner of 5% or more of the outstanding Common Stock or Voting Power (each such director, officer or beneficial owner, a "**Related Party**"). To its knowledge, no Related Party beneficially owns 5% or more of the outstanding voting equity, or votes entitled to be cast by the outstanding voting equity, of the Holder.

Section 2.6 **No Illegal Transactions.** Each of the Undersigned and the Holder has not, directly or indirectly, and no person acting on behalf of or pursuant to any understanding with it has, disclosed to a third party any information regarding the Exchange or engaged in any transactions in the securities of the Company (including, without limitation, any Short Sales (as defined below) involving any of the Company's securities) since the time that the Undersigned was first contacted by either the Company or any other person regarding the Exchange, this Agreement or an investment in the New Notes or the Common Stock or the Company. Each of the Undersigned and the Holder covenants that neither it nor any person acting on its behalf or pursuant to any understanding with it will disclose to a third party any information regarding the Exchange or engage, directly or indirectly, in any transactions in the securities of the Company (including Short Sales) prior to the time the transactions contemplated by this Agreement are publicly disclosed. "**Short Sales**" include, without limitation, all "short sales" as defined in Rule 200 of Regulation SHO promulgated under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and all types of direct and indirect stock pledges, forward sale contracts, options, puts, calls, short sales, swaps, derivatives and similar arrangements (including on a total return basis), and sales and other transactions through non-U.S. broker-dealers or foreign regulated brokers. Solely for purposes of this Section 2.6, subject to the Undersigned's and the Holder's compliance with their respective obligations under the U.S. federal securities laws and the Undersigned's and the Holder's respective internal policies, (a) "Undersigned" and "Holder" shall not be deemed to include any employees, subsidiaries or affiliates of the Undersigned or the Holder that are effectively walled off by appropriate "Chinese Wall" information barriers approved by the Undersigned's or the Holder's respective legal or compliance department (and thus have not been privy to any information concerning the Exchange), and (b) the foregoing representations and covenants of this Section 2.6 shall not apply to any transaction by or on behalf of an Account that was effected without the advice or participation of, or such Account's receipt of information regarding the Exchange provided by, the Undersigned.

Section 2.7 **Adequate Information; No Reliance.** The Holder acknowledges and agrees that (a) the Holder has been furnished with all materials it considers relevant to making an investment decision to enter into the Exchange and has had the opportunity to review the Company's filings and submissions with the

Securities and Exchange Commission (the "**SEC**"), including, without limitation, all information filed or furnished pursuant to the Exchange Act, (b) the Holder has had a full opportunity to ask questions of and receive answers from the officers of the Company concerning the Company, their business, operations, financial performance, financial condition and prospects, and the terms and conditions of the Exchange, (c) the Holder, together with its professional advisers, is a sophisticated and experienced investor and is capable of evaluating, to its satisfaction, the accounting, tax, financial, legal and other risks associated with the Exchange, and that such Holder has had the opportunity to consult with its accounting, tax, financial and legal advisors to be able to evaluate the risks involved in the Exchange and to make an informed investment decision with respect to such Exchange, and that such Holder is capable of sustaining any loss resulting therefrom without material injury, (d) the Holder understands that no federal or state agency has passed upon the merits or risks of an investment in the Common Stock or made any finding or determination concerning the fairness or advisability of this investment, (e) the Holder is not relying, and has not relied, upon any statement, advice (whether accounting, tax, financial, legal or other), representation or warranty made by the Company or any of its affiliates or representatives, except for the representations and warranties made by the Company in this Agreement, (f) any disclosure documents provided in connection with the Exchange are the responsibility of the Company, (g) no statement or written material contrary to this Agreement has been made or given to the Holder by or on behalf of the Company and (h) the Holder is able to fend for itself in the Exchange, has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of the prospective investment in the New Notes, the Deferred Consideration and the Common Stock and has the ability to bear the economic risks of its investment and can afford the complete loss of such investment.

The Holder specifically understands and acknowledges that, on the date of this Agreement and on the Closing Date, the Company may have in its possession non-public information that could be material to the market price of the Existing Notes, the New Notes and/or the Common Stock. The Holder hereby represents and warrants that, in entering into this Agreement and consummating the transactions contemplated hereby, it does not require the disclosure of such non-public information to it by the Company in order to make an investment in the Common Stock or a disposition of the Existing Notes, and hereby waives all present or future claims arising out of or relating to the Company's failure to disclose such non-public information to the Holder.

The Holder also specifically acknowledges that the Company would not enter into this Agreement or any related documents in the absence of such Holder's representations and acknowledgments set out in this Agreement, and that this Agreement, including such representations and acknowledgments, are a fundamental inducement to the Company, and a substantial portion of the consideration provided by such Holder, in this transaction, and that the Company would not enter into this transaction but for this inducement.

The Holder agrees that it will, upon request, execute and deliver any additional documents reasonably deemed by the Company, the trustee for the Existing Notes or the trustee for the New Notes or transfer agent for the Common Stock to be necessary or desirable to complete the Exchange.

Section 2.8 **Tax Consequences of the Exchange.** The Holder understands that the tax consequences of the Exchange will depend in part on its own tax circumstances. The Holder acknowledges that it must consult its own tax adviser about the federal, foreign, state and local tax consequences peculiar to its circumstances.

Section 2.9 **Tax Reporting.** On or prior to the Closing, the Undersigned shall deliver to the Company completed IRS Forms W-9 or W-8, as applicable, with regards to each Holder.

Section 2.10 **No Public Market.** The Undersigned acknowledges and agrees on behalf of itself and each Holder that no public market exists for the New Notes and that there is no assurance that a public market will ever develop for the New Notes.

Article III: Covenants, Representations and Warranties of the Company

The Company hereby covenants as follows, and makes the following representations and warranties, each of which is and shall be true and correct on the date hereof and at the Closing, to the Holders, and all such covenants, representations and warranties shall survive the Closing.

Section 3.1 Power and Authorization. The Company is duly incorporated, validly existing and in good standing under the laws of its state of incorporation, and has the power, authority and capacity to execute and deliver this Agreement, to perform its obligations hereunder, and to consummate the Exchange contemplated hereby.

Section 3.2 Valid and Enforceable Agreement; No Violations. This Agreement has been duly executed and delivered by the Company and constitutes a legal, valid and binding obligation of the Company, enforceable against it in accordance with its terms, except that such enforcement may be subject to the Enforceability Exceptions. At the Closing, the Indenture, substantially in the form of Exhibit C hereto (with such changes as requested by the trustee thereunder to comply with the trustee's documentation requirements and standards), will have been duly executed and delivered by the Company and will govern the terms of the New Notes, and the Indenture will constitute a valid and legally binding obligation of the Company, enforceable against the Company in accordance with its terms, except that such enforcement may be subject to the Enforceability Exceptions. This Agreement, the Indenture and consummation of the Exchange will not violate, conflict with or result in a breach of or default under (a) the charter, bylaws or other organizational documents of the Company, (b) any agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound, or (c) any laws, regulations or governmental or judicial decrees, injunctions or orders applicable to the Company.

Section 3.3 Validity of the Holders' New Notes. The Holders' New Notes have been duly authorized by the Company and, when executed and authenticated in accordance with the provisions of the Indenture and delivered to the Holder pursuant to the Exchange against delivery of the Exchanged Notes in accordance with the terms of this Agreement, the Holders' New Notes will be valid and legally binding obligations of the Company, enforceable in accordance with their terms, except that such enforcement may be subject to the Enforceability Exceptions, and the Holders' New Notes will not be subject to any preemptive, participation, rights of first refusal or other similar rights. Assuming the accuracy of each Holder's representations and warranties hereunder, the Holders' New Notes (a) will be issued in the Note Exchange exempt from the registration requirements of the Securities Act pursuant to Section 4(a)(2) of the Securities Act, (b) will, at the Closing, be free of any restrictions on resale by such Holder pursuant to Rule 144 promulgated under the Securities Act, and (c) will be issued in compliance with all applicable state and federal laws concerning the issuance of the Holders' New Notes. For the purposes of Rule 144 promulgated under the Securities Act, the Company acknowledges that, assuming the accuracy of each Holder's representations and warranties hereunder, the holding period of the New Notes may be tacked onto the holding period of the Exchanged Notes and the Company agrees not to take a position contrary thereto.

