UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2018

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NUMBER: 001-36485

ARDELYX, INC.

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE	**26-1303944**
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(I.R.S. EMPLOYER IDENTIFICATION NUMBER)

34175 Ardenwood Boulevard, Suite 200
Fremont, California 94555
(ADDRESS OF PRINCIPAL EXECUTIVE OFFICES, INCLUDING ZIPCODE)

(510) 745-1700
(REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐ (do not check if a smaller reporting company)	Smaller reporting company	☐
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. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of issued and outstanding shares of the registrant's Common Stock, $0.0001 par value per share, as of August 2, 2018, was 62,053,751.

ARDELYX, INC.

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PART I. FINANCIAL INFORMATION

ITEM 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

ARDELYX, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share amounts)

	June 30, 2018 (Unaudited)	December 31, 2017 (1)
Assets		
Current assets:		
Cash and cash equivalents	$ 91,751	$ 75,383
Short-term investments	120,980	58,593
Accounts receivable	30	10,796
Unbilled license revenue	5,000	—
Prepaid expenses and other current assets	3,927	4,940
Total current assets	221,688	149,712
Property and equipment, net	6,689	8,032
Other assets	159	159
Total assets	$ 228,536	$ 157,903
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 3,172	$ 3,933
Accrued compensation and benefits	2,203	3,229
Uncharged license fees	1,000	—
Accrued and other liabilities	9,234	10,709
Total current liabilities	15,609	17,871
Loan payable, long term	48,836	—
Other long-term liabilities	677	720
Total liabilities	65,122	18,591
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.0001 par value; 5,000,000 shares authorized; no shares issued and outstanding as of June 30, 2018 and December 31, 2017, respectively.	—	—
Common stock, $0.0001 par value; 300,000,000 shares authorized; 62,053,751 and 47,534,979 shares issued and outstanding as of June 30, 2018 and December 31, 2017, respectively.	6	5
Additional paid-in capital	476,968	417,568
Accumulated deficit	(313,524)	(278,214)
Accumulated other comprehensive loss	(36)	(47)
Total stockholders' equity	163,414	139,312
Total liabilities and stockholders' equity	$ 228,536	$ 157,903

(1) Derived from the audited consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017.

See accompanying notes to Condensed Consolidated Financial Statements.

ARDELYX, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Revenues:				
Licensing revenue	$ —	$ —	$ 2,320	$ —
Other revenue	30	—	30	—
Total revenues	30	—	2,350	—
Cost of revenue	—	—	464	—
Gross profit	30	—	1,886	—
Operating expenses:				
Research and development	16,046	20,572	$ 29,396	$ 42,960
General and administrative	6,138	5,846	12,329	11,892
Total operating expenses	22,184	26,418	41,725	54,852
Loss from operations	(22,154)	(26,418)	(39,839)	(54,852)
Other income (expense), net	(135)	697	535	1,123
Loss before provision for income taxes	(22,289)	(25,721)	(39,304)	(53,729)
Provision for income taxes	2	—	6	—
Net loss	$ (22,291)	$ (25,721)	$ (39,310)	$ (53,729)
Net loss per common share, basic and diluted	$ (0.42)	$ (0.54)	$ (0.78)	$ (1.13)
Shares used in computing net loss per share - basic and diluted	52,824,483	47,403,243	50,206,470	47,373,404
Comprehensive loss:				
Net loss	(22,291)	(25,721)	$ (39,310)	$ (53,729)
Unrealized (loss) gain on available-for-sale securities, net of tax	55	9	11	31
Comprehensive loss	$ (22,236)	$ (25,712)	$ (39,299)	$ (53,698)

See accompanying notes to Condensed Consolidated Financial Statements.

ARDELYX, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(Unaudited)

	Six Months Ended June 30,	
	2018	2017
Operating activities		
Net loss	$ (39,310)	$ (53,729)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation expense	1,343	1,242
Amortization of deferred financing costs	59	325
Amortization of deferred compensation for services	101	91
Amortization of premium on investment securities	(256)	1
Stock-based compensation	5,028	4,899
Non-cash interest expense relating to loan payable	54	—
Changes in operating assets and liabilities:		
Accounts receivable	10,766	—
Prepaid expenses and other assets	1,192	(2,961)
Accounts payable	(706)	(451)
Accrued compensation and benefits	(1,026)	(562)
Accrued and other liabilities	(2,064)	498
Net cash used in operating activities	(24,819)	(50,647)
Investing activities		
Proceeds from maturities of investments	56,050	75,434
Sales and redemptions of investments	850	10,482
Purchases of investments	(119,021)	(44,748)
Purchases of property and equipment	(55)	(1,907)
Net cash (used in) provided by investing activities	(62,176)	39,261
Financing activities		
Proceeds from loan payable, net of issuance costs	49,292	—
Proceeds from underwritten public offering, net of issuance costs	53,770	—
Proceeds from issuance of common stock under stock plans	301	424
Net cash provided by financing activities	103,363	424
Net decrease in cash and cash equivalents	16,368	(10,962)
Cash and cash equivalents at beginning of period	75,383	74,598
Cash and cash equivalents at end of period	$ 91,751	$ 63,636
Supplementary disclosure of non-cash financing information:		
Issuance of derivative in connection with issuance of loan payable	$ 546	$ —

See accompanying notes to Condensed Consolidated Financial Statements.

ARDELYX, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

NOTE 1. ORGANIZATION AND BASIS OF PRESENTATION

Ardelyx, Inc., or "the Company," is a specialized biopharmaceutical company focused on developing disruptive medicines for the treatment of renal diseases, which affect both the heart and the kidneys. Tenapanor, a first-in-class inhibitor of NHE3, is being evaluated in a second Phase 3 trial for the treatment of hyperphosphatemia in patients with end-stage renal disease, or ESRD, who are on dialysis. The Company is also advancing a small molecule potassium secretagogue program, RDX013, for the potential treatment of hyperkalemia as well as tenapanor for the treatment of people with irritable bowel syndrome with constipation, or IBS-C, for which the Company is preparing to submit a New Drug Application, or NDA, to the United States Food and Drug Administration, or FDA, in the second half of 2018.

The Company operates in only one business segment, which is the development of biopharmaceutical products.

Basis of Presentation

These unaudited condensed consolidated financial statements and the related footnote information of the Company have been prepared pursuant to the requirements of the Securities and Exchange Commission, or the SEC, for interim reporting. As permitted under those rules and regulations, certain footnotes or other financial information that are normally required by U.S. generally accepted accounting principles, or U.S. GAAP, have been condensed or omitted pursuant to such rules and regulations. In the opinion of the Company's management, the accompanying interim unaudited condensed consolidated financial statements include all adjustments (consisting only of normal recurring adjustments) necessary for a fair presentation of the information for the periods presented. The results for the three and six months ended June 30, 2018, are not necessarily indicative of results to be expected for the entire year ending December 31, 2018, or future operating periods.

The accompanying condensed consolidated financial statements and related financial information should be read in conjunction with the audited consolidated financial statements and the related notes thereto for the year ended December 31, 2017, included in the Company's Annual Report on Form 10-K filed with the SEC (the "2017 Form 10-K"). The balance sheet at December 31, 2017, has been derived from the audited consolidated financial statements at that date, as filed with the 2017 Form 10-K.

The accompanying condensed consolidated financial statements include the accounts of Ardelyx, Inc. and its wholly-owned subsidiary, Ardelyx Cayman Islands, which was placed into voluntary liquidation in December 2017, and have been prepared in accordance with U.S. GAAP. Intercompany transactions and balances have been eliminated in consolidation.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and judgments that affect the amounts reported in the consolidated financial statements and accompanying notes. On an ongoing basis, management evaluates its estimates, including those related to recognition of revenue, clinical trial accruals, contract manufacturing accruals, fair value of assets and liabilities, income taxes and stock-based compensation. Management bases its estimates on historical experience and on various other market-specific and relevant assumptions that management believes to be reasonable under the circumstances. Actual results could materially differ from those estimates.

Accrued Research and Development Expenses

As part of the process of preparing its financial statements, the Company is required to estimate its accrued expenses. This process involves reviewing open contracts and purchase orders, communicating with its personnel to identify services that have been performed on its behalf and estimating the level of service performed and the associated cost incurred for the service when the Company has not yet been invoiced or otherwise notified of the actual cost. The majority of the Company's service providers submit its monthly invoices in arrears for services performed or when contractual milestones are met. The Company makes estimates of its accrued expenses as of each balance sheet date in its financial statements based on facts and circumstances known to the Company at that time. The Company periodically confirms the accuracy of its estimates with the service providers and makes adjustments if necessary. Examples of estimated accrued research and development expenses include fees paid to:

- contract research organizations, or CROs, in connection with clinical studies;
- investigative sites in connection with clinical studies;
- vendors related to product manufacturing, development and distribution of clinical supplies; and
- vendors in connection with preclinical development activities.

The Company records expenses related to clinical studies and manufacturing development activities based on its estimates of the services received and efforts expended pursuant to contracts with multiple CROs and manufacturing vendors that conduct and manage these activities on its behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract, and may result in uneven payment flows. There may be instances in which payments made to the Company's vendors will exceed the level of services provided and result in a prepayment of the expense. Payments under some of these contracts depend on factors such as the successful enrollment of subjects and the completion of clinical trial milestones. In accruing service fees, the Company estimates the time period over which services will be performed, enrollment of subjects, number of sites activated and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from the Company's estimate, the Company will adjust the accrued or prepaid expense balance accordingly. To date, there have been no material differences from the Company's estimates to the amounts actually incurred.

Revenue Recognition

On January 1, 2018 the Company adopted the new standard for Revenue from Contracts with *Customers*, Topic 606, on a modified retrospective method as an adjustment to the opening balance of retained earnings of the annual reporting period. On January 1, 2018, the Company recorded an increase in current assets of $5.0 million representing a future receivable related to the first milestone under the Company's license agreement with Kyowa Hakko Kirin Co., Ltd., or KHK,, which the Company believes is not materially at risk, an increase in current liabilities of $1.0 million representing a future payable related to the corresponding payment to AstraZeneca AB, or AstraZeneca,, in accordance with the Company's termination agreement with AstraZeneca and a related decrease in its accumulated deficit of approximately $4.0 million as the new standard permits revenue from milestones that possess certain criteria to be recognized earlier of approximately $4.0 million as the new standard contains different recognition criteria related to milestones than under the previous standard, Revenue Recognition, Multiple-Element *Arrangements*, ASC 605, Licensing revenues.

The Company enters into licensing agreements which are within the scope of Topic 606, under which it licenses certain rights to its product candidates to third parties. The terms of these arrangements typically include payment to the Company of one or more of the following: non-refundable, up-front license fees; development, regulatory and commercial milestone payments; and future royalties on net sales of licensed products. Each of these payments results in license, collaboration and other revenues, except for revenues from royalties on net sales of licensed products, which are classified as royalty revenues.

In determining the appropriate amount of revenue to be recognized as it fulfills its obligations under each of its agreements, the Company performs the following steps: (i) identification of the promised goods or services in the contract;

(ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when (or as) the Company satisfies each performance obligation. As part of the accounting for these arrangements, the Company must develop assumptions that require judgment to determine the stand-alone selling price for each performance obligation identified in the contract. The Company uses key assumptions to determine the stand-alone selling price, which may include forecasted revenues, development timelines, reimbursement rates for personnel costs, discount rates and probabilities of technical and regulatory success.

Milestone Payments: At the inception of each arrangement that includes development milestone payments, the Company evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price using the most likely amount method. Amounts of variable consideration are included in the transaction price to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur and when the uncertainty associated with the variable consideration is subsequently resolved. Milestone payments that are not within the control of the Company or the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. The transaction price is then allocated to each performance obligation on a relative stand-alone selling price basis, for which the Company recognizes revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, the Company re-evaluates the probability of achievement of such development milestones and any related constraint, and if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect license, collaboration and other revenues and earnings in the period of adjustment.