Section 3.4 Validity of Underlying Common Stock. The Holders' New Notes will at the Closing be convertible into shares of the Common Stock (the "**Conversion Shares**") in accordance with the terms of the Indenture. The Conversion Shares have been duly authorized and reserved by the Company for issuance upon conversion of the Holders' New Notes and, when issued upon conversion of the Holders' New Notes in accordance with the terms of the Holders' New Notes and the Indenture, will be validly issued, fully paid and non-assessable, and the issuance of the Conversion Shares will not be subject to any preemptive, participation, rights of first refusal or other similar rights.

Section 3.5 Validity of the Holders' New Shares. The Closing Date Shares (a) have been duly authorized by the Company and, upon their issuance pursuant to the Common Stock Exchange against delivery of the Exchanged Notes in accordance with the terms of this Agreement, the Closing Date Shares will be validly issued, fully-paid and non-assessable and (b) will not, as of the date of issuance, be subject to any preemptive,

participation, rights of first refusal or other similar rights. Assuming the accuracy of the Holders' representations and warranties hereunder, the Closing Date Shares (a) will be issued in the Exchange exempt from the registration requirements of the Securities Act pursuant to either Section 3(a)(9) or Section 4(a)(2) of the Securities Act and will be issued without any restrictive legend, (b) will, at the Closing, be free of any restrictions on resale by such Holder pursuant to Rule 144 promulgated under the Securities Act, and (c) will be issued in compliance with all applicable state and federal laws concerning the issuance of each Holder's Closing Date Shares.

Section 3.6 **Listing.** At the Closing, the Closing Date Shares and the Conversion Shares (as defined in the Indenture) shall be approved for listing on The NASDAQ Global Market, subject to notice of issuance.

Section 3.7 **Disclosure.** On or before the first business day following the date of this Agreement, the Company shall issue a publicly available press release or file with the SEC a Current Report on Form 8-K disclosing all material terms of the Exchange (to the extent not previously publicly disclosed).

Article IV: Miscellaneous

Section 4.1 **Entire Agreement.** This Agreement and, with respect to the Note Exchange, the Indenture, and any documents and agreements executed in connection with the Exchange embody the entire agreement and understanding of the parties hereto with respect to the subject matter hereof and supersede all prior and contemporaneous oral or written agreements, representations, warranties, contracts, correspondence, conversations, memoranda and understandings between or among the parties or any of their agents, representatives or affiliates relative to such subject matter, including, without limitation, any term sheets, emails or draft documents.

Section 4.2 **Construction.** References in the singular shall include the plural, and vice versa, unless the context otherwise requires. References in the masculine shall include the feminine and neuter, and vice versa, unless the context otherwise requires. Headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meanings of the provisions hereof. Neither party, nor its respective counsel, shall be deemed the drafter of this Agreement for purposes of construing the provisions of this Agreement, and all language in all parts of this Agreement shall be construed in accordance with its fair meaning, and not strictly for or against either party.

Section 4.3 **Costs and Expenses.** The Undersigned, the Holders and the Company shall each pay their own respective costs and expenses incurred in connection with the negotiation, preparation, execution and performance of this Agreement, including, but not limited to, attorneys' fees.

Section 4.4 **Governing Law.** This Agreement shall in all respects be construed in accordance with and governed by the substantive laws of the State of New York, without reference to its choice of law rules.

Section 4.5 **Counterparts.** This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument. Any counterpart or other signature hereon delivered by facsimile shall be deemed for all purposes as constituting good and valid execution and delivery of this Agreement by such party.

[Signature Page Follows]

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be executed as of the date first above written.

“COMPANY”:

MANNKIND CORPORATION

By: /s/ Steven Binder
Name: Steven Binder
Title: Chief Financial Officer

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be executed as of the date first above written.

"UNDERSIGNED":

BRUCE FUND, INC.
(in its capacities described in the first paragraph hereof)

By: /s/ R. Jeffrey Bruce
Name: R. Jeffrey Bruce
Title: Vice President

EXHIBIT A
Exchanging Beneficial Owners

Holder Name and Address	**Exchanged Notes** (*principal amount of Existing Notes to be exchanged for New Notes and New Shares*)	**Closing Date Cash Payment**	**Closing Date Shares** (*number of shares of Common Stock to be issued in exchange for Exchanged Notes*)	**New Notes** (*principal amount of New Notes to be issued in exchange for Exchanged Notes*)	**August 15, 2019 Interest Payment Consideration**	**June Note**	**December Note**
Bruce Fund, Inc.	$ 18,690,000	$1,470,147.92	4,017,857	$ 5,000,000	$537,337.5 (payable in shares of Common Stock as calculated pursuant to the terms hereof)	$2,630,750	$ 2,630,750

DTC Participant Information*

DTC Participant Number: 2305

DTC Participant Name: Huntington National Bank

DTC Participant Phone Number: 614 331 9742

DTC Participant Email: Zachary.j.leibold@huntington.com

FFC Account #: 1041040522

Account # at Bank/Broker:

* DTC Participant information to be provided for each Holder.

EXHIBIT B
Form of Subordination Agreement

EXHIBIT C
Form of Indenture

EXHIBIT D
Form of June Note

EXHIBIT E
Form of December Note

Exhibit 99.3

Execution Version

EXCHANGE AGREEMENT

The Mann Group LLC (the "**Holder**"), enters into this Exchange Agreement (this "**Agreement**") with MannKind Corporation (the "**Company**") on August 5, 2019 whereby the Holder will exchange that certain Amended and Restated Promissory Note, dated as of March 11, 2018, issued by the Company to the Holder in a principal amount of $71,505,500 (the "**Existing Note**") for (i) the cash amount as specified below payable on the Closing Date (the "**Closing Date Cash Payment**"), (ii) shares of the Company's common stock, par value $0.01 per share (the "**Common Stock**") to be issued as of the Closing Date as specified below (the "**Closing Date Shares**"), (iii) a new convertible promissory note issued by the Company to the Holder in the principal amount of $35,000,000 (the "**New Convertible Note**") to be dated as of the Closing Date, and (iv) a new non-convertible promissory note issued by the Company to the Holder in the principal amount of $35,050,750 (the "**New Non-Convertible Note**," and together with the New Convertible Note, the "**New Notes**") to be dated as of the Closing Date.

On and subject to the terms and conditions set forth in this Agreement, the parties hereto agree as follows:

Article I: Exchange of the Existing Note

At the Closing (as defined herein), the Holder shall exchange and deliver to the Company the Existing Note, and in exchange therefor the Company hereby agrees to issue or pay, as the case may be, to the Holder the consideration described below (such exchange, the "**Exchange**"):

Exchange Consideration	
Closing Date Shares:	7,142,857
Closing Date Cash Payment:	$ 3,000,000
Aggregate principal amount of New Convertible Note to be issued in the Exchange	$35,000,000
Aggregate principal amount of New Non-Convertible Note to be issued in the Exchange	$35,050,750

The closing of the Exchange (when all exchanges between the parties set forth below have been consummated, the "**Closing**") shall occur on a date (the "**Closing Date**") that is no later than five business days after the date of this Agreement; *provided* that the Closing shall take place concurrently with the consummation of those certain credit facilities to be provided under that certain Credit and Security Agreement, expected to be dated as of August 6, 2019, by and between the Company, MannKind LLC, the lenders party thereto and MidCap Financial Trust as administrative agent for such lenders (in such capacity, the "**MidCap Agent**").

At the Closing, (a) the Holder shall: (i) deliver or cause to be delivered to the Company all right, title and interest in and to the Existing Note (and no other consideration) free and clear of any mortgage, lien, pledge, charge, security interest, encumbrance, title retention agreement, option, equity or other adverse claim thereto (collectively, "**Liens**"), together with any documents of conveyance or transfer that the Company may deem necessary or desirable to transfer to and confirm in the Company all right, title and interest in and to the Existing Note free and clear of any Liens; and (ii) sign a subordination agreement with the MidCap Agent in the form of Exhibit A hereto, and (b) the Company shall: (i) pay to the Holder the Closing Date Cash Payment; (ii) issue and deliver to the Holder the Closing Date Shares; (iii) issue and deliver to the Holder the New Convertible Note, substantially in the form of Exhibit B hereto; and (iv) issue and deliver to the Holder the New Non-Convertible Note, substantially in the form of Exhibit C hereto; *provided*, *however*, that the parties acknowledge that the delivery of the Closing Date Shares to the Holder may be delayed due to procedures and mechanics within the system of the Depository Trust Company or The NASDAQ Global Market or other events beyond the Company's control and that such delay will not be a default under this Agreement so long as (A) the Company is using its best efforts to effect the issuance of the Closing Date Shares, and (B) such delay is no longer than five business days. Notwithstanding the foregoing, for the avoidance of doubt, as of the Closing, the Holder shall be deemed for all corporate purposes to have become the legal and record holder of the Closing Date Shares without any further action by any party. In the event that any Closing Date Shares are not delivered on a timely basis in accordance herewith, the Holder shall have all available remedies available at law or in equity.