Manufacturing Supply Services: Arrangements that include a promise for future supply of drug substance or drug product for either clinical development or commercial supply at the customer's discretion are generally considered as options. The Company assess if these options provide a material right to the licensee and if so, they are accounted for as separate performance obligations. If the Company is entitled to additional payments when the customer exercises these options, any payments are recorded in license, collaboration and other revenues when the customer obtains control of the goods, which is upon delivery.

Royalties: For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any royalty revenue resulting from any of its licensing arrangements.

Reclassification

Approximately $0.2 million in the six months ended June 30, 2017, which was previously recorded within "Proceeds from issuance of common stock under stock plans" in Financing activities in the Statement of Cash Flows, has been reclassified as a Changes in operating assets and liabilities item "Prepaid expenses and other assets" within Operating activities.

Recent Accounting Pronouncements

New Accounting Pronouncements - Recently Adopted

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2014-09, which amends the guidance for accounting for revenue from contracts with customers. This ASU supersedes the revenue recognition requirements in Topic 605, *Revenue Recognition*, and creates a new Topic 606, *Revenue from Contracts with Customers.* In 2015 and 2016, the FASB issued additional ASUs related to Topic 606 that delayed the effective date of the guidance and clarified various aspects of the new revenue guidance, including principal versus agent considerations, identifying performance obligations, and licensing, and they include other improvements and practical expedients. The Company adopted this new standard on January 1, 2018 using the modified retrospective transition method.

Impact of Adoption

The Company, on adopting Topic 606 on January 1, 2018, has used the modified retrospective transition method with the cumulative effect of initially applying the standard as an adjustment to the opening balance of retained earnings of the annual reporting period that includes the date of initial application. The following adjustments were recorded in the opening balance on January 1, 2018.

	December 31, 2017	Adjustments Due to Topic 606	January 1, 2018
Total current assets	$ —	5,000	$ 5,000
Total current liabilities	—	1,000	1,000
Accumulated deficit	$ —	4,000	$ 4,000

As a result of adopting Topic 606 on January 1, 2018, the following financial statement line items in the Company's Condensed Consolidated Balance Sheet at June 30, 2018 and the Condensed Consolidated Statement of Income for the six months ended June 30, 2018 were affected.

	June 30, 2018		
	As Reported	Under Topic 605	Effect of Change
Total current assets	$ 221,688	216,688	$ 5,000
Total current liabilities	15,609	14,609	1,000
Accumulated deficit	(313,524)	(317,524)	4,000

	Six Months Ended June 30, 2018		
	As Reported	Under Topic 605	Effect of Change
Revenue:			
Licensing revenue	$ 2,320	2,320	$ —
Other revenue	30	30	—
Cost of revenue	464	464	—

In May 2017, FASB issued ASU No. 2017-09, Compensation-Stock Compensation (Topic 718) - Scope of Modification Accounting (ASU 2017-09). The amendments included in this update provide guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The amendments in this update will be applied prospectively to an award modified on or after the adoption date. On January 1, 2018, we adopted ASU 2017-09 and the adoption of this standard did not have a material impact on the Company's condensed consolidated financial statements.

New Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which replaces most current lease guidance when it becomes effective. This standard update intends to increase the transparency and improve comparability by requiring entities to recognize assets and liabilities on the balance sheet for all leases, with certain exceptions. The new standard states that a lessee will recognize a lease liability for the obligation to make lease payments and a right-of-use asset for the right to use the underlying asset for the lease term. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the consolidated statements of operations. The new guidance will be effective for the Company starting in the first quarter of fiscal 2019. Early adoption is permitted. The Company plans to adopt the new guidance effective January 1, 2019, and is currently evaluating the effect that this guidance will have on its consolidated financial statements and related disclosures.

In June 2018, the FASB issued ASU No. 2018-07, *Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*. ASU 2018-07 is intended to reduce the cost and complexity and to improve financial reporting for nonemployee share-based payments. ASU 2018-07 expands the scope of Topic 718, Compensation-Stock Compensation (which currently only includes share-based payments to employees) to include share-based payments issued to nonemployees for goods or services. Consequently, the accounting for share-based payments to nonemployees and employees will be substantially aligned. ASU 2018-07 supersedes Subtopic 505-50, Equity-Based Payments to Non-

Employees. ASU 2018-07 is effective for the Company for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year and early adoption is permitted. The Company is currently assessing the impact of this standard on its consolidated financial statements.

The Company has reviewed all other significant newly-issued accounting pronouncements and concluded that they either are not applicable to the Company's operations or no material effect is expected on its condensed consolidated financial statements as a result of future adoption.

NOTE 3. CASH, CASH EQUIVALENTS AND INVESTMENTS

Securities classified as cash, cash equivalents and short-term investments as of June 30, 2018 and December 31, 2017, are summarized below (in thousands). Estimated fair value is based on quoted market prices for these investments.

	June 30, 2018			
		Gross Unrealized		
	Amortized Cost	Gains	Losses	Fair Value
Cash and cash equivalents:				
Cash	$ 2,932	—	—	$ 2,932
Money market funds	67,611	—	—	67,611
Corporate bonds	2,664		—	2,664
Commercial paper	18,544	—	—	18,544
Total cash and cash equivalents	$ 91,751	$ —	$ —	$ 91,751
Short-term investments				
U.S. treasury securities	8,459	1	—	8,460
Corporate bonds	38,788	—	(31)	38,757
Commercial paper	64,642	—	(2)	64,640
Asset-backed securities	9,126	—	(3)	9,123
Total short-term investments	$ 121,015	$ 1	$ (36)	$ 120,980
Total cash equivalents and investments	$ 212,766	$ 1	$ (36)	$ 212,731

	December 31, 2017			
		Gross Unrealized		
	Amortized Cost	Gains	Losses	Fair Value
Cash and cash equivalents:				
Cash	$ 5,882	$ —	$ —	$ 5,882
Money market funds	68,651	—	—	68,651
Commercial paper	850	—	—	850
Total cash equivalents and investments	$ 75,383	$ —	$ —	$ 75,383
Short-term investments				
U.S. treasury securities	$ 3,994	—	(1)	$ 3,993
Corporate bonds	26,853	—	(26)	26,827
Commercial paper	19,584	—	(14)	19,570
Asset-backed securities	8,209	—	(6)	8,203
Total short-term investments	$ 58,640	$ —	$ (47)	$ 58,593
Total cash equivalents and investments	$ 134,023	$ —	$ (47)	$ 133,976

Cash equivalents consist of money market funds and other debt securities with original maturities of three months or less at the time of purchase, and the carrying amount is a reasonable approximation of fair value. The Company invests its cash in high quality securities of financial and commercial institutions. These securities are carried at fair value, which is based on readily available market information, with unrealized gains and losses included in “accumulated other comprehensive loss” within stockholders’ equity on the Company’s condensed consolidated balance sheets. The Company uses the specific identification method to determine the amount of realized gains or losses on sales of marketable securities. Realized gains or losses have been insignificant and are included in “other income, net” in the consolidated condensed statement of operations.

All available-for-sale securities held as of June 30, 2018, had contractual maturities of less than one year. The Company’s available-for-sale securities are subject to a periodic impairment review. The Company considers a debt security to be impaired when its fair value is less than its carrying cost, in which case the Company would further review the investment to determine whether it is other-than-temporarily impaired. When the Company evaluates an investment for other-than-temporary impairment, the Company reviews factors such as the length of time and extent to which fair value has been below cost basis, the financial condition of the issuer and any changes thereto, intent to sell, and whether it is more likely than not the Company will be required to sell the investment before the recovery of it cost basis. If an investment is other-than-temporarily impaired, the Company writes it down through the statement of operations to its fair value and establishes that value as a new cost basis for the investment. The Company did not identify any of its available-for-sale securities as other-than-temporarily impaired in any of the periods presented. As of June 30, 2018, no investment was in a continuous unrealized loss position for more than one year and the Company believes that is more likely than not the investments will be held until maturity or a forecasted recovery of fair value.

NOTE 4. FAIR VALUE MEASUREMENTS

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs.

The three-level hierarchy for the inputs to valuation techniques is briefly summarized as follows:

Level 1 – Valuations are based on quoted prices in active markets for identical assets or liabilities and readily accessible by the Company at the reporting date. Examples of assets and liabilities utilizing Level 1 inputs are certain money market funds, U.S. Treasuries and trading securities with quoted prices on active markets.

Level 2 – Valuations based on inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Examples of assets and liabilities utilizing Level 2 inputs are corporate bonds, commercial paper, certificates of deposit and over-the-counter derivatives.

Level 3 – Valuations based on unobservable inputs in which there is little or no market data, which require the Company to develop its own assumptions.

The following table sets forth the fair value of the Company's financial assets and liabilities measured on a recurring basis by level within the fair value hierarchy (in thousands):

	June 30, 2018			
	Total	Level 1	Level 2	Level 3
Assets:				
Money market funds	$ 67,611	$ 67,611	$ —	$ —
U.S. treasury securities	8,460	8,460	—	—
Corporate bonds	41,421	—	41,421	—
Commercial paper	83,184	—	83,184	—
Asset-backed securities	9,123	—	9,123	—
Total	$ 209,799	$ 76,071	$ 133,728	$ —
Liabilities:				
Derivative liability	$ 546	$ —	$ —	$ 546

	December 31, 2017			
	Total	Level 1	Level 2	Level 3
Assets:				
Money market funds	$ 68,651	$ 68,651	$ —	$ —
U.S. treasury securities	3,993	3,993	—	—
Corporate bonds	26,827	—	26,827	—
Commercial paper	20,420	—	20,420	—
Asset-backed securities	8,203	—	8,203	—
Total	$ 128,094	$ 72,644	$ 55,450	$ —

Where quoted prices are available in an active market, securities are classified as Level 1. The Company classifies money market funds, U.S. treasury securities and U.S. government-sponsored agency bonds as Level 1. When quoted market prices are not available for the specific security, then the Company estimates fair value by using benchmark yields, reported trades, broker/dealer quotes and issuer spreads. The Company classifies corporate bonds, commercial paper and asset-backed securities as Level 2. In certain cases, where there is limited activity or less transparency around inputs to valuation, securities are classified as Level 3. There were no transfers between Level 1 and Level 2 during the periods presented.

In May 2018, pursuant to the loan and security agreement with Solar Capital Ltd. and Western Alliance Bank (see Note 5), the Company entered into an Exit Fee Agreement under which the Company agreed to pay $1.5 million in cash, or the Exit Fee, upon any change of control transaction or if the Company obtains FDA approval of tenapanor in the treatment of hyperphosphatemia in ESRD patients on dialysis and FDA approval of tenapanor for the treatment of patients with IBS-C. Notwithstanding the prepayment or termination of the Term Loan, the Company's obligation to pay the Exit Fee will expire 10 years from the Closing Date. The Company evaluated that the Exit Fee is a freestanding derivative which should be accounted for at fair value on a recurring basis. The estimated fair value of the Exit Fee was determined to be $546,000 and is recorded as a derivative liability and included in accrued and other liabilities on the accompanying consolidated balance sheet.

The fair value of the derivative liability was determined using a discounted cash flow analysis, and is classified as a Level 3 measurement within the fair value hierarchy since the Company's valuation utilized significant unobservable inputs. Specifically, the key assumptions included in the calculation of the estimated fair value of the derivative instrument include: i) the Company's estimates of both the probability and timing of a potential $1.5 million payment to Solar Capital Ltd. and Western Alliance Bank as a result of the FDA approvals, and ii) a discount rate which was derived from the Company's estimated cost of debt. Generally, increases or decreases in the probability of occurrence would result in a directionally similar impact in the fair value measurement of the derivative instrument and it is estimated that a 10% increase (decrease) in the probability of occurrence would result in a fair value fluctuation of approximately $55,000.

The carrying amounts reflected in the balance sheets for cash equivalents, short-term investments, accounts receivable, prepaid expenses and other current assets, accounts payable and accrued expenses approximate their fair values at both June 30, 2018 and December 31, 2017, due to their short-term nature.