The parties agree that the delivery of the Exchange Notes and the New Notes may be effected electronically, provided that each party agrees that it will, upon request, execute and deliver any additional documents reasonably deemed necessary or desirable by the other party or transfer agent for the Closing Date Shares to be issued to complete the Exchange.

Article II: Covenants, Representations and Warranties of the Holder

The Holder hereby covenants as follows, and makes the following representations and warranties, each of which is and shall be true and correct on the date hereof and at the Closing, to the Company and all such covenants, representations and warranties shall survive the Closing.

Section 2.1 Power and Authorization. The Holder is duly organized, validly existing and in good standing, and has the power, authority and capacity to execute and deliver this Agreement, to perform its obligations hereunder, and to consummate the Exchange contemplated hereby.

Section 2.2 Valid and Enforceable Agreement; No Violations. This Agreement has been duly executed and delivered by the Holder and constitutes a legal, valid and binding obligation of the Holder, enforceable against the Holder in accordance with its terms, except that such enforcement may be subject to (a) bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium or other similar laws affecting or relating to enforcement of creditors' rights generally, and (b) general principles of equity, whether such enforceability is considered in a proceeding at law or in equity (the "**Enforceability Exceptions**"). This Agreement and consummation of the Exchange will not violate, conflict with or result in a breach of or default under (i) the Holder's organizational documents, (ii) any agreement or instrument to which the Holder is a party or by which the Holder or any of its assets are bound, or (iii) any laws, regulations or governmental or judicial decrees, injunctions or orders applicable to the Holder.

Section 2.3 Title to the Existing Note. The Holder is the sole legal and beneficial owner of the Existing Note. The Holder has good, valid and marketable title to the Existing Note, free and clear of any Liens (other than pledges or security interests that the Holder may have created in favor of a prime broker under and in accordance with its prime brokerage agreement with such broker). The Holder has not, in whole or in part, except as described in the preceding sentence, (a) assigned, transferred, hypothecated, pledged, exchanged or otherwise disposed of the Existing Note or any of its rights in the Existing Note, or (b) given any person or entity any transfer order, power of attorney or other authority of any nature whatsoever with respect to the Existing Note. Upon the Holder's delivery of the Existing Note to the Company pursuant to the Exchange, the Existing Note shall be free and clear of all Liens created by the Holder.

Section 2.4 Qualified Institutional Buyer. The Holder is an "accredited investor" within the meaning of Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended (the "**Securities Act**"), and is acquiring the Closing Date Shares and the New Notes for investment for its own respective account and not with a view to, or for resale in connection with, any distribution thereof in a manner that would violate the registration requirements of the Securities Act.

Section 2.5 [Reserved]

Section 2.6 No Illegal Transactions. The Holder has not, directly or indirectly, and no person acting on behalf of or pursuant to any understanding with it has, disclosed to a third party any information regarding the Exchange or engaged in any transactions in the securities of the Company (including, without limitation, any Short Sales (as defined below) involving any of the Company's securities) since the time that the

Holder was first contacted by either the Company or any other person regarding the Exchange, this Agreement or an investment in the New Notes or the Common Stock or the Company. The Holder covenants that neither it nor any person acting on its behalf or pursuant to any understanding with it will disclose to a third party any information regarding the Exchange or engage, directly or indirectly, in any transactions in the securities of the Company (including Short Sales) prior to the time the transactions contemplated by this Agreement are publicly disclosed. "**Short Sales**" include, without limitation, all "short sales" as defined in Rule 200 of Regulation SHO promulgated under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and all types of direct and indirect stock pledges, forward sale contracts, options, puts, calls, short sales, swaps, derivatives and similar arrangements (including on a total return basis), and sales and other transactions through non-U.S. broker-dealers or foreign regulated brokers. Solely for purposes of this Section 2.6, subject to the Holder's compliance with its obligations under the U.S. federal securities laws and the Holder's internal policies, (a) "Holder" shall not be deemed to include any employees, subsidiaries or affiliates of the Holder that are effectively walled off by appropriate "Chinese Wall" information barriers approved by the Holder's respective legal or compliance department (and thus have not been privy to any information concerning the Exchange), and (b) the foregoing representations and covenants of this Section 2.6 shall not apply to any transaction by or on behalf of an Account that was effected without the advice or participation of, or such Account's receipt of information regarding the Exchange provided by, the Holder.

Section 2.7 **Adequate Information; No Reliance.** The Holder acknowledges and agrees that (a) the Holder has been furnished with all materials it considers relevant to making an investment decision to enter into the Exchange and has had the opportunity to review the Company's filings and submissions with the Securities and Exchange Commission (the "**SEC**"), including, without limitation, all information filed or furnished pursuant to the Exchange Act, (b) the Holder has had a full opportunity to ask questions of and receive answers from the officers of the Company concerning the Company, their business, operations, financial performance, financial condition and prospects, and the terms and conditions of the Exchange, (c) the Holder, together with its professional advisers, is a sophisticated and experienced investor and is capable of evaluating, to its satisfaction, the accounting, tax, financial, legal and other risks associated with the Exchange, and that the Holder has had the opportunity to consult with its accounting, tax, financial and legal advisors to be able to evaluate the risks involved in the Exchange and to make an informed investment decision with respect to such Exchange, and that the Holder is capable of sustaining any loss resulting therefrom without material injury, (d) the Holder understands that no federal or state agency has passed upon the merits or risks of an investment in the Common Stock or made any finding or determination concerning the fairness or advisability of this investment, (e) the Holder is not relying, and has not relied, upon any statement, advice (whether accounting, tax, financial, legal or other), representation or warranty made by the Company or any of its affiliates or representatives, except for the representations and warranties made by the Company in this Agreement, (f) any disclosure documents provided in connection with the Exchange are the responsibility of the Company, (g) no statement or written material contrary to this Agreement has been made or given to the Holder by or on behalf of the Company and (h) the Holder is able to fend for itself in the Exchange, has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of the prospective investment in the New Notes and the Common Stock and has the ability to bear the economic risks of its investment and can afford the complete loss of such investment.

The Holder specifically understands and acknowledges that, on the date of this Agreement and on the Closing Date, the Company may have in its possession non-public information that could be material to the market price of the Existing Note, the New Notes and/or the Common Stock. The Holder hereby represents and warrants that, in entering into this Agreement and consummating the transactions contemplated hereby, it does not require the disclosure of such non-public information to it by the Company in order to make an investment in the Common Stock or a disposition of the Existing Note, and hereby waives all present or future claims arising out of or relating to the Company's failure to disclose such non-public information to the Holder.

The Holder also specifically acknowledges that the Company would not enter into this Agreement or any related documents in the absence of such Holder's representations and acknowledgments set out in this

Agreement, and that this Agreement, including such representations and acknowledgments, are a fundamental inducement to the Company, and a substantial portion of the consideration provided by such Holder, in this transaction, and that the Company would not enter into this transaction but for this inducement.

Section 2.8 **Tax Consequences of the Exchange.** The Holder understands that the tax consequences of the Exchange will depend in part on its own tax circumstances. The Holder acknowledges that it must consult its own tax adviser about the federal, foreign, state and local tax consequences peculiar to its circumstances.

Section 2.9 **Tax Reporting.** On or prior to the Closing, the Holder shall deliver to the Company completed IRS Form W-9.

Section 2.10 **No Public Market.** The Holder acknowledges and agrees that no public market exists for the New Notes and that there is no assurance that a public market will ever develop for the New Notes.

Article III: Covenants, Representations and Warranties of the Company

The Company hereby covenants as follows, and makes the following representations and warranties, each of which is and shall be true and correct on the date hereof and at the Closing, to the Holder, and all such covenants, representations and warranties shall survive the Closing.

Section 3.1 **Power and Authorization.** The Company is duly incorporated, validly existing and in good standing under the laws of its state of incorporation, and has the power, authority and capacity to execute and deliver this Agreement, to perform its obligations hereunder, and to consummate the Exchange contemplated hereby.

Section 3.2 **Valid and Enforceable Agreement; No Violations.** This Agreement has been duly executed and delivered by the Company and constitutes a legal, valid and binding obligation of the Company, enforceable against it in accordance with its terms, except that such enforcement may be subject to the Enforceability Exceptions. The issuance of the New Notes have been duly authorized by the Company. At the Closing, the New Notes will have been duly executed and delivered by the Company and will constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with its terms, except that such enforcement may be subject to the Enforceability Exceptions. This Agreement, the issuance of the Closing Date Shares and the New Notes and consummation of the Exchange will not violate, conflict with or result in a breach of or default under (a) the charter, bylaws or other organizational documents of the Company, (b) any agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound, or (c) any laws, regulations or governmental or judicial decrees, injunctions or orders applicable to the Company.

Section 3.3 **Securities Law Matters.** Assuming the accuracy of the Holder's representations and warranties hereunder, the Closing Date Shares and the New Notes (a) will be issued in the Exchange exempt from the registration requirements of the Securities Act pursuant to Section 4(a)(2) of the Securities Act, and (b) will be issued in compliance with all applicable state and federal laws concerning the issuance of the Closing Date Shares and the New Notes.

Section 3.4 **Validity of Underlying Common Stock.** The New Convertible Note will at the Closing be convertible into shares of the Common Stock (the "**Conversion Shares**") in accordance with the terms thereof. The Conversion Shares have been duly authorized and reserved by the Company for issuance upon conversion of the New Convertible Note and, when issued upon conversion of the New Convertible Note in accordance with the terms thereof, will be validly issued, fully paid and non-assessable, and the issuance of the Conversion Shares will not be subject to any preemptive, participation, rights of first refusal or other similar rights.

Section 3.5 **Validity of the Closing Date Shares.** The Closing Date Shares (a) have been duly authorized by the Company and, upon their issuance pursuant to the Exchange against delivery of the Existing Note in accordance with the terms of this Agreement, the Closing Date Shares will be validly issued, fully-paid and non-assessable and (b) will not, as of the date of issuance, be subject to any preemptive, participation, rights of first refusal or other similar rights.

Section 3.6 **Listing.** At the Closing, the Closing Date Shares and the Conversion Shares shall be approved for listing on The NASDAQ Global Market, subject to notice of issuance.

Article IV: Miscellaneous

Section 4.1 **Entire Agreement.** This Agreement, the New Notes, and any documents and agreements executed in connection with the Exchange embody the entire agreement and understanding of the parties hereto with respect to the subject matter hereof and supersede all prior and contemporaneous oral or written agreements, representations, warranties, contracts, correspondence, conversations, memoranda and understandings between or among the parties or any of their agents, representatives or affiliates relative to such subject matter, including, without limitation, any term sheets, emails or draft documents.

Section 4.2 **Construction.** References in the singular shall include the plural, and vice versa, unless the context otherwise requires. References in the masculine shall include the feminine and neuter, and vice versa, unless the context otherwise requires. Headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meanings of the provisions hereof. Neither party, nor its respective counsel, shall be deemed the drafter of this Agreement for purposes of construing the provisions of this Agreement, and all language in all parts of this Agreement shall be construed in accordance with its fair meaning, and not strictly for or against either party.

Section 4.3 **Costs and Expenses.** The Holder and the Company shall each pay their own respective costs and expenses incurred in connection with the negotiation, preparation, execution and performance of this Agreement, including, but not limited to, attorneys' fees.

Section 4.4 **Governing Law.** This Agreement shall in all respects be construed in accordance with and governed by the substantive laws of the State of New York, without reference to its choice of law rules.

Section 4.5 **Counterparts.** This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument. Any counterpart or other signature hereon delivered by facsimile shall be deemed for all purposes as constituting good and valid execution and delivery of this Agreement by such party.

[Signature Page Follows]

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be executed as of the date first above written.

“COMPANY”:

MANNKIND CORPORATION

By: /s/ Steven Binder
Name: Steven Binder
Title: Chief Financial Officer

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be executed as of the date first above written.

"HOLDER":

THE MANN GROUP LLC

By: /s/ Michael S. Dreyer
Name: Michael S. Dreyer
Title: President

EXHIBIT A
Form of Subordination Agreement

EXHIBIT B
Form of New Convertible Note

EXHIBIT C
Form of New Non-Convertible Note

Exhibit 99.4

Execution Version

EXCHANGE AGREEMENT

This **EXCHANGE AGREEMENT** (this "**Agreement**") dated as of August 6, 2019 (the "**Closing Date**"), is by and among MannKind Corporation, a Delaware corporation (the "**Borrower**"), MannKind LLC, a Delaware limited liability company ("**Guarantor**" and together with the Borrower, collectively, the "**Obligors**"), Deerfield Private Design Fund II, L.P. ("**DPDF**") and Deerfield Private Design International II, L.P. ("**DPDI**" and, together with DPDF, the "**Purchasers**"). Capitalized terms used herein which are defined in the Facility Agreement (as defined below), unless otherwise defined herein, shall have the meanings ascribed to them in the Facility Agreement.

RECITALS:

A. The Obligors and the Purchasers have entered into that certain Facility Agreement, dated as of July 1, 2013, as amended by the First Amendment to Facility Agreement and Registration Rights Agreement, dated as of February 28, 2014, the Second Amendment to Facility Agreement, dated as of August 11, 2014, the Exchange and Third Amendment to Facility Agreement, dated as of June 29, 2017, the Fourth Amendment to Facility Agreement, dated as of October 23, 2017, the Fifth Amendment to Facility Agreement, dated as of January 15, 2018, the Exchange and Sixth Amendment to Facility Agreement, dated as of January 18, 2018, the Exchange and Seventh Amendment to Facility Agreement, dated as of June 8, 2018, the Exchange and Eighth Amendment to Facility Agreement, dated as of July 12, 2018, the Ninth Amendment to Facility Agreement, dated as of September 5, 2018, the Tenth Amendment to Facility Agreement, dated as of September 26, 2018, and the Eleventh Amendment to Facility Agreement, dated as of June 18, 2019 (the "**Facility Agreement**").

B. The Facility Agreement provides for the issuance of Notes in 4 Tranches of $40,000,000 per Tranche. Prior to the date hereof, the Purchasers purchased the Tranche 1 Notes, the Tranche 2 Notes, the Tranche 3 Notes and the Tranche 4 Notes in the aggregate principal amount of $40,000,000 per Tranche.

C. The Facility Agreement also provides for the issuance of Tranche B Notes. An aggregate of $20,000,000 in principal amount of Tranche B Notes have been issued to the Purchasers.

D. Prior to the date hereof, (i) the Purchasers have converted all of the Tranche 2 Notes and the Tranche 3 Notes into Common Stock, (ii) the Borrower has repaid, converted, exchanged and/or otherwise satisfied the Tranche 4 Notes and the Tranche B Notes and (iii) the Borrower has repaid, converted, exchanged and/or otherwise satisfied a portion of the principal amounts under the Tranche 1 Notes, leaving $5,000,000 in principal amount of the Tranche 1 Notes outstanding.

E. Pursuant to this Agreement, the Borrower shall repay an aggregate of $2,000,000 in principal amount of the Tranche 1 Notes in cash, and the remaining $3,000,000 in principal amount of the Tranche 1 Notes shall be exchanged for the issuance of 1,248,214 shares of Common Stock to DPDF (the "**DPDF Shares**"), and 1,430,357 shares of Common Stock to DPDI (the "**DPDI Shares**" and, together with the DPDF Shares, the "**Exchange Shares**"); and

F. The Purchasers and the Obligors are contemporaneously entering into a payoff letter, dated of even date herewith (the "**Payoff Letter**"), providing for, among other things, the release of the security interests securing the obligations under the Facility Agreement and all other Transaction Documents, including the Tranche 1 Notes, effective upon the consummation of the Repayment and the Exchange (each as defined herein).