NOTE 5. BORROWINGS

Solar Capital and Western Alliance Bank Loan Agreement

On May 16, 2018, the Company entered into a loan and security agreement, or the Loan Agreement, with Solar Capital Ltd. and Western Alliance Bank, or collectively the Lenders. The Loan Agreement provides for a $50.0 million term loan facility with a maturity date of November 1, 2022, or the Term Loan. The full amount of the loan was funded on May 16, 2018. The Company received net proceeds from the loan of approximately $49.3 million, after deducting the closing fee, legal expenses and issuance cost.

Borrowings under the Term Loan bear interest at a floating per annum rate equal to 7.45% plus the one-month LIBOR. The Company is permitted to make interest-only payments on the Term Loan through December 1, 2020 if the Company achieves its primary endpoint in the Phase 3 study of tenapanor for the treatment of hyperphosphatemia in end-stage renal disease patients on dialysis, prior to June 1, 2020; otherwise, the Company is permitted to make interest-only payments on the Term Loan only through June 1, 2020. Accordingly, beginning on either June 1, 2020 or December 1, 2020, as applicable, through the maturity date, the Company will be required to make monthly payments of interest plus repayment of the Term Loan in consecutive equal monthly installments of principal. The Company paid a closing fee of 1% of the Term Loan, or $0.5 million, upon the closing of the Term Loan. The Company is obligated to pay a final fee equal to 3.95% of the Term Loan upon the earliest to occur of the maturity date, the acceleration of the Term Loan, the prepayment or repayment of the Term Loan or the termination of the Loan Agreement. The Company may voluntarily prepay the outstanding Term Loan, subject to a prepayment premium of (i) 3% of the principal amount of the Term Loan if prepaid prior to or on the first anniversary of the Closing Date, (ii) 2% of the principal amount of the Term Loan if prepaid after the first anniversary of the Closing Date through and including the second anniversary of the Closing Date, or (iii) 1% of the principal amount of the Term Loan if prepaid after the second anniversary of the Closing Date and prior to the maturity date. The Term Loan is secured by substantially all the Company's assets, except for our intellectual property and certain other customary exclusions. Additionally, in connection with the Term Loan, the Company entered into an Exit Fee Agreement, whereby the Company agreed to pay an exit fee in the amount of 3% of the Term Loan, or the Exit Fee, upon any change of control transaction or FDA approval of tenapanor in the treatment of hyperphosphatemia in ESRD patients on dialysis and FDA approval of tenapanor for the treatment of patients with IBS-C. Notwithstanding the prepayment or termination of the Term Loan, the obligation to pay the Exit Fee will expire 10 years from the Closing Date.

The Loan Agreement contains customary representations and warranties and customary affirmative and negative covenants. Additionally, if the Company elects to enter into an exclusive license agreement for the use of its intellectual property in the United States (other than for tenapanor for hyperphosphatemia or for our FXR and TGR5 agonist programs) and has not obtained the written consent of the Lenders to enter into such license agreement, the Company has agreed to not allow our unrestricted cash and cash equivalents to be less than $50.0 million, until the Company achieves its primary endpoint in the second Phase 3 study of tenapanor for the treatment of hyperphosphatemia in end-stage renal disease patients on dialysis. As of June 30, 2018, the Company was in compliance with the covenants.

In addition, the Loan Agreement contains customary events of default that entitle the Lender to cause the Company's indebtedness under the Loan Agreement to become immediately due and payable, and to exercise remedies against the Company and the collateral securing the Term Loan, including our cash. Upon the occurrence and for the duration of an event of default, an additional default interest rate equal to 4.0% per annum will apply to all obligations owed under the Loan Agreement. As of June 30, 2018, there were no events of default.

As of June 30, 2018, assuming the principal payments start on December 1, 2020, the Company's future debt payment obligations towards the principal and final fee, excluding interest payments and exit fee, for the respective fiscal years are as follows (in thousands):

2018	$ —
2019	—
2020	2,083
2021	25,000
2022	24,892
Total principal and final fee payments	51,975
Less: Unamortized discount and debt issuance costs	(1,218)
Less: Unaccreted value of final fee	(1,921)
Loan payable, long term	$ 48,836

NOTE 6. SHAREHOLDERS EQUITY

On May 22, 2018, the Company entered into an underwriting agreement with Jefferies LLC and Leerink Partners LLC, as representatives of several underwriters, or collectively the Underwriters, pursuant to which the Company agreed to issue and sell 12,500,000 shares of its common stock, par value $0.0001 per share, or Common Stock, to the Underwriters, or the Offering. The shares were sold at a public offering price of $4.00 per share, and were purchased by the Underwriters from the Company at a price of $3.76 per Share. Under the terms of the underwriting agreement, the Company granted the Underwriters the option, for 30 days, to purchase up to 1,875,000 additional shares of Common Stock at the public offering price.

On May 25, 2018, the Offering closed and the Company completed the sale and issuance of 12,500,000 shares of Common Stock. The Company received net proceeds from the Offering of approximately $46.7 million, after deducting the Underwriters' discounts and commissions and offering expenses payable by the Company. Subsequently, on June 25, 2018, the Underwriters exercised their option to purchase the full 1,875,000 shares of Common Stock at the public offering price of $4.00 per share that were purchased by the Underwriters from the Company at a price of $3.76 per Share and the Company received additional net proceeds of $7.1 million, after deducting the Underwriters' commissions. In aggregate, the Company completed the sale and issuance of 14,375,000 shares of Common Stock and received net proceeds from the Offering of approximately $53.8 million, after deducting the Underwriters' discounts, commissions and offering expenses.

NOTE 7. STOCK-BASED COMPENSATION

The following table presents stock-based compensation expense recognized for stock options, restricted stock units, or RSUs, performance-based restricted stock units, or PRSUs, and the Company's employee stock purchase program, or ESPP, in the Company's statements of operations (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Research and development	$ 983	$ 1,414	$ 1,890	$ 2,445
General and administrative	1,620	1,376	3,138	2,454
Total	$ 2,603	$ 2,790	$ 5,028	$ 4,899

In January 2017, the Company granted PRSU awards to certain employees which vest upon the achievement of specified performance conditions, subject to the employees' continued service relationship with the Company. None vested during the three and six months ended June 30, 2018 and 2017. However, the related compensation cost is recognized as an expense over the estimated vesting period when achievement of the milestone is considered probable. The expense recognized for these awards is based on the grant date fair value of the Company's common stock multiplied by the number of units granted. The Company recognized $0.3 million and $0.4 million of related expense during the three and six months ended June 30, 2018, respectively.

At June 30, 2018, the Company had $14.5 million, $1.6 million, $0.3 million and $0.1 million of total unrecognized compensation expense, net of estimated forfeitures, related to stock option grants, RSU grants, PRSUs and the ESPP, respectively, that will be recognized over an average vesting period of 2.7 years, 1.0 years, 0.3 years and 0.2 years, respectively.

Option Exercises

For the three and six months ended June 30, 2018, zero options were exercised to purchase shares of the Company's common stock, with zero net proceeds to the Company. For the three and six months ended June 30, 2017, 9,025 and 28,326 options, respectively, were exercised to purchase shares of the Company's common stock, with insignificant net proceeds to the Company.

Restricted Stock Units

For the three and six months ended June 30, 2018, the Company issued zero shares, of its common stock upon vesting of restricted stock units to its employees. For the three and six months ended June 30, 2017, the Company issued zero and 15,188 shares, respectively, of the Company's common stock due to vesting of restricted stock units resulting in insignificant net proceeds to the Company.

Employee Stock Purchase Plan

In February 2018, the Company sold 68,589 shares under the ESPP. The shares were purchased by employees at a purchase price of $4.38 per share with proceeds to the Company of approximately $0.3 million. In February 2017, the Company sold 42,845 shares under the ESPP. The shares were purchased by employees at a purchase price of $8.77 per share with proceeds to the Company of approximately $0.4 million.

Issuance of Common Stock for Services

For the three and six months ended June 30, 2018, the Company issued 75,183 shares of common stock to members of the board of directors who elected to receive stock in lieu of their cash fees under the Non-Employee Director Compensation Plan. The shares issued were valued at $0.3 million based on the fair value of the common stock on the date of grant. For the three and six months ended June 30, 2017, the Company issued 46,858 shares of common stock to members of the board of directors who elected to receive stock in lieu of their cash fees under the Non-Employee Director Compensation Plan. The shares issued were valued at $0.2 million based on the fair value of the common stock on the date of grant.

NOTE 8. NET LOSS PER SHARE

Basic net loss per share is calculated by dividing net loss by the weighted-average number of common shares outstanding during the period, less shares subject to repurchase, and excludes any dilutive effects of stock-based awards and warrants. Diluted net loss per common share is computed giving effect to all potential dilutive common shares, including common stock issuable upon exercise of stock options, and unvested restricted common stock and stock units. As the Company had net losses for the three and six months ended June 30, 2018 and 2017, all potential common shares were determined to be anti-dilutive. The following table sets forth the computation of net loss per common share (in thousands, except share and per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Numerator:				
Net loss	$ (22,291)	$ (25,721)	$ (39,310)	$ (53,729)
Denominator:				
Weighted average common shares outstanding - basic and diluted	52,824,483	47,403,243	50,206,470	47,373,404
Net loss per share - basic and diluted	$ (0.42)	$ (0.54)	$ (0.78)	$ (1.13)

For the three and six months ended June 30, 2018 the total number of securities that could potentially dilute basic net loss per share in the future that were not included in the computation of diluted net loss per share because the effect would have been antidilutive was 7.9 million and 8.0 million, respectively.

For the three and six months ended June 30, 2017, the total number of securities that could potentially dilute basic net loss per share in the future that were not included in the computation of diluted net loss per share because the effect would have been antidilutive was 6.6 million and 6.4 million, respectively.

NOTE 9. ACCRUED AND OTHER LIABILITIES

Accrued liabilities and other liabilities consist of the following (in thousands):

	June 30, 2018	December 31, 2017
Accrued clinical and non-clinical expenses	$ 5,518	$ 5,447
Accrued contract manufacturing	1,958	3,980
Derivative liability	546	—
Accrued professional and consulting services	368	530
Other	844	752
	$ 9,234	$ 10,709

NOTE 10. COLLABORATION AND LICENSING AGREEMENTS

Kyowa Hakko Kirin Co., Ltd., or KHK

In November 2017, the Company entered into an exclusive license agreement with KHK, or the KHK Agreement, for the development, commercialization and distribution of tenapanor in Japan for cardiorenal indications. The Company assessed these arrangements in accordance with Topic 606 and concluded that the contract counterparty, KHK, is a customer. Under the terms of the KHK Agreement, the Company received $30.0 million in up-front license fees which was recognized as revenue when the agreement was executed. Based on the Company's assessment, it identified that the license and the manufacturing supply services were its material performance obligations at the inception of the agreement, and as such each of the performance obligations are distinct. Additionally, on January 1, 2018, the Company recorded an increase in current assets of $5.0 million as well as in current liabilities of $1.0 million related to the first milestone under the KHK Agreement which the Company believes is not materially at risk, reflecting revenues and cost of revenue,

respectively, that would have been recognized in the fourth quarter 2017 if the Company had adopted Topic 606 prior to January 1, 2018.

In addition to the up-front license fee of $30.0 million, the Company may be entitled to receive up to $55.0 million in total development milestones and 8.5 billion yen in commercialization milestones, as well as reimbursement of cost plus a reasonable overhead for the supply of product and high-teen royalties on net sales throughout the term of the agreement.

The Company recorded $30,000 of other revenue for manufacturing supply of tenapanor and other materials to KHK for KHK's product development and clinical trials in Japan, in accordance with the Company's agreement with KHK, for the three and six months ended June 30, 2018.

Shanghai Fosun Pharmaceutical Industrial Development Co. Ltd., or Fosun Pharma

In December 2017, the Company entered into an exclusive license agreement with Fosun Pharma, or the Fosun Agreement, for the development, commercialization and distribution of tenapanor in China for both hyperphosphatemia and irritable bowel syndrome with constipation, or IBS-C. The Company assessed these arrangements in accordance with Topic 606 and concluded that the contract counterparty, Fosun Pharma, is a customer. Under the terms of the Fosun Agreement, the Company received $12.0 million in up-front license fees which was recognized as revenue when the agreement was executed. Based on the Company's assessment, it identified that the license and the manufacturing supply services were its material performance obligations at the inception of the agreement, and as such each of the performance obligations are distinct.

In addition, the Company may be entitled to additional development and commercialization milestones of up to $113.0 million, as well as reimbursement of cost plus a reasonable overhead for the supply of product and tiered royalties on net sales ranging from the mid-teens to 20%.

There was no revenue recorded in the three and six month period ended June 30, 2018 related to the Fosun Agreement.

Knight Therapeutics, Inc., or Knight

In March 2018, the Company entered into an exclusive license agreement with Knight Therapeutics, Inc., or the Knight Agreement, for the development, commercialization and distribution of tenapanor in Canada for hyperphosphatemia and IBS-C. The Company assessed these arrangements in accordance with Topic 606 and concluded that the contract counterparty, Knight, is a customer. Based on the Company's assessment, it identified that the license and the manufacturing supply services were its material performance obligations at the inception of the agreement, and as such each of the performance obligations are distinct.

Under the terms of the agreement, the Company is eligible to receive up to CAD 25 million in total payments including an up-front payment and development and sales milestones, reimbursement of supply costs on a schedule specifying cost per tablet, with a reasonable mark up for overhead, as well as double-digit tiered royalties on net sales.

There was no revenue recorded in the three month period ended June 30, 2018 related to the Knight Agreement. In the six month period ended June 30, 2018, there was $2.3 million of revenue recorded related to the Knight Agreement and $0.5 million of cost of revenue pursuant to the AstraZeneca Termination Agreement.

AstraZeneca

In June 2015, the Company entered into a termination agreement with AstraZeneca, or the Termination Agreement, pursuant to which the Company remains liable to pay AstraZeneca license fees for (i) future royalties at a royalty rate of 10% of net sales of tenapanor or other NHE3 products by the Company or its licensees, and (ii) 20% of non-royalty revenue received from a new collaboration partner should the Company elect to license, or otherwise provide rights to develop and commercialize tenapanor or another NHE3 inhibitor, up to a maximum of $75.0 million in aggregate for (i) and (ii). To date in aggregate, the Company has recognized $9.9 million of the $75.0 million, recorded as cost of revenue comprising (i) $6.0 million and $2.4 million related to the KHK Agreement and Fosun Agreement, respectively, recorded in 2017 (ii) $1.0 million related to the KHK Agreement associated with a future milestone which the Company believes is not materially at risk for which the Company recorded an increase in current liabilities in the six month period ended June 30, 2018 reflecting the future payable to AstraZeneca and (iii) $0.5 million related to the Knight Agreement recorded in the six month period ended June 30, 2018.

NOTE 11. CONTINGENCIES

From time to time the Company may be involved in claims arising in connection with its business. Based on information currently available, the Company believes that the amount, or range, of reasonably possible losses in connection with any pending actions against it in excess of established reserves, in the aggregate, not to be material to its consolidated financial condition or cash flows. However, losses may be material to the Company's operating results for any particular future period, depending on the level of income or loss for such period.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the condensed consolidated financial statements and notes thereto included elsewhere in this report and with the audited consolidated financial statements and related notes thereto included as part of our Annual Report on Form 10-K for the year ended December 31, 2017. This discussion and analysis and other parts of this report contain forward-looking statements that involve risk and uncertainties, such as statements of our plans, objectives, expectations and intentions. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section of this report entitled "Risk Factors." These forward-looking statements speak only as of the date hereof. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason. Unless the context requires otherwise, the terms "Ardelyx," "Company," "we," "us," and "our" refer to Ardelyx, Inc.

About Ardelyx

We are a specialized biopharmaceutical company focused on developing first-in-class, disruptive medicines for the treatment of renal diseases, which affect both the heart and the kidneys. This includes patients with end-stage renal disease, or ESRD, who suffer from elevated serum phosphorus, or hyperphosphatemia; and patients with chronic kidney disease, or CKD, and/or heart failure who have elevated serum potassium, or hyperkalemia. We have also developed a number of programs directed toward treating gastrointestinal, or GI, disorders, including the treatment of irritable bowel syndrome with constipation, or IBS-C.

Our portfolio is led by the development of tenapanor, a first-in-class inhibitor of NHE3. In our renal pipeline, tenapanor is being evaluated in a second Phase 3 trial for the treatment of hyperphosphatemia in patients with ESRD who are on dialysis. We are also advancing a small molecule potassium secretagogue program, RDX013, for the potential treatment of hyperkalemia.

We have also developed tenapanor for the treatment of people with irritable bowel syndrome with constipation, or IBS-C. In 2017, we completed the T3MPO program for this indication, including two Phase 3 studies, both of which achieved statistical significance for the primary endpoint, and a long-term safety extension study. Based on the results of the T3MPO clinical program in IBS-C, we currently plan to submit our first NDA to FDA in the second half of 2018 for tenapanor for the treatment of IBS-C.

We have developed a proprietary drug discovery and design platform to discover targets found in the GI tract that regulate processes in the body and design products candidates that act upon those targets to take advantage of the gut's ability to communicate with other organs.

Since commencing operations in October 2007, substantially all our efforts have been dedicated to our research and development activities, including developing our clinical product candidate tenapanor and developing our proprietary drug discovery and design platform. We have not generated any revenues from product sales and have no products approved for commercialization.

On May 16, 2018, we entered into a loan and security agreement, or the Loan Agreement, with Solar Capital Ltd. and Western Alliance Bank. The Loan Agreement provides for a $50.0 million term loan facility with a maturity date of November 1, 2022. The full amount of the loan was funded on May 16, 2018. We received net proceeds from the loan of $49.3 million, after deducting the closing fee, legal expenses and issuance cost.

On May 25, 2018, we completed an underwritten public offering of 12,500,000 shares of our common stock at a price to the public of $4.00 per share, that were purchased by the Underwriters from the Company at a price of $3.76 per Share, and on June 25, 2018, we sold an additional 1,875,000 shares of our common stock at a price to the public of $4.00 per share, that were purchased by the Underwriters from the Company at a price of $3.76 per Share, following the full exercise of the underwriters' option to purchase additional shares of common stock. We received net proceeds from the offering of $53.8 million, after deducting the underwriting discounts, commissions and offering expenses.

We expect to incur operating losses for the foreseeable future as we prepare for the development and commercialization of tenapanor, including costs associated with completing the on-going Phase 3 development program for tenapanor for the treatment of hyperphosphatemia in patients with ESRD on dialysis, as well as the advancement of our research programs into the preclinical stage and the progression of our early stage research. To date, we have funded our operations from the sale and issuance of common stock, convertible preferred stock, funds from our former collaboration partnerships with AstraZeneca AB, or AstraZeneca, and Sanofi SA, or Sanofi, and funds from our recent license agreements with Kyowa Hakko Kirin Co., Ltd., or KHK, Shanghai Fosun Pharmaceutical Industrial Development Co. Ltd., or Fosun Pharma, and Knight Therapeutics Inc., or Knight.

Financial Operations Overview

Revenue

We have not generated any revenue from product sales. Our past revenue performance is not necessarily indicative of results to be expected for the entire year ending December 31, 2018, or future operating periods. Our non-product revenue cannot always be predicted since it is dependent upon achievement of certain milestones. See “NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES” for further detail.

During the first quarter of 2018, we executed license agreements with Knight for the development, commercialization and distribution of tenapanor for hyperphosphatemia and IBS-C in Canada. Under the terms of the Knight license agreements, the Company received a nonrefundable payment of CAD 3 million, or U.S. $2.3 million, in up-front license fees, which was recorded as revenue when the contracts were executed. The agreement also provides for development and commercialization milestone payments, which will be recorded as revenue when we achieve the underlying milestone.

On January 1, 2018 we adopted the new standard for Revenue from Contracts with *Customers*, Topic 606, on a modified retrospective method as an adjustment to the opening balance of retained earnings of the annual reporting period. On January 1, 2018, we recorded an increase in current assets of $5.0 million reflecting a future receivable related to the first milestone under our license with KHK, which we believe is not materially at risk, an increase in current liabilities of $1.0 million reflecting a future payable related to the corresponding payment to AstraZeneca, in accordance with our termination agreement with AstraZeneca and a related decrease in its accumulated deficit of approximately $4.0 million as the new standard permits revenue from certain milestones to be recognized earlier of approximately $4.0 million as the new standard contains different recognition criteria related to milestones than under the previous standard, Topic 605.

Cost of Revenue

Cost of revenue currently represents payments due to AstraZeneca, who under the terms of a termination agreement entered into in 2015 are entitled to (i) future royalties at a royalty rate of 10% of net sales of tenapanor or other NHE3 products by us or our licensees, and (ii) 20% of non-royalty revenue received from a new collaboration partner should we elect to license, or otherwise provide rights to develop and commercialize tenapanor or another NHE3 inhibitor, up to a maximum of $75.0 million in aggregate for (i) and (ii). We recognize these expenses as cost of revenue when we recognize the revenue that generates our liability for these license payments. To date in aggregate, we have recognized $9.9 million of the $75.0 million, recorded as cost of revenue comprising (i) $6.0 million and $2.4 million related to the KHK Agreement and Fosun Agreement, respectively, recorded in 2017 (ii) $1.0 million related to the KHK Agreement associated with a future milestone which we believe is not materially at risk for which we recorded an increase in current liabilities in the six month period ended June 30, 2018 reflecting the future payable to AstraZeneca and (iii) $0.5 million related to the Knight Agreement recorded in the six month period ended June 30, 2018.

Research and Development Expenses

We recognize all research and development expenses as they are incurred to support the discovery, development and manufacturing of our product candidates. Research and development expenses consist of the following:

- external research and development expenses incurred under agreements with consultants, third-party CROs and investigative sites where a substantial portion of our clinical studies are conducted, and with contract manufacturing organizations where our clinical supplies are produced;
- expenses associated with supplies and materials consumed in connection with our research operations;
- employee-related expenses, which include salaries, bonuses, benefits, travel and stock-based compensation;
- other costs associated with regulatory, clinical and non-clinical development activities; and
- facilities and other allocated expenses, which include direct and allocated expenses for rent and maintenance of facilities, depreciation and amortization expense, information technology expense and other supplies.

We expect to continue to make substantial investments in research and development activities as we progress the development of tenapanor, as well as our other product candidates, advance our research programs into the preclinical stage and continue our early stage research. The process of conducting preclinical studies and clinical trials necessary to obtain regulatory approval is costly and time consuming. We may never succeed in achieving marketing approval for any of our product candidates, including tenapanor. Additionally, if marketing approval is received for tenapanor for the treatment of IBS-C, we may not be successful in securing one or more collaboration partners to commercialize tenapanor in the United States and other territories. The probability of success of each of the product candidates may be affected by numerous factors, including preclinical data, clinical data, market acceptance, sufficient third-party coverage or reimbursement, our ability to access capital on acceptable terms, competition, manufacturing capability and commercial viability.

We anticipate that we will make determinations as to which programs to pursue and how much funding to direct to each program on an ongoing basis in response to the scientific and clinical success of each product candidate, ongoing assessment as to each product candidate's commercial potential, and our ability to access capital on acceptable terms. We will need to raise additional capital and will seek additional collaboration partnerships in order to complete the development and commercialization of tenapanor. If we are unable to access capital on a timely basis and on terms that are acceptable to us, we may be forced to restructure certain aspects of our business or identify and complete one or more strategic collaborations or other transactions in order to fund the development or commercialization of tenapanor or certain of our product candidates through the use of alternative structures.