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, agree as follows:

ARTICLE I.
REPAYMENT AND EXCHANGE

Section 1.01. Repayment. In connection with the closing on the date hereof of the credit facilities (the "**New Financing**") pursuant to that certain Credit and Security Agreement, dated as of the Closing Date, by and among the Borrower, the Guarantor, the lenders party thereto and MidCap Financial Trust, as administrative agent for the lenders thereunder (the "**New Financing Document**"), by no later than 4:00 p.m., New York City time, on the Closing Date, the Borrower shall pay or direct that payment be made, by wire transfer of immediately available funds to an account or accounts specified by the Purchasers, an aggregate of $2,000,0000, which shall constitute the repayment of $932,000 in principal amount of DPDF's Tranche 1 Note and $1,068,000 in principal amount of DPDI's Tranche 1 Note, and shall additionally pay an aggregate of $49,417.81, which shall constitute payment of accrued and unpaid interest on the principal of the Tranche 1 Notes through the date hereof in amounts of $23,028.70 and $26,389.11 to DPDF and DPDI, respectively (collectively, the "**Repayment**"). In the event that the Borrower fails to make such payment in full by such deadline, each Purchaser shall have the right to rescind and terminate any or all of this Agreement and the transactions contemplated hereby and/or to exercise any and all other rights and remedies available at law or in equity.

Section 1.02. Exchange. In connection with closing on the date hereof of the New Financing, each Purchaser hereby agrees to exchange a portion of the principal amount of such Purchaser's Notes for the issuance by the Borrower to such Purchaser of the applicable Exchange Shares (the "**Exchange**"), as follows:

(a) Issuance of Shares. Pursuant to the Exchange, which shall be deemed effective and consummated immediately prior to the closing of the New Financing on the Closing Date, (i) the Borrower shall issue the DPDF Shares to DPDF and the DPDI Shares to DPDI, and, subject thereto and in exchange therefor, (ii) (A) the principal amount of DPDF's Tranche 1 Note shall be deemed repaid by $1,398,000 and the principal amount of DPDI's Tranche 1 Note shall be deemed repaid by $1,602,000, each such deemed repayment to be applied against, and reduce, the principal amount of each Purchaser's Tranche 1 Note that the Borrower would, but for the consummation of the transactions contemplated by this Article I, be obligated to repay on August 31, 2019. The Borrower represents, warrants, covenants and agrees that, in reliance on the

Purchasers' representations in Section 2.01(e), the Exchange Shares (X) will be freely transferable by the Purchasers, without restriction or limitation (including any volume limitation) under federal or state securities laws, pursuant to Rule 144 under the Securities Act, and (Y) will not contain or be subject to any legend or stop transfer instructions restricting the sale or transferability thereof.

(b) Delivery of Exchange Shares. By no later than 4:00 p.m., New York City time, on the Closing Date, the Borrower shall cause the transfer agent for the Common Stock to credit the aggregate number of Exchange Shares to which each Purchaser is entitled pursuant to the Exchange to such Purchaser's or its designee's balance account with The Depository Trust Company through its Deposit/Withdrawal At Custodian system. For the avoidance of doubt, as of effectiveness of the Exchange, each Purchaser shall be deemed for all corporate purposes to have become the legal and record holder of its Exchange Shares without any further action by any party. In the event that any Exchange Shares are not delivered on a timely basis in accordance herewith, the Purchasers shall have the right to rescind and terminate any or all of this Agreement and the transactions contemplated hereby, to exercise any of the remedies available under the Notes in the event of any failure to timely deliver Conversion Shares (as if the Exchange Shares were Conversion Shares) and/or to exercise any and all other rights and remedies available at law or in equity.

(c) Cancellation of Notes. Upon consummation of the Repayment and the Exchange (including delivery of all of the Exchange Shares to the Purchasers in accordance herewith), the Facility Agreement and all other Transaction Documents, including the Tranche 1 Notes, will have been repaid in full, will be deemed cancelled and will be of no further force or effect, as more fully set forth in (and subject to the terms and conditions of) the Payoff Letter and subject to Section 5.17.

Following the Exchange, the Purchasers will surrender the Tranche 1 Notes to the Borrower for cancellation.

ARTICLE II.
REPRESENTATIONS AND WARRANTIES

Section 2.01. Representations and Warranties of the Purchasers. Each Purchaser hereby represents and warrants to the Borrower as of the date of this Agreement as follows:

(a) Organization and Good Standing. Such Purchaser is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted.

(b) Authority. Such Purchaser has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and otherwise to carry out its obligations hereunder. The execution and delivery of each of this Agreement by

such Purchaser and the consummation by it of the transactions contemplated hereby have been duly authorized by all necessary action on the part of such Purchaser and no further action is required in connection herewith or therewith.

(c) Valid and Binding Agreement. This Agreement has been duly executed and delivered by such Purchaser and constitutes the valid and binding obligation of such Purchaser, enforceable against such Purchaser in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally and (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

(d) Non-Contravention. The execution and delivery of this Agreement by such Purchaser and the performance by such Purchaser of its obligations hereunder does not and will not (i) violate any provision of such Purchaser's organizational documents or (ii) conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which such Purchaser is subject, or by which such Purchaser's Tranche 1 Note is bound or affected.

(e) Exemption. Such Purchaser has held such Purchaser's Tranche 1 Note of record and beneficially for a period of at least one year for purposes of Rule 144 under the Securities Act and is not, and during the three-month period prior to the date hereof has not been, an Affiliate of the Borrower. Such Purchaser understands that the Exchange Shares are being offered, sold, issued and delivered to it in reliance upon specific exemptions from registration or qualification under federal and applicable state securities laws.

(f) Ownership of the Notes. Such Purchaser is the record and beneficial owner of, and has good and valid title to, such Purchaser's Tranche 1 Note, free and clear of all Liens, and has full power to dispose thereof and to exercise all rights thereunder (other than as restricted by this Agreement), without the consent or approval of, or any other action on the part of, any other Person. Other than as contemplated by this Agreement, there is no outstanding contract, vote, plan, pending proposal or other right of any Person to acquire such Purchaser's Tranche 1 Note or any portion thereof.

(g) Stock Ownership. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby will not cause such Purchaser to own, or be treated as owning under the attribution rules of Section 871(h)(3)(C) of the Code, 10% or more of the total combined voting power of the stock of Borrower for purposes of Section 871(h)(3) of the Code.

Section 2.02. Representations and Warranties of the Borrower. The Borrower hereby represents and warrants to the Purchasers as of the date of this Agreement as follows:

(a) Organization and Good Standing. The Borrower is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted.

(b) Authority. The Borrower has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement by the Borrower and the consummation by it of the transactions contemplated hereby have been duly authorized by all necessary action on the part of the Borrower, and no further action of the Borrower, its board of directors or stockholders is required in connection herewith or therewith.

(c) Consents. The Borrower is not required to obtain any consent from, authorization or order of, or make any filing or registration with any Governmental Authority or any regulatory or self-regulatory agency or any other Person in order for it to execute, deliver or perform any of its respective obligations under or contemplated by this Agreement, in accordance with the terms hereof.

(d) Valid and Binding Agreement. This Agreement has been duly executed and delivered by the Borrower and constitutes the valid and binding obligations of the Borrower, enforceable against the Borrower in accordance with their respective terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally and (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

(e) Non-Contravention. The execution and delivery of this Agreement and the performance by the Borrower of its obligations hereunder does not and will not (i) violate any provision of the Borrower's certificate of incorporation or bylaws, (ii) conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Borrower is subject, or by which any property or asset of the Borrower is bound or affected, (iii) require any permit, authorization, consent, approval, exemption or other action by, notice to or filing with, any court or other federal, state, local or other governmental authority or other Person, (iv) violate, conflict with, result in a material breach of, or constitute (with or without notice or lapse of time or both) a material default under, or an event which would give rise to any right of notice, modification, acceleration, payment, cancellation or termination under, or in any manner release any party thereto from any obligation under, any permit or contract to which the Borrower is a party or by which any of its properties or assets are bound, or (v) result in the creation or imposition of any Lien on any part of the properties or assets of the Borrower. No Event of Default exists.

(f) Issuance of Exchange Shares. The Exchange Shares are duly authorized and, when issued in accordance with this Agreement, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Borrower.