General and Administrative

General and administrative expenses consist primarily of salaries and related costs, including stock-based compensation. Other general and administrative expenses include facility related costs and professional fees for legal, accounting, investor relations and other consulting services.

We anticipate that our general and administrative expenses will increase in the future primarily because of (i) increased pre-commercial activities and personnel costs to support the potential launch of tenapanor for the treatment of hyperphosphatemia in ESRD patients on dialysis and (ii) expenses related to costs of operating as a public company primarily preparing for future integrated audits.

Provision for Income Taxes

The provision for income taxes was insignificant for the three and six months ended June 30, 2018 and zero for the three and six months ended June 30, 2017. We expect to generate a net loss for the year ending December 31, 2018. Our deferred tax assets continue to be fully offset by a valuation allowance.

The Tax Cuts and Jobs Act ("TCJA") makes broad and complex changes to the U.S. tax code, including, but not limited to, reducing the U.S. federal corporate tax rate from 35% to 21%, effective January 1, 2018. The Company was able to determine a reasonable estimate of certain effects of the TCJA and has therefore recognized the provisional tax impacts related to the revaluation of deferred tax assets and liabilities. The Securities and Exchange Commission has provided accounting and reporting guidance that allows the Company to report provisional amounts within a measurement period of up to one year from the date of enactment due to the complexities inherent in adopting the TCJA. The ultimate impact may differ from provisional amounts, possibly materially, due to, among other things, additional analysis, changes in interpretations and assumptions the Company has made, additional regulatory guidance that may be issued, and actions the Company may take as a result of the TCJA. As of June 30, 2018, the Company still considers its accounting for the impacts of the new law to be provisional and will continue to assess the impact of the recently enacted tax law on its business and condensed consolidated financial statements over the next six months.

Critical Accounting Polices and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based upon our unaudited condensed consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, as well as the expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We consider certain accounting policies related to research and development expense, accruals and stock-based compensation to be critical policies. Other than the implementation of Topic 606 there have been no changes to our critical accounting policies since we filed our 2017 Form 10-K with the SEC on March 14, 2018. For a description of our critical accounting policies, please refer to our Form 10-K we filed with the SEC on March 14, 2018.

RESULTS OF OPERATIONS

Three and six months ended June 30, 2018 and 2017

Revenue

Revenue for the three and six months ended June 30, 2018, as compared to the same period in the prior year, was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Licensing revenue	$ —	$ —	$ 2,320	$ —
Other revenue	30	—	30	—
Total revenues	30	—	2,350	—
Dollar change from prior year	30		2,350	
Percent change from prior year	*		*	—

* not meaningful

Revenue was $30,000 for the three months ended June 30, 2018, an increase of $30,000, compared to zero for the three months ended June 30, 2017. The increase in revenue of $30,000 was related to the manufacturing supply of tenapanor and other materials to KHK for KHK's product development and clinical trials in Japan in accordance with our agreement with KHK.

Revenue was $2.4 million for the six months ended June 30, 2018, an increase of $2.4 million, compared to zero for the six months ended June 30, 2017. The increase in revenue was primarily from the licensing revenue of $2.3 million related to the license fees payment we received.

Cost of revenue

Cost of revenue for the three and six months ended June 30, 2018, as compared to the same period in the prior year, was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Cost of revenue	$ —	$ —	$ 464	$ —
Dollar change from prior year	—		464	
Percent change from prior year	*		*	

* not meaningful

Cost of revenue was negligible for the three months ended June 30, 2018 and June 30, 2017.

Cost of revenue was $0.5 million for the six months ended June 30, 2018, an increase of $0.5 million, compared to zero for the six months ended June 30, 2017. The increase in cost of revenue of $0.5 million was due to the license fees paid to AstraZeneca pursuant to the Termination Agreement, corresponding to the revenue realized.

Research and Development

Research and development expenses for the three and six months ended June 30, 2018, as compared to the same period in the prior year, were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Research and development	$ 16,046	$ 20,572	$ 29,396	$ 42,960
Dollar change from prior year	(4,526)		(13,564)	
Percent change from prior year	(22)%		(32)%	

Research and development expenses were $16.1 million for the three months ended June 30, 2018, a decrease of $4.5 million, or 22%, compared to $20.6 million for the three months ended June 30, 2017. The decrease consisted of a $2.4 million decrease in our external program costs and a $2.1 million decrease in our internal program costs.

The decrease in our external program costs of $2.4 million included a $2.2 million decrease related to discontinuation of the RDX7675 program and a $1.0 million decrease related to the reduction of activities associated with the RDX8940 program that was partially offset by $0.8 million primarily related to an increase in expense due to the start of our second tenapanor hyperphosphatemia Phase 3 study.

The decrease in our internal costs of $2.1 million was primarily due to a decrease in personnel costs, including stock-based compensation costs as a result of a reduction in force during the third quarter of 2017, and a related decrease in research and development activities.

Research and development expenses were $29.4 million for the six months ended June 30, 2018, a decrease of $13.6 million, or 32%, compared to $43.0 million for the six months ended June 30, 2017. The decrease consisted of a $9.4 million decrease in our external program costs and a $4.2 million decrease in our internal program costs.

The decrease in our external program costs of $9.4 million included a $5.5 million decrease related to discontinuation of the RDX7675 program, a $1.6 million decrease related to the reduction of activities associated with the RDX8940 program and a net $2.3 million decrease in expense primarily for clinical development activities related to the completion of our tenapanor IBS-C Phase 3 clinical program as well as our first tenapanor hyperphosphatemia Phase 3 clinical trial that was partially offset by an increase in expenses incurred related to the start of our second tenapanor hyperphosphatemia Phase 3 study.

The decrease in our internal costs of $4.2 million was primarily due to a decrease in personnel costs, including stock-based compensation costs, as a result of a reduction in force during the third quarter of 2017, and a related decrease in research and development activities.

General and Administrative

General and administrative expenses for the three and six months ended June 30, 2018, as compared to the same period in the prior year, were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
General and administrative	$ 6,138	$ 5,846	$ 12,329	$ 11,892
Dollar change from prior year	292		437	
Percent change from prior year	5 %		4 %	

General and administrative expenses were $6.1 million for the three months ended June 30, 2018, an increase of $0.3 million, or 5%, compared to $5.8 million for the three months ended June 30, 2017. The increase was primarily due to an increase in professional services and stock-based compensation expense, partially offset by a reduction in personnel costs due to reduction in force during the third quarter of 2017.

General and administrative expenses were $12.3 million for the six months ended June 30, 2018, an increase of $0.4 million, or 4%, compared to $11.9 million for the six months ended June 30, 2017. The increase was primarily due to an increase in professional services and stock-based compensation expense, partially offset by a reduction in personnel costs due to reduction in force during the third quarter of 2017.

Liquidity and Capital Resources

The following table displays a summary of our cash, cash equivalents and short-term investments as of June 30, 2018 and December 31, 2017 (in thousands):

	June 30, 2018	December 31, 2017
Cash and cash equivalents	$ 91,751	$ 75,383
Short-term investments	120,980	58,593
Total liquid funds	$ 212,731	$ 133,976

On May 16, 2018, we entered into a loan and security agreement, or the Loan Agreement, with Solar Capital Ltd. and Western Alliance Bank. The Loan Agreement provides for a $50.0 million term loan facility with a maturity date of November 1, 2022. The full amount of the loan was funded on May 16, 2018. We received net proceeds from the loan of $49.3 million, after deducting the closing fee, legal expenses and issuance cost.

On May 25, 2018, we completed an underwritten public offering of 12,500,000 shares of our common stock at a price to the public of $4.00 per share, that were purchased by the Underwriters from the Company at a price of $3.76 per Share,

and on June 25, 2018, we sold an additional 1,875,000 shares of our common stock at a price to the public of $4.00 per share, that were purchased by the Underwriters from the Company at a price of $3.76 per Share, following the full exercise of the underwriters' option to purchase an additional shares of common stock. We received net proceeds from the offering of $53.8 million, after deducting the underwriting discounts, commissions and offering expenses.

Our primary sources of cash have been primarily from past equity financings, debt financings and collaboration partnerships, including past collaboration partnerships with AstraZeneca and Sanofi and more recent collaboration partnerships with KHK, Fosun Pharma, and Knight. Our primary uses of cash are to fund operating expenses, primarily research and development expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable and accrued expenses.

We believe that our existing capital resources as of June 30, 2018 will be sufficient to meet our projected operating requirements for at least the next 12-months. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Further, our operating plan can change, and we may require significant additional capital to fund our operations, including to support the development, commercialization and manufacturing efforts for tenapanor. We may seek to obtain such additional capital through debt financings, credit facilities, additional equity offerings and/or strategic collaborations. We currently have no unutilized credit facility or committed sources of capital, and there can be no assurances that such sources of capital will be available to us when needed or on acceptable terms. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, and the extent to which we may enter into additional collaboration partnerships with third-parties to participate in their development and commercialization, our future funding requirements will depend on many factors, including the following:

- the progress, timing, scope, results and costs of our Phase 3 clinical trial programs evaluating tenapanor for the treatment of hyperphosphatemia in ESRD patients on dialysis, the submission of an NDA with the FDA to request marketing authorization for tenapanor for the treatment of IBS-C, as well as our decision whether or not to pursue other indications for tenapanor;
- our ability to identify a collaboration partner and negotiate acceptable terms for a collaboration partnership for the commercialization of tenapanor in IBS-C in the United States;
- our ability to successfully commercialize tenapanor, either alone or with one or more collaboration partners;
- the manufacturing costs of tenapanor, and the availability of one or more suppliers for tenapanor at reasonable costs;
- the selling and marketing costs associated with tenapanor, including the cost and timing of building our sales and marketing capabilities;
- our ability to maintain our existing collaboration partnerships and to establish additional collaboration partnerships, in-license/out-license, joint ventures or other similar arrangements and the financial terms of such agreements;
- the timing, receipt, and amount of sales of, or royalties on, tenapanor, if any;
- the sales price and the availability of adequate third-party reimbursement for tenapanor;
- the cash requirements of any future acquisitions or discovery of product candidates;
- the number and scope of research programs that we decide to pursue or initiate, and any clinical trials we decide to pursue for other product candidates;
- the time and cost necessary to respond to technological and market developments;

- the costs of filing, prosecuting, maintaining, defending and enforcing any patent claims and other intellectual property rights, including litigation costs and the outcome of such litigation, including costs of defending any claims of infringement brought by others in connection with the development, manufacture or commercialization of tenapanor or any of our product candidates: and

- requirements to pay the interest and principal of our Loan Agreement and the restrictions, penalties and covenants therein.

The following table summarizes our cash flows for the periods indicated (in thousands):

	Six Months Ended June 30,	
	2018	2017
Cash used in operating activities	$ (24,819)	$ (50,647)
Cash (used in) provided by investing activities	(62,176)	39,261
Cash provided by financing activities	103,363	424
Net increase (decrease) in cash and cash equivalents	$ 16,368	$ (10,962)

Cash Flows from Operating Activities

Net cash used in operating activities during the six months ended June 30, 2018, was approximately $24.8 million. The net loss of $39.3 million was adjusted for non-cash charges of $1.3 million related to depreciation amortization and non-cash interest expense and $5.0 million for stock-based compensation, and an increase to cash of $8.2 million related to other working capital items associated with changes in our net operating assets and liabilities primarily related to a decrease of receivables related to the Fosun Agreement offset by working capital related to clinical development and manufacturing of tenapanor.

Net cash used in operating activities during the six months ended June 30, 2017 was approximately $50.6 million. The net loss of $53.7 million was adjusted for non-cash charges of $1.7 million for depreciation and amortization and $4.9 million for stock-based compensation, and a decrease to cash of $3.5 million related to other working capital items associated with changes in our net operating assets and liabilities, primarily related to a decrease in pre-payments to vendors for clinical development and manufacturing activities, and a decrease of accounts payable and accrued liabilities primarily due to expenses for the activities for tenapanor, RDX7675 and RDX8940.

Cash Flows from Investing Activities

Net cash used in investing activities was $62.2 million for the six months ended June 30, 2018, primarily due to purchases of investments of $119.0 million offset by maturities of investments of $56.0 million and redemptions of investments of $0.8 million.

Net cash provided by investing activities was $39.3 million for the six months ended June 30, 2017 and was primarily due to maturities and sales of investments of $85.9 million. This was offset by purchases of investments of $44.7 million and acquisition of property and equipment of $1.9 million related to the expansion of our laboratory and related equipment.

Cash Flows from Financing Activities

Net cash provided by financing activities for the six months ended June 30, 2018, was $103.4 million, primarily due to net proceeds of $53.8 million, after deducting the underwriting discounts and commissions and offering expenses from an underwritten public offering of our common stock in May 2018, net proceeds of $49.3 million, after deducting the closing fee, legal expenses and issuance cost from the term loan provided by Solar Capital Ltd. and Western Alliance Bank, and net proceeds of $0.3 million from issuance of common stock under the employee stock purchase plan, or ESPP.

Net cash provided by financing activities for the six months ended June 30, 2017 was $0.4 million and was due to proceeds from issuance of common stock under ESPP.

Off-Balance Sheet Arrangements

None.

Recent Accounting Pronouncements

Refer to Note 2 in the notes to our unaudited interim condensed consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q, for a discussion of recent accounting pronouncements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no material changes in the sources and effects of our market risk compared to the disclosures in Item 7A of our 2017 Form 10-K.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), our management, under the supervision and with the participation of our principal executive officer and principal accounting and financial officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of June 30, 2018. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on such evaluation, our principal executive officer and principal accounting and financial officer have concluded that, as of June 30, 2018, our disclosure controls and procedures were effective at a reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended June 30, 2018, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Internal control over financial reporting has inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements will not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may be involved in legal proceedings arising in the ordinary course of business. As of June 30, 2018, there is no litigation pending that would reasonably be expected to have a material adverse effect on our results of operations and financial condition.

ITEM 1A. RISK FACTORS

Our business involves significant risks, some of which are described below. You should carefully consider these risks, as well as other information in this Quarterly Report on Form 10-Q, including our financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations." The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations, cash flows, the trading price of our common stock and our growth prospects. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

Risks Related to Our Limited Operating History, Financial Condition and Capital Requirements

We have a limited operating history, have incurred significant losses since our inception and we will incur losses in the future, which makes it difficult to assess our future viability.

We are a clinical-stage biopharmaceutical company with a limited operating history. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. To date, we have focused substantially all of our efforts on our research and development activities, including developing tenapanor and developing our proprietary drug discovery and design platform. To date, we have not commercialized any products or generated any revenue from the sale of products.

We are not profitable and have incurred losses in each year since our inception in October 2007, and we do not know whether or when we will become profitable. We have only a limited operating history upon which to evaluate our business and prospects. We continue to incur significant research, development and other expenses related to our ongoing operations. As of June 30, 2018, we had an accumulated deficit of $313.5 million.

We expect that our operating losses will substantially increase for the foreseeable future as we prepare for the potential commercialization of, and incur manufacturing and development costs for, tenapanor, including costs associated with completing the ongoing Phase 3 development of tenapanor for the treatment of hyperphosphatemia in ESRD patients on dialysis, preparing the new drug application, or NDA, for submission to the U.S. Food and Drug Administration, or FDA, to request marketing authorization for tenapanor for the treatment of patients with IBS-C, and continuing our discovery and research activities.

Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and working capital. Further, the net losses we incur may fluctuate significantly from quarter to quarter and year to year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance.

We have substantial net operating loss and tax credit carryforwards for Federal and California income tax purposes. Such net operating losses and tax credits carryforwards may be reduced as a result of certain intercompany restructuring transactions. In addition, the future utilization of such net operating loss and tax credit carryforwards and credits will be subject to limitations, pursuant to Internal Revenue Code Sections 382 and 383, as a result of ownership changes that have occurred previously and additional limitations may be applicable as a result of ownership changes that could occur in the future.

We have never generated any revenue from product sales and may never be profitable.

We have no products approved for sale and have never generated any revenue from product sales. Our ability to generate revenue from product sales and achieve profitability depends on our ability to successfully complete the development of and obtain the regulatory and marketing approvals necessary to commercialize tenapanor for one or more indications, either on our own, or with one or more collaboration partners. We do not anticipate generating revenue from product sales for the foreseeable future. Our ability to generate future revenue from product sales or pursuant to milestone payments depends heavily on many factors, including but not limited to:

- the successful completion of nonclinical and clinical development of tenapanor;
- obtaining regulatory approvals for tenapanor, either on our own, or with one or more collaboration partners;
- our ability to identify a collaboration partnership and negotiate acceptable terms for a collaboration partnership for the commercialization of tenapanor in IBS-C in the United States;
- our ability to successfully commercialize tenapanor, either on our own, or with one or more collaboration partners;
- developing a sustainable and scalable manufacturing process for tenapanor and establishing and maintaining supply and manufacturing relationships with third parties that can provide an adequate (in amount and quality) supply of product to support the market demand for tenapanor, if approved;
- obtaining market acceptance of tenapanor, if approved, as a viable treatment option for the indications for which it is approved;
- addressing any competing technological and market developments;
- identifying, assessing, acquiring, in-licensing and/or developing new product candidates;
- negotiating favorable terms in any collaboration partnership, licensing or other arrangements into which we may enter;
- maintaining, protecting, and expanding our portfolio of intellectual property rights, including patents, trade secrets, and know-how, and our ability to develop, manufacture and commercialize our product candidates and products without infringing intellectual property rights of others; and
- attracting, hiring, and retaining qualified personnel.

In cases where we are successful in obtaining regulatory approvals to market tenapanor for one or more indications, our revenue will be dependent, in part, upon the size of the markets in the territories for which regulatory approval is granted, the accepted price for the product, the ability to get reimbursement at any price and whether we are commercializing the product or the product is being commercialized by a collaboration partner, and in such case, whether we have royalty and/or co-promotion rights for that territory. If the number of patients suitable for tenapanor is not as significant as we estimate, the indications approved by regulatory authorities are narrower than we expect, or the reasonably accepted population for treatment is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from the sale of tenapanor, even if approved. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our failure to generate revenue from product sales would likely depress our market value and could impair our ability to raise capital, expand our business, discover or develop other product candidates or continue our operations. A decline in the value of our common stock could cause our stockholders to lose all or part of their investment.

Our operating activities may be restricted as a result of covenants related to the indebtedness under our loan and security agreement and we may be required to repay the outstanding indebtedness in an event of default, which could have a materially adverse effect on our business.

On May 16, 2018, we entered into a loan and security agreement with Silicon Valley Bank and Western Alliance Bank, or collectively the Lenders, pursuant to which the Lenders agreed to provide us a $50.0 million term loan facility with a maturity date of November 1, 2022, or the Term Loan. The full amount of the loan was funded on May 16, 2018. Until we have repaid such indebtedness, the loan and security agreement subjects us to various customary covenants, including requirements as to financial reporting and insurance and restrictions on our ability to dispose of our business or property, to change our line of business, to liquidate or dissolve, to enter into any change in control transaction, to merge or consolidate with any other entity or to acquire all or substantially all the capital stock or property of another entity, to incur additional indebtedness, to incur liens on our property, to pay any dividends or other distributions on capital stock other than dividends payable solely in capital stock, to redeem capital stock, to enter into licensing agreements, to engage in transactions with affiliates, and to encumber our intellectual property. Our business may be adversely affected by these restrictions on our ability to operate our business.

Additionally, we may be required to repay the outstanding indebtedness under the loan facility if an event of default occurs under the loan and security agreement. Under the loan and security agreement, an event of default will occur if, among other things, we fail to make payments under the loan and security agreement; we breach any of our covenants under the loan and security agreement, subject to specified cure periods with respect to certain breaches; the Lenders determines that a material adverse change has occurred; we or our assets become subject to certain legal proceedings, such as bankruptcy proceedings; we are unable to pay our debts as they become due; or we default on contracts with third parties which would permit the Lenders to accelerate the maturity of such indebtedness or that could have a material adverse change on us. We may not have enough available cash or be able to raise additional funds through equity or debt financings to repay such indebtedness at the time any such event of default occurs. In this case, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts or grant to others' rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. The Lenders could also exercise their rights as collateral agent to take possession of and to dispose of the collateral securing the term loans, which collateral includes substantially all of our property (excluding intellectual property, which is subject to a negative pledge). Our business, financial condition and results of operations could be materially adversely affected as a result of any of these events.

We will require substantial additional financing to achieve our goals, and the inability to access this necessary capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our pre-commercialization efforts for tenapanor and our other product development and platform development activities.

Since our inception, most of our resources have been dedicated to our research and development activities, including developing our clinical product candidate tenapanor and developing our proprietary drug discovery and design platform. We believe that we will continue to expend substantial resources for the foreseeable future, including costs associated with completing the clinical program for tenapanor for the treatment of hyperphosphatemia in ESRD patients on dialysis, research and development, conducting preclinical studies and clinical trials for our other programs, obtaining regulatory approvals, developing and maintaining scalable manufacturing processes for our product candidates and sales and marketing. Because the outcome of any clinical trial and/or regulatory approval process is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development, regulatory approval process and commercialization or co-promotion of any of our product candidates. Our future funding requirements will depend on many factors, including, but not limited to:

- the progress, timing, scope, results and costs of our Phase 3 clinical trial programs evaluating tenapanor for the treatment of hyperphosphatemia in ESRD patients on dialysis, the submission of an NDA with the FDA to request marketing authorization for tenapanor for the treatment of IBS-C, as well as our decision whether or not to pursue other indications for tenapanor;

- our ability to identify a collaboration partner and negotiate acceptable terms for a collaboration partnership for the commercialization of tenapanor in IBS-C in the United States;
- our ability to successfully commercialize tenapanor, either alone or with one or more collaboration partners;
- the manufacturing costs of our product candidates, and the availability of one or more suppliers for our product candidates at reasonable costs, both for clinical and commercial supply;
- the selling and marketing costs associated with tenapanor, including the cost and timing of building our sales and marketing capabilities, should we elect to do so;
- our ability to maintain our existing collaboration partnerships and to establish additional collaboration partnerships, in-license/out-license, joint ventures or other similar arrangements and the financial terms of such agreements;
- the timing, receipt, and amount of sales of, or royalties on, tenapanor, if any;
- the sales price and the availability of adequate third-party reimbursement for tenapanor, if approved;
- the cash requirements of any future acquisitions or discovery of product candidates;
- the number and scope of preclinical and discovery programs that we decide to pursue or initiate, and any clinical trials we decide to pursue for other product candidates;
- the time and cost necessary to respond to technological and market developments;
- the costs of filing, prosecuting, maintaining, defending and enforcing any patent claims and other intellectual property rights, including litigation costs and the outcome of such litigation, including costs of defending any claims of infringement brought by others in connection with the development, manufacture or commercialization of tenapanor or any of our product candidates; and
- the payment of interest and principal related to our loan and security agreement entered into during May 2018.

Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis, we may be required to delay, limit, reduce or terminate our research activities, preclinical and clinical trials for our product candidates and our establishment and maintenance of sales and marketing capabilities or other activities that may be necessary to commercialize tenapanor, either alone or with collaboration partners. Additionally, our inability to access capital on a timely basis and on terms that are acceptable to us may force us to restructure certain aspects of our business or identify and complete one or more strategic collaborations or other transactions in order to fund the development or commercialization of tenapanor or certain of our product candidates through the use of alternative structures.

Risks Related to Our Business

We are substantially dependent on the success of our lead product candidate, tenapanor, which may not be successful in further nonclinical studies or clinical trials, receive regulatory approval or be successfully commercialized.