(g) SEC Reports. The Borrower has filed all reports, schedules, forms, statements and other documents required to be filed by it under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "SEC Reports"). As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Borrower is not in violation of the requirements of The NASDAQ Stock Market ("**NASDAQ**") and has no knowledge of any facts or circumstances which could reasonably lead to delisting or suspension of trading of the Common Stock in the foreseeable future.

(h) Certain Fees. No brokerage or finder's fees or commissions are or will be payable by the Borrower or any of its affiliates or representatives to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by this Agreement. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section 2.2(h) that may be due in connection with the transactions contemplated hereby.

(i) Exemption from Registration. No registration under the Securities Act is required for the offer and issuance of the Exchange Shares by the Borrower to the Purchasers as contemplated hereby. The issuance and sale of the Exchange Shares hereunder do not contravene, or require stockholder approval pursuant to, the rules and regulations of NASDAQ. At the time of issuance, and in reliance on the Purchasers' representations in Section 2.01(f) above, the Exchange Shares will be freely tradeable by each Purchaser without restriction or limitation (including volume limitation), pursuant to Rule 144 under the Securities Act, and will not contain or be subject to any legend or stop transfer instructions restricting the sale or transferability thereof.

(j) No Integrated Offering. Neither the Borrower, nor any of its affiliates, nor any Person acting on its or their behalf has, directly or indirectly, has made, or will make, any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause this offering and issuance of the Exchange Shares to be integrated with prior offerings by the Borrower (i) for purposes of the Securities Act and which would require the registration of any such securities under the Securities Act, or (ii) for purposes of any applicable stockholder approval provisions of NASDAQ.

ARTICLE III.
COVENANTS

Section 3.01. Blue Sky Filings. The Borrower shall take such action as is necessary in order to obtain an exemption for, or to qualify the Exchange Shares for, issuance and sale to the Purchasers under applicable securities or "Blue Sky" laws of the states of the United States, and shall provide evidence of such actions promptly upon request of any Purchaser.

Section 3.02. Listing. To the extent required under the rules of The Nasdaq Global Market, the Borrower has submitted an application for the listing of the Exchange Shares on The Nasdaq Global Market and will use its commercially reasonable efforts to secure such listing. The Borrower shall pay all fees and expenses in connection with satisfying its obligations under this Section 3.02.

Section 3.03. Disclosure; Confidentiality. On or before 8:00 a.m., New York City time, on August 8, 2019, the Borrower shall file a Current Report on Form 8-K describing all the material terms of the transactions contemplated by this Agreement and the New Financing, attaching as exhibits this Agreement and disclosing any other presently material non-public information (if any) provided or made available to any Purchaser (or any Purchaser's agents or representatives) on or prior to the date hereof (including the exhibits, the "**8-K Filing**"). From and after the filing of the 8-K Filing, the Borrower shall have disclosed all material, non-public information (if any) provided or made available to any Purchaser (or any Purchaser's agents or representatives) by Borrower or any of its respective officers, directors, employees, Affiliates or agents in connection with the transactions contemplated by this Agreement or the New Financing Documents or otherwise on or prior to the date hereof. Notwithstanding anything contained in this Agreement to the contrary and without implication that the contrary would otherwise be true, the Borrower expressly acknowledges and agrees that, from and after the 8-K Filing, no Purchaser shall have (unless expressly agreed to by a particular Purchaser after the date hereof in a written definitive and binding agreement executed by (or customary oral (confirmed by email) "wall-cross" agreement between) the Borrower and such particular Purchaser (it being understood and agreed that no Purchaser may bind any other Purchaser with respect thereto)), any duty of trust or confidence with respect to, or a duty not to trade on the basis of, any information regarding the Borrower.

Section 3.04. Taxes. The Borrower shall be responsible for paying all present or future stamp, court or documentary, intangible, recording, filing or similar taxes that arise from any payment or issuance made under, from the execution, delivery, performance or enforcement of, or otherwise with respect to, this Agreement.

Section 3.05. Fees and Expenses. On the Closing Date, the Borrower shall reimburse the Purchasers for all of their reasonable out-of-pocket, costs, fees and expenses, including legal fees and expenses, incurred in connection with the negotiation and drafting of this Agreement and the consummation of the transactions contemplated hereby, which amounts shall be included in the Loan Payoff Amount (as defined in the Payoff Letter).

ARTICLE IV.
ACKNOWLEDMENT OF THE BORROWER AND THE GUARANTOR

Section 4.01. The Obligors irrevocably and unconditionally acknowledge, affirm and covenant to each Purchaser that:

(a) such Purchaser is not in default under any of the Transaction Documents and has not otherwise breached any obligations to the Borrower or the Guarantor; and

(b) there are no offsets, counterclaims or defenses to the Obligations, including the liabilities and obligations of the Borrower under the Notes and other Transaction Documents, or to the rights, remedies or powers of such Purchaser in respect of any of the Obligations or any of the Transaction Documents, and the Obligors agree not to interpose (and each does hereby waive and release) any such defense, set-off or counterclaim in any action brought by such Purchaser with respect thereto.

ARTICLE V.
MISCELLANEOUS

Section 5.01. Entire Agreement. This Agreement and the Payoff Letter constitute the entire agreement, and supersede all other prior and contemporaneous agreements and understandings, both oral and written, among the Purchasers, the Borrower and Guarantor with respect to the subject matter hereof.

Section 5.02. Amendments and Waivers. No provision of this Agreement may be waived or amended except in a written instrument signed by the parties hereto. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right.

Section 5.03. Successors and Assigns. All of the covenants and provisions of this Agreement by or for the benefit of the Purchasers or the Borrower shall bind and inure to the benefit of their respective successors and permitted assigns. No party hereunder may assign its rights or obligations hereunder without the prior written consent of the other parties hereto, except as otherwise provided in the Transaction Documents.

Section 5.04. Notices. Any notice to be given by any party to this Agreement shall be given in writing and be effected as provided in Section 6.1 of the Facility Agreement (regardless of any termination of the Facility Agreement).

Section 5.05. Applicable Law; Consent to Jurisdiction.

(a) As part of the consideration and mutual promises being exchanged and given in connection with this Agreement, the parties hereto agree that all claims, controversies and disputes of any kind or nature arising under or relating in any way to the enforcement or interpretation of this Agreement or to the parties' dealings, rights or obligations in connection herewith, including disputes relating to the negotiations for, inducements to enter into, or execution of, this Agreement, and disputes concerning the interpretation, enforceability, performance, breach, termination or validity of all or any portion of this Agreement shall be governed by the laws of the State of New York without regard to its choice or conflicts of laws principles.

(b) The parties hereto agree that all claims, controversies and disputes of any kind or nature relating in any way to the enforcement or interpretation of this Agreement or to the parties' dealings, rights or obligations in connection herewith, shall be brought exclusively in the state and federal courts sitting in The City of New York, Borough of Manhattan. With respect to any such claims, controversies or disputes, each of the parties to this Agreement hereby irrevocably:

(i) submits itself and its property, generally and unconditionally, to the personal jurisdiction of the aforesaid courts and agrees that it will not bring any action in any court or tribunal other than the aforesaid courts;

(ii) waives, and agrees not to assert, by way of motion, as a defense, counterclaim or otherwise, in any action or proceeding (A) any claim that it is not personally subject to the jurisdiction of the above named courts for any reason other than the failure to serve process in accordance with this Section 5.05, (B) any claim that it or its property is exempt or immune from jurisdiction of any such court or from any legal process commenced in such courts (whether through service of notice, attachment prior to judgment, attachment in aid of execution of judgment, execution of judgment or otherwise), and (C) to the fullest extent permitted by the applicable law, any claim that (1) the suit, action or proceeding in such court is brought in an inconvenient forum, (2) the venue of such suit, action or proceeding is improper or (3) this Agreement, or the subject matter hereof, may not be enforced in or by such courts; and

(iii) WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY DISPUTE ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT. EACH PARTY TO THIS AGREEMENT CERTIFIES AND ACKNOWLEDGES THAT (I) NO REPRESENTATIVE OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT SEEK TO ENFORCE THE FOREGOING WAIVER IN THE EVENT OF A LEGAL ACTION, (II) SUCH PARTY HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (III) SUCH PARTY MAKES THIS WAIVER VOLUNTARILY AND (IV) SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 5.05.