To date, we have invested a significant amount of our efforts and financial resources in the research and development of tenapanor, which is currently our lead product candidate. The clinical and commercial success of tenapanor will depend on a number of factors, including the following:

- our ability to, in a timely manner and under terms that are acceptable to us, establish a collaboration partnership for the commercialization of tenapanor for the treatment of IBS-C in the United States;

- the ability of the third-party manufacturers we contract with to successfully execute and scale up the manufacturing processes for tenapanor, which has not yet been demonstrated, and to manufacture supplies of tenapanor and to develop, validate and maintain commercially viable manufacturing processes that are compliant with cGMP, requirements;

- whether the FDA or foreign regulatory authorities require additional nonclinical and/or clinical studies, which could delay the commercialization of tenapanor;

- whether the FDA or foreign regulatory authorities require us to conduct clinical trials in addition to those anticipated prior to approval to market tenapanor;

- whether we will be required to conduct clinical trials in addition to those anticipated to obtain adequate commercial pricing;

- the prevalence and severity of adverse side effects of tenapanor;

- whether tenapanor's safety and efficacy profile is satisfactory to the FDA and foreign regulatory authorities to gain marketing approval;

- the timely receipt of necessary marketing approvals from the FDA and foreign regulatory authorities;

- our ability, either alone, or with a collaboration partner, to successfully commercialize tenapanor, if approved for marketing and sale by the FDA or foreign regulatory authorities, including educating physicians and patients about the benefits, administration and use of tenapanor;

- achieving and maintaining compliance with all regulatory requirements applicable to tenapanor;

- acceptance of tenapanor as safe, effective and well-tolerated by patients and the medical community;

- our ability, alone or with collaboration partners, to manage the complex pricing and reimbursement negotiations associated with marketing the same product at different doses for separate indications, if tenapanor is approved for marketing and sale by the FDA or foreign regulatory authorities for both IBS-C and hyperphosphatemia in dialysis patients;

- the availability, perceived advantages, relative cost, relative safety and relative efficacy of tenapanor compared to alternative and competing treatments;

- obtaining and sustaining an adequate level of coverage and reimbursement for tenapanor by third-party payors;

- enforcing intellectual property rights in and to tenapanor;

- avoiding third-party interference, opposition, derivation or similar proceedings with respect to our patent rights, and avoiding other challenges to our patent rights and patent infringement claims; and

- a continued acceptable safety and tolerability profile of tenapanor following approval.

As tenapanor is a first-in-class drug, there is a higher likelihood that approval may not be attained as compared to a class of drugs with approved products. While tenapanor met the primary endpoint in two Phase 3 clinical studies evaluating tenapanor for the treatment of patients with IBS-C, there can be no assurance that our NDA that we plan to submit for this indication, once submitted, will be accepted by FDA or that we will receive marketing authorization from FDA. Although tenapanor met the primary endpoint in the first Phase 3 clinical trial for the treatment of hyperphosphatemia in ESRD patients on dialysis, there can be no assurances that the second Phase 3 trial of tenapanor in this indication will achieve the primary endpoint, or that tenapanor will receive regulatory approval for this indication. Further, it may not be possible

or practicable to demonstrate, or if approved, to market tenapanor on the basis of certain of the benefits we believe tenapanor possesses. If the number of patients in the market for tenapanor or the price that the market can bear is not as significant as we estimate, we may not generate sufficient revenue from sales of tenapanor, if approved. Accordingly, there can be no assurance that tenapanor will ever be successfully commercialized or that we will ever generate income from sales of tenapanor. If we are not successful in completing the development of, obtaining approval for, and commercializing tenapanor, or are significantly delayed in doing so, our business will be materially harmed.

Clinical drug development involves a lengthy and expensive process with an uncertain outcome, and we may encounter substantial delays in our Phase 3 clinical study of tenapanor for the treatment of hyperphosphatemia. Furthermore, results of earlier studies and trials may not be predictive of future trial results.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical studies to demonstrate the safety and efficacy of the product candidates in humans. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical and clinical studies of our product candidates may not be predictive of the results of later-stage clinical trials. An unexpected adverse event profile, or the results of drug-drug interaction studies, may present challenges for the future development and commercialization of a product candidate for a particular condition despite receipt of positive efficacy data in a clinical study. Although tenapanor met the primary endpoint in the first Phase 3 clinical trial for the treatment of hyperphosphatemia in ESRD patients on dialysis, there can be no assurances that the second Phase 3 trial results of tenapanor in that indication will show the desired safety and efficacy. A number of companies in the pharmaceutical, biopharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials for similar indications that we are pursuing due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier studies, and we cannot be certain that we will not face similar setbacks. Even if our Phase 3 program for tenapanor for the treatment of hyperphosphatemia is completed, and despite the completion of our Phase 3 program for tenapanor for IBS-C, the results for one or both indications may not be sufficient to obtain regulatory approval for tenapanor, or if such regulatory approval is obtained, the content of the label approved by regulatory authorities may materially and adversely impact our ability to commercialize the product for the approved indication.

We do not know whether our second Phase 3 clinical trial for tenapanor for the treatment of hyperphosphatemia will enroll an adequate number of patients on time or be completed on schedule, if at all. Clinical trials can be delayed or terminated for a variety of reasons, including delay or failure to:

- reach agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- obtain institutional review board, or IRB, approval at each site;
- recruit suitable patients in a timely manner to participate in our trials;
- have patients complete a trial or return for post-treatment follow-up;
- ensure that clinical sites observe trial protocol, comply with good clinical practices, or GCPs, or continue to participate in a trial;
- address any patient safety concerns that arise during the course of a trial;
- address any conflicts with new or existing laws or regulations; or
- initiate or add a sufficient number of clinical trial sites.

Patient enrollment is a significant factor in the timing of clinical trials and is affected by many factors, including the size and nature of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies, including any new drugs or treatments that may be approved for the indications we are investigating.

We could also encounter delays if our Phase 3 clinical trial is suspended or terminated by us, by the IRBs of the institutions in which the trial is being conducted, or by the FDA or other regulatory authorities. Such authorities may suspend or terminate a clinical trial due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

Further, if there are delays in the completion of, or termination of, the Phase 3 clinical trial for tenapanor for the treatment of hyperphosphatemia, the commercial prospects of tenapanor for such indication may be harmed, and our ability to generate revenue from product sales of tenapanor for such indication will be delayed. In addition, any delays in completing the clinical trial will increase costs, slow down our regulatory approval process for tenapanor for hyperphosphatemia and jeopardize the ability to commence product sales and generate revenue from product sales for this indication. Any of these occurrences may significantly harm our business, financial condition and prospects. In addition, many of the factors that may cause, or lead to, a delay in the completion of the Phase 3 clinical trial may also ultimately lead to the denial of regulatory approval.

Even if we successfully obtain regulatory approval for tenapanor, it may never achieve market acceptance, sufficient third-party coverage or reimbursement, or commercial success, which will depend, in part, upon the degree of acceptance among physicians, patients, patient advocacy groups, health care payors and the medical community.

Even if tenapanor obtains FDA or other regulatory approvals, and is ultimately commercialized for one or more indications, it may not achieve market acceptance among physicians, patients, third-party payors, patient advocacy groups, and the medical community. Market acceptance of tenapanor, in the event that marketing approval is obtained, depends on a number of factors, including:

- with respect to tenapanor for IBS-C in the United States, our ability to obtain a collaboration partner for commercialization and the strength of such collaboration partner's marketing and distribution organizations;
- the efficacy demonstrated in clinical trials;
- the prevalence and severity of any side effects and overall safety and tolerability profile of the product;
- the clinical indications for which it is approved;
- advantages over new or traditional or existing therapies, including recently approved therapies or therapies that the physician community anticipate will be approved;
- acceptance by physicians, major operators of clinics and patients of tenapanor as a safe, effective and well-tolerated treatment;
- relative convenience and ease of administration of tenapanor;
- the potential and perceived advantages of tenapanor over current treatment options or alternative treatments, including future alternative treatments;

- the cost of treatment in relation to alternative treatments and willingness to pay for tenapanor, if approved, on the part of physicians and patients;
- the availability of alternative products and their ability to meet market demand; and
- the quality of our relationships with patient advocacy groups; and

Any failure by us to obtain a collaboration partner for the commercialization of tenapanor in the United States for IBS-C and any failure of tenapanor to achieve market acceptance, sufficient third-party coverage or reimbursement, or commercial success, should it receive regulatory approval, would adversely affect our results of operations.

We currently have no sales organization. If we are unable to establish sales capabilities on our own or through third parties, we may not be able to commercialize tenapanor or any of our other product candidates.

We currently do not have a sales organization. In order to commercialize or co-promote tenapanor or any of our other product candidates, we must enter collaborative relationships with one or more third parties, or build internal marketing, sales, distribution, managerial and other non-technical capabilities. There can be no assurances that we will be successful in establishing collaborative relationships in a timely manner or on terms that are acceptable to us. If tenapanor receives regulatory approval and we have not entered collaborative relationships for the commercialization of tenapanor in the United States, we would have to establish appropriate sales organizations with technical expertise supporting distribution capabilities to commercialize the product candidate, which will be expensive and time consuming, or delay the commercial launch of tenapanor for such indication. As a company, we have no prior experience in the marketing, sale and distribution of pharmaceutical products and there are significant risks involved in building and managing a sales organization, including our ability to secure the capital necessary to fund such efforts on acceptable terms, hire, retain, and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel, comply with regulatory requirements applicable to the marketing and sale of drug products and effectively manage a geographically dispersed sales and marketing team.

If we are unable to enter collaborative relationships a timely manner, or on acceptable terms, and/or we fail or are delayed in the development of our internal sales, marketing and distribution capabilities, we may choose to delay the commercialization of our products and/or the commercialization of our products could be adversely impacted, and we may not be able to successfully commercialize our product candidates.

We may not be successful in our efforts to develop our product candidates that are at an early stage of development, or expand our pipeline of product candidates, as a result of numerous factors, which may include the inability to access capital necessary to fund such efforts on acceptable terms.

A key element of our strategy has been focused on the expansion of our pipeline of product candidates utilizing our proprietary drug discovery and design platform and to advance such product candidates through clinical development. Our inability to access capital in a timely manner or on acceptable terms to fund our early stage product candidates may force us to consider certain restructuring activities to enable the funding of those early assets through the use of alternative structures. In addition, of the large number of drugs in development, only a small percentage of such drugs successfully complete the FDA regulatory approval process and are commercialized. Accordingly, even if we are able to continue to fund our research and early stage development programs, there can be no assurance that any product candidates will reach the clinic or be successfully developed or commercialized.

Research programs to identify product candidates require substantial technical, financial and human resources, whether or not any product candidates are ultimately identified. Although our research and development efforts to date have resulted in several development programs, we may not be able to develop product candidates that are safe, effective and well-tolerated. Our research programs may initially show promise in identifying potential product candidates, and we

may select candidates for development, yet we may fail to advance product candidates to clinical development for many reasons, including the following:

- we may be unable to access sufficient capital on acceptable terms to fund the development of all of our assets and as a result we may be forced to delay or terminate the development of certain product candidates, or to consider restructuring efforts to secure alternate funding for those assets;
- the research methodology used and our drug discovery and design platform may not be successful in identifying potential product candidates;
- competitors may develop alternatives that render our product candidates obsolete or less attractive;
- product candidates we develop may nevertheless be covered by third parties' patents or other exclusive rights;
- the market for a product candidate may change during our program so that the continued development of that product candidate is no longer reasonable;
- a product candidate may on further study be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective, well-tolerated or otherwise does not meet applicable regulatory or commercial criteria;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and
- a product candidate may not be accepted as safe, effective and well-tolerated by patients, the medical community or third-party payors, if applicable.