(iv) Notwithstanding the foregoing in this Section 5.05, a party may commence any action or proceeding in a court other than the above-named courts solely for the purpose of enforcing an order or judgment issued by one of the above-named courts.

Section 5.06. Agreement Fee. As consideration for the Purchasers' entry into this Agreement, on the Closing Date, the Borrowers shall pay the Purchasers, or direct payment be made to the Purchasers of, an aggregate of $150,000 (allocated as set forth in the Payoff Letter) by wire transfer of immediately available funds to an account or accounts designated by the Purchasers, which amounts shall be included in the Loan Payoff Amount (as defined in the Payoff Letter)..

Section 5.07. Counterparts; Effectiveness. This Agreement and any amendment hereto may be executed and delivered in any number counterparts, and by the different parties hereto in separate counterparts, each of which when executed shall be deemed to be an original, but all of which taken together shall constitute one and the same agreement. In the event that any signature to this Agreement or any amendment hereto is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf" signature page were an original thereof. No party hereto shall raise the use of a facsimile machine or e-mail delivery of a ".pdf" format data file to deliver a signature to this Agreement or any amendment hereto or the fact that such signature was transmitted or communicated through the use of a facsimile machine or e-mail delivery of a ".pdf" format data file as a defense to the formation or enforceability of a contract, and each party hereto forever waives any such defense.

Section 5.08. No Third Party Beneficiaries. Nothing in this Agreement, express or implied, is intended to or shall confer upon the Person (other than the parties to this Agreement) any right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

Section 5.09. Specific Performance. The parties to this Agreement agree that irreparable damage would occur and that the parties to this Agreement would not have any adequate remedy at law in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties to this Agreement shall be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement, in each case without the necessity of posting bond or other security or showing actual damages, and this being in addition to any other remedy to which they are entitled at law or in equity.

Section 5.10. Effect of Headings. The section and subsection headings herein are for convenience only and not part of this Agreement and shall not affect the interpretation thereof.

Section 5.11. Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be prohibited by or invalid under applicable law, such provision shall

be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of this Agreement so long as this Agreement as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

Section 5.12. Avoidance of Doubt. The parties hereto hereby agree, for the avoidance of doubt, that the terms "**Liabilities**" and "**Obligations**" as used in the Transaction Documents shall include all liabilities and obligations of the Borrower under this Agreement, under the Facility Agreement, under the Notes and under the other Transaction Documents, and each of the parties hereto agrees not to take any contrary positions.

Section 5.13. Reservation of Rights. Neither of the Purchasers has hereby waived (a) any breach, default or Event of Default that may be continuing under any of the Transaction Documents or (b) any of such Purchaser's rights or remedies arising from any such breach, default or Event of Default or otherwise available under the Transaction Documents or at law or in equity. Each of the Purchasers expressly reserves all such rights and remedies.

Section 5.14. Further Assurances. The Borrower hereby agrees, from time to time, as and when requested by any Purchaser, to execute and deliver or cause to be executed and delivered, all such documents, instruments and agreements, including secretary's certificates, stock powers and irrevocable transfer agent instructions, and to take or cause to be taken such further or other action, as any Purchaser may reasonably deem necessary or desirable in order to carry out the intent and purposes of this Agreement and the Transaction Documents.

Section 5.15. No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rule of strict construction will be applied against any party.

Section 5.16. Interpretative Matters. Unless otherwise indicated or the context otherwise requires, (i) all references to Sections, Schedules, Appendices or Exhibits are to Sections, Schedules, Appendices or Exhibits contained in or attached to this Agreement, (b) words in the singular or plural include the singular and plural and pronouns stated in either the masculine, the feminine or neuter gender shall include the masculine, feminine and neuter, (c) the words "hereof," "herein" and words of similar effect shall reference this Agreement in its entirety, and (d) the use of the word "including" in this Agreement shall be by way of example rather than limitation.

Section 5.17. Reaffirmation. Each of the Obligors hereby consents to this Agreement and acknowledges and agrees that, notwithstanding anything to the contrary contained herein, (a) any provision of the Facility Agreement or any other Transaction Document that by its terms

specifically survives repayment in full of the Notes or termination of the Facility Agreement or such other Transaction Document (as applicable) shall remain in full force and effect, (b) this Agreement shall remain in full force and effect, and (c) the Milestone Rights Purchase Agreement, dated as of July 1, 2013, by and among the Company and DPDF and Horizon Santé FLML SÀRL, a Luxembourg Société à Responsibilité Limitée (as such agreement may be amended, restated, modified or otherwise supplemented, the "**Milestone Agreement**"), and the "Milestone Rights" (as defined in, and issued under, the Milestone Agreement) remain in full force and effect and are hereby ratified and reaffirmed. For the avoidance of doubt, each Purchaser agrees that, upon consummation of the Exchange and Repayment, none of the obligations set forth in clauses (a)-(c) of this Section 5.17 shall be secured by any lien or security interest on any asset of any Obligor.

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IN WITNESS WHEREOF, each party hereto has caused this Exchange Agreement to be duly executed as of the date first written above.

THE BORROWER:

MANNKIND CORPORATION

By: /s/ Steven B. Binder
Name: Steven B. Binder
Title: CFO

THE GUARANTOR:

MANNKIND LLC

By: /s/ Steven B. Binder
Name: Steven B. Binder
Title: CFO

PURCHASERS:

DEERFIELD PRIVATE DESIGN FUND II, L.P.

By: Deerfield Mgmt, L.P., its General Partner
By: J.E. Flynn Capital, LLC, its General Partner

By: /s/ David Clark
Name: David Clark
Title: Authorized Signatory

DEERFIELD PRIVATE DESIGN INTERNATIONAL II, L.P.

By: Deerfield Mgmt, L.P., its General Partner
By: J.E. Flynn Capital, LLC, its General Partner

By: /s/ David Clark
Name: David Clark
Title: Authorized Signatory

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD LIKELY CAUSE COMPETITIVE HARM IF PUBLICLY DISCLOSED.

FIFTH AMENDMENT TO SUPPLY AGREEMENT

This fifth amendment ("**Fifth Amendment**") to the Supply Agreement by and between MannKind Corporation ("**MannKind**") and Amphastar Pharmaceuticals, Inc. ("**Amphastar**"), originally dated July 31, 2014 and as previously amended on October 31, 2014 ("**First Amendment**"), November 9, 2016 ("**Second Amendment**"), April 11, 2018 ("**Third Amendment**"), and December 24, 2018 ("**Fourth Amendment**") (collectively, the "**Agreement**"), is hereby made as of the 2nd day of August, 2019, by and between MannKind on the one hand, and on the other hand, Amphastar.

RECITALS

WHEREAS, MannKind and Amphastar entered into the Agreement pursuant to which Amphastar is to manufacture and supply the Product to MannKind, and MannKind is to purchase certain minimum quantities of the Product; and

WHEREAS MannKind and Amphastar have determined it to be mutually beneficial to amend the Agreement as set forth herein.

NOW, THEREFORE, for good and valuable consideration, MannKind and Amphastar, hereby agree to amend the Agreement as follows:

1. Definitions. Unless otherwise defined herein, each of the capitalized terms used in this Fifth Amendment shall have the definition and meaning ascribed to it in the Agreement.

2. Amendment Fees. In order to compensate Amphastar and its subsidiaries for its unused manufacturing capacity related to 2019 production, MannKind shall make the following payments (in U.S. dollars) to Amphastar France Pharmaceuticals S.A.S., as manufacturer of the API, no later than the dates specified below:

Amount	Payment Due Date
$1,500,000	September 15, 2019
$1,250,000	December 15, 2019

In the event that MannKind fails to make timely payment in full of the Amendment Fees specified in this Section 2, the terms and conditions of the Agreement, as amended by the Fourth Amendment, shall be in full force and effect from and after January 1, 2020; provided, however, that MannKind will still be required to immediately pay in full the Amendment Fees and purchase an additional **[***]** kg of Purchase Commitment Quantities to be added to the 2020 Purchase Commitment Quantities specified in the Fourth Amendment (i.e., the Purchase Commitment Quantities for 2020 shall become **[***]** kg).

3. Amendments to the Agreement. Subject to Section 2 of this Fifth Amendment, the Agreement shall be, and hereby is, amended, as follows:

3.1 Section 6.1 of the Agreement, as amended by the First, Second, and Fourth Amendments, shall be amended and replaced in its entirety with the following:

"6.1 Purchase Commitment and Purchase Price. MannKind shall purchase from Amphastar the minimum quantities of Product (the "Purchase Commitment Quantities") at the purchase price per gram (the "Purchase Price") in each calendar year as provided in the table set forth below. This annual Purchase Commitment Quantities will be divided into four (4) equal quarterly commitments (the "Quarterly Commitment') for purchase commitments in years 2022 - 2026. In the event that MannKind fails to meet the Quarterly Commitment in any given calendar quarter, MannKind shall pay Amphastar for the difference in the amount of the Quarterly Commitment and the actual amount purchased for the corresponding calendar quarter (such difference, the "Payment Commitment Difference"). Amphastar shall issue an invoice and MannKind shall pay the Payment Commitment Difference no later than fifteen (15) business days after the close of the corresponding calendar quarter.

Calendar Year	Purchase Commitment Quantities (kg)	Purchase Price (per gram)	Delivery and Payment
2014	[***]	[***]	Completed
2015	[***]	[***]	Completed
2016	[***]	[***]	
2017	[***]	[***]	Completed
2018	[***]	[***]	Completed
2019	[***]	[***]	Completed
2020	[***]	[***]	50% of the Purchase Commitment Quantities shall be purchased in each of the second Quarter and fourth Quarter.
2021	[***]	[***]	50% of the Purchase Commitment Quantities shall be purchased in each of the second Quarter and fourth Quarter.
2022	[***]	[***]	25% of the Purchase Commitment Quantities shall be purchased on a Quarterly basis.
2023	[***]	[***]	25% of the Purchase Commitment Quantities shall be purchased on a Quarterly basis.

2024	[***]	[***]	25% of the Purchase Commitment Quantities shall be purchased on a Quarterly basis.
2025	[***]	[***]	25% of the Purchase Commitment Quantities shall be purchased on a Quarterly basis.
2026	[***]	[***]	25% of the Purchase Commitment Quantities shall be purchased on a Quarterly basis.

All amounts due under this § 6.1 shall be due and payable by MannKind to Amphastar in U.S. dollars, and the conversion of the Purchase Price from euros (EUR) to U.S. dollars shall be made using the exchange rate at the close (Eastern time) of the last business day immediately prior to the shipment date, as reported by the Bloomberg Currency Spot Exchange Rate (http://www.bloomberg.com/guote/EURUSD:CUR), and otherwise in accordance with § 6.2.

(a) The Purchase Price will be subject to an obligatory annual adjustment on January 1 of each calendar year equal to the percentage change in the **[***]** (the *"Index")*, where the annual adjustment is calculated using the historical twelve (12) month percentage change of the Index, as of December 1 of the immediate prior year; provided, however, that if the percentage change (either increase or decrease, as applicable) of the Index equals or exceeds **[***]** percent (i.e., +/- **[***]**%), the Purchase Price adjustment shall not be obligatory, but instead the Parties shall attempt in good faith to negotiate an adjusted Purchase Price based on such change, which attempted negotiations shall be concluded no later than February 15 of that calendar year.

(b) In addition to any adjustment to the Purchase Price pursuant to §6.1(a), if for causes beyond Amphastar's reasonable control (including market shortage, market embargo, etc.), Amphastar has incurred any price increase(s) in its aggregate material and service costs (such increased costs measured on a per gram basis of Product, the *"Cost Excess")* which are in excess of **[***]** percent (**[***]**%) of the Purchase Price in a given calendar year, then the Purchase Price for the next calendar year shall be increased by the percentage increase of the Cost Excess as compared to the aggregate costs for such materials and services during the prior calendar year.

(c) If Amphastar delivers any Product Purchase Commitment Quantities, as defined in the Firm Order Period through a Purchase Order accepted by Amphastar, beyond sixty (60) days after the committed delivery date, then such quantities shall be subject to a **[***]** percent (**[***]**%) discount off the Purchase Price."

3.2 Section 6.2, as amended by the Second Amendment, shall be amended and replaced with the following:

"**6.2 Payment.** MannKind shall pay Amphastar for the Product within thirty (30) days from the shipment date of the Product. Notwithstanding anything to the contrary, in no event shall any of the Quarterly payments set forth in the table above [Section 6.1 of the Agreement] be payable to Amphastar later than fifteen (15) days after the close of the corresponding Quarter. Amphastar shall submit an invoice electronically to MannKind, Attention: Account Payable, ap@mannkindcorp.com. If any portion of an invoice is disputed then MannKind shall pay the undisputed amount and the Parties shall use good faith efforts to reconcile the disputed amount as soon as practicable."

3.3 The following sentence in Section 5.1 of the Agreement, as amended in the Second Amendment:

"In calendar year 2017 and 2018, upon delivery to MannKind, Amphastar shall ensure that Product will have a remaining expiry date of not less than two (2) years. In calendar year 2019 and the remainder of the term of the Agreement, Amphastar shall ensure Product will have a remaining expiry date of not less than three (3) years."

is amended and replaced in its entirety with the following:

"In calendar years 2019, 2020, and 2021, upon delivery to MannKind, Amphastar shall ensure that Product will have a remaining expiry date of not less than three (3) years. In calendar years 2022 and 2023, upon delivery to MannKind, Amphastar shall ensure that Product will have a remaining expiry date of not less than two (2) years. In calendar year 2024 and the remainder of the term of the Agreement, Amphastar shall ensure Product will have a remaining expiry date of not less than three (3) years."

3.4 Section 4.1 of the Agreement is amended and replaced in its entirety with the following:

"**4.1 Raw Materials**. Amphastar shall be responsible for obtaining, and shall store at no cost to MannKind, any and all materials required for the manufacture of the Product, in reasonable quantities consistent with MannKind's designated quantities and orders for the Product. Amphastar shall use and rotate all stock of materials on a first in, first out basis. Amphastar shall conduct on-site quality audits of its inclusion bodies supplier on a regular basis, but shall not be obligated to conduct more than one (1) such audit every calendar year. Amphastar represents, and warrants that Amphastar's long-term supply agreement with Merck Sharpe & Dohme B.V., combined with the alternate source described below, will provide Amphastar with a sufficient supply of inclusion bodies to support Amphastar's obligations with respect to the Purchase Commitment Quantities and Purchase Price (without resorting to § 6.1(b)) under this Agreement and covenants that during the term of this Agreement Amphastar shall not unreasonably terminate its sources or amend such supply agreement in a manner that would adversely affect Amphastar's ability to perform its obligations under this Agreement. If during the term of this Agreement Amphastar intends to qualify an appropriate alternate source of inclusion bodies to supplement or replace its supply from Merck Sharpe & Dohme B.V. then Amphastar must notify MannKind in writing and Amphastar agrees that such change shall not

adversely affect Amphastar's ability to perform its obligations under this Agreement. For the avoidance of doubt, the Parties agree that Amphastar had notified MannKind on April 24, 2018 that Amphastar intends to qualify an alternate source of inclusion bodies. Both parties shall cooperate diligently and in good faith to obtain any and all necessary approvals for the alternate source of inclusion bodies. MannKind agrees that Amphastar's use of an alternate source of inclusion bodies does not change the Purchase Commitments agreed upon in the table of Section 6.1."

3.5 Section 10.1 of the Agreement shall be extended until December 31, 2026. All other terms and conditions in Section 10.1 shall remain in full force and effect.

4. Final Agreement. From and after the execution of this Fifth Amendment, all references in the Agreement (or in the Fifth Amendment) to "this Agreement," "hereof," "herein," "hereto," and similar words or phrases shall mean and refer to the Agreement as amended by this Fifth Amendment. The Agreement as amended by this Fifth Amendment constitutes the entire agreement by and between the Parties as to the subject matter hereof. Except as expressly modified by this Fifth Amendment, all other terms and conditions of the Agreement shall remain in full force and effect

IN WITNESS WHEREOF, each of MannKind and Amphastar has caused this Fifth Amendment to be executed by their duly authorized officers.

MannKind Corporation

By: /s/ Michael Castagna
Name: Michael Castagna
Title: Chief Executive Officer

Amphastar Pharmaceuticals, Inc.

By: /s/ Jason Shandell
Name: Jason Shandell
Title: President