Even if we are successful in continuing to expand our pipeline, through our own research and development efforts, the potential product candidates that we identify or for which we acquire rights may not be suitable for clinical development, including as a result of being shown to have harmful side effects or other characteristics that indicate that they are unlikely to receive marketing approval and achieve market acceptance. If we do not successfully develop and commercialize a product pipeline, we may not be able to generate revenue from product sales in future periods or ever achieve profitability.

Our proprietary drug discovery and design platform, and, in particular, APECCS, is a new approach to the discovery, design and development of new product candidates and may not result in any products of commercial value. Furthermore, the APECCS aspects of our drug discovery and design platform may have diminished relevance to our efforts focused on the discovery of targets and therapies for the treatment of renal diseases.

We have developed a proprietary drug discovery and design platform to enable the identification, screening, testing, design and development of new product candidates, and have developed APECCS as a component of this of this platform. We have utilized APECCS in the design of our small molecules and to identify new and potentially novel targets in the GI tract. However, there can be no assurance that APECCS will be able to identify new targets in the GI tract or that any of these potential targets or other aspects of our proprietary drug discovery and design platform will yield product candidates that could enter clinical development and, ultimately, be commercially valuable. In addition, as we focus our efforts on the discovery and design of therapies for the treatment of renal diseases, we may need to further develop our proprietary drug discovery and design platform to enhance its usefulness in the identification, screening, testing, design and development of new product candidates for the treatment of renal diseases. There can be no assurances that we will be successful in such additional development of our platform or that our platform will yield product candidates for the treatment of renal diseases.

We rely on third parties to conduct some of our nonclinical studies and all of our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may be unable to obtain regulatory approval for or commercialize our product candidates.

We do not have the ability to independently conduct clinical trials and, in some cases, nonclinical studies. We rely on medical institutions, clinical investigators, contract laboratories, and other third parties, such as CROs, to conduct clinical trials on our product candidates. The third parties with whom we contract for execution of the clinical trials play a significant role in the conduct of these trials and the subsequent collection and analysis of data. However, these third parties are not our employees, and except for contractual duties and obligations, we control only certain aspects of their activities and have limited ability to control the amount or timing of resources that they devote to our programs. Although we rely, and will continue to rely, on these third parties to conduct some of our nonclinical studies and all of our clinical trials, we remain responsible for ensuring that each of our studies and clinical trials is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on third parties does not relieve us of our regulatory responsibilities. We, and these third parties are required to comply with current GLPs for nonclinical studies, and good clinical practices, or GCPs, for clinical studies. GLPs and GCPs are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area, or EEA, and comparable foreign regulatory authorities for all of our products in nonclinical and clinical development, respectively. Regulatory authorities enforce GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our third-party contractors fail to comply with applicable regulatory requirements, including GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA, the European Medicines Agency, or EMA, or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. There can be no assurance that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP regulations. In addition, our clinical trials must be conducted with product produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

Our product candidates may cause undesirable side effects or have other properties that could delay our clinical trials, or delay or prevent regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following regulatory approval, if any. If tenapanor or any of our other product candidates receives marketing approval and we or others later identify undesirable side effects caused by the product candidate, the ability to market the product candidates could be compromised.

Undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials, result in the delay or denial of regulatory approval by the FDA or other comparable foreign regulatory authorities or limit the commercial profile of an approved label. To date, patients treated with tenapanor have experienced drug-related side effects including diarrhea, nausea, vomiting, flatulence, abdominal discomfort, abdominal pain, abdominal distention and changes in electrolytes. In the event that trials conducted by us with tenapanor or trials we conduct with our other product candidates, reveal an unacceptable severity and prevalence of these or other side effects, such trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of tenapanor, or any such other product candidate, for any or all targeted indications. Additionally, despite a positive efficacy profile, the prevalence and/or severity of these or other side effects could cause us to cease further development of a product candidate for a particular indication, or entirely. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

In addition, in the event that any of our product candidates receives regulatory approval and we or others later identify undesirable side effects caused by one of our products, a number of potentially significant negative consequences could occur, including:

- regulatory authorities may withdraw their approval of the product or seize the product;
- we, or a collaboration partner, may be required to recall the product;

- additional restrictions may be imposed on the marketing of the particular product or the manufacturing processes for the product or any component thereof, including the imposition of a Risk Evaluation and Mitigation Strategies, or REMS, plan that may require creation of a Medication Guide outlining the risks of such side effects for distribution to patients, as well as elements to assure safe use of the product, such as a patient registry and training and certification of prescribers;

- we, or a collaboration partner, may be subject to fines, injunctions or the imposition of civil or criminal penalties;

- regulatory authorities may require the addition of labeling statements, such as a “black box” warning or a contraindication;

- we could be sued and held liable for harm caused to patients;

- the product may become less competitive; and

- our reputation may suffer

Any of the foregoing events could prevent us, or a collaboration partner, from achieving or maintaining market acceptance of a particular product candidate, if approved, and could result in the loss of significant revenue to us, which would materially and adversely affect our results of operations and business.

We face substantial competition and our competitors may discover, develop or commercialize products faster or more successfully than us.

The biotechnology and pharmaceutical industries are highly competitive, and we face significant competition from companies in the biotechnology, pharmaceutical and other related markets that are researching and marketing products designed to address diseases that we are currently developing products to treat. If approved for marketing by the FDA or other regulatory agencies, tenapanor, as well as our other product candidates, would compete against existing treatments.

For example, tenapanor will, if approved, compete directly with phosphate binders for the treatment of hyperphosphatemia in ESRD patients on dialysis. The various types of phosphate binders commercialized in the United States include the following:

- Calcium carbonate (many over-the-counter brands including Tums and Caltrate)

- Calcium acetate (several prescription brands including PhosLo and Phoslyra)

- Lanthanum carbonate (Fosrenol marketed by Shire)

- Sevelamer hydrochloride (Renagel, marketed by Sanofi)

- Sevelamer carbonate (Renvela, marketed by Sanofi)

- Sucroferric oxyhydroxide (Velphoro, marketed by Vifor Fresenius)

- Ferric citrate (Auryxia, marketed by Keryx)

The hydrochloride form of sevelamer, Renagel, was launched in the United States by Genzyme Corporation in 1998 prior to its acquisition by Sanofi, and the carbonate form, Renvela, was launched in 2008. Sanofi booked €802 million ($0.98 billion) in worldwide sales of sevelamer during 2017. Generic sevelamer carbonate has been approved in certain jurisdictions in Europe since 2015 and in the U.S. market since June 2017. In addition to the currently marketed phosphate binders, we are aware of at least two other binders in development, including fermagate (Alpharen), an iron-based binder

in Phase 3 being developed by Opko Health, Inc., and PT20, an iron-based binder in Phase 3 being developed by Shield Therapeutics.

Numerous treatments exist for constipation and the constipation component of IBS-C, many of which are over-the-counter. These include psyllium husk (such as Metamucil), methylcellulose (such as Citrucel), calcium polycarbophil (such as FiberCon), lactulose (such as Cephulac), polyethylene glycol (such as MiraLax), sennosides (such as Exlax), bisacodyl (such as Ducolax), docusate sodium (such as Colace), magnesium hydroxide (such as Milk of Magnesia), saline enemas (such as Fleet) and sorbitol. These agents are generally inexpensive and work well to temporarily relieve constipation.

We are also aware of three prescription products marketed for IBS-C: (i) Linzess (linaclotide), marketed by Ironwood Pharmaceuticals and Allergan, (ii) Amitiza (lubiprostone), marketed by Takeda and Sucampo, a wholly-owned subsidiary of Mallinckrodt, and (iii) Trulance (plecanatide), marketed by Synergy Pharmaceuticals.

It is possible that our competitors will develop and market drugs or other treatments that are less expensive and more effective than our product candidates, or that will render our product candidates obsolete. It is also possible that our competitors will commercialize competing drugs or treatments before we, or our collaboration partners, can launch any products developed from our product candidates. We also anticipate that we will face increased competition in the future as new companies enter into our target markets.

Many of our competitors have materially greater name recognition and financial, manufacturing, marketing, research and drug development resources than we do. Additional mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. Large pharmaceutical companies in particular have extensive expertise in preclinical and clinical testing and in obtaining regulatory approvals for drugs. In addition, academic institutions, government agencies, and other public and private organizations conducting research may seek patent protection with respect to potentially competitive products or technologies. These organizations may also establish exclusive collaboration partnerships or licensing relationships with our competitors.

We may experience difficulties in managing our current activities and growth given our level of managerial, operational, financial and other resources.

While we have continued to work to optimize our management composition, personnel and systems to support our current activities for future growth, these resources may not be adequate for this purpose. Our need to effectively execute our business strategy requires that we:

- manage our clinical trials effectively, including the Phase 3 trial of tenapanor which is being conducted at multiple trial sites;
- manage our internal research and development efforts effectively while carrying out our contractual obligations to licensors, contractors, collaborators, government agencies and other third parties;
- continue to improve our operational, financial and management controls, reporting systems and procedures; and
- retain and motivate our remaining employees and potentially identify, recruit, and integrate additional employees.

If we are unable to maintain or expand our managerial, operational, financial and other resources to the extent required to manage our development and pre-commercialization activities, our business will be materially adversely affected.

We rely completely on third parties to manufacture our nonclinical and clinical drug supplies, and we intend to rely on third parties to produce commercial supplies of tenapanor, if approved. Our business would be harmed if those third parties fail to obtain approval of the FDA, Competent Authorities of the Member States of the EEA or comparable regulatory authorities, fail to provide us with sufficient quantities of drug product, or fail to do so at acceptable quality levels or prices.

We do not currently have, nor do we plan to acquire, the infrastructure or capability internally to manufacture tenapanor or any of other our product candidates on a commercial scale, or to manufacture our drug supplies for use in the conduct of our nonclinical and clinical studies. The facilities used by our contract manufacturers to manufacture any drug products must be approved by the FDA pursuant to inspections that will be conducted after an NDA is submitted to the FDA. We do not control the manufacturing process of our product candidates, and we are completely dependent on our contract manufacturing partners for compliance with the regulatory requirements, known as cGMPs, for manufacture of both active drug substances and finished drug products.

If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved.

We rely on our manufacturers to purchase from third-party suppliers the materials necessary to produce our product candidates for our clinical studies. There are a limited number of suppliers for raw materials and certain processes, such as spray drying, that we use to manufacture our drugs, and there may be a need to identify alternate suppliers to prevent a possible disruption of the manufacture of the materials necessary to produce our product candidates for our clinical studies, and, if approved, ultimately for commercial sale. We do not have any control over the process or timing of the acquisition of these raw materials or processes by our manufacturers. Although we generally do not begin a clinical study unless we believe we have on hand, or will be able to manufacture, a sufficient supply of a product candidate to complete such study, any significant delay or discontinuity in the supply of a product candidate, or the raw material components thereof, for an ongoing clinical study due to the need to replace a third-party manufacturer could considerably delay completion of our clinical studies, product testing, and potential regulatory approval of our product candidates, which could harm our business and results of operations.

Third-party payor coverage and reimbursement status of newly-approved products is uncertain. Failure to obtain or maintain adequate coverage and reimbursement for our products, if approved, could limit our ability to market those products and decrease our ability to generate revenue.

The pricing, coverage and reimbursement of our product candidates, if approved, must be adequate to support a commercial infrastructure. The availability and adequacy of coverage and reimbursement by governmental and private payors are essential for most patients to be able to afford treatments such as ours, assuming approval. Sales of our product candidates will depend substantially, both domestically and abroad, on the extent to which the costs of our product candidates will be paid for by health maintenance, managed care, pharmacy benefit, and similar healthcare management organizations, or reimbursed by government authorities, private health insurers, and other third-party payors. If coverage and reimbursement are not available, or are available only to limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a return on our investment.

There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products. In the United States, the principal decisions about coverage and reimbursement for new drugs are typically made by the Centers for Medicare & Medicaid Services, or CMS, an agency within the U.S.

Department of Health and Human Services responsible for administering the Medicare program, as CMS decides whether and to what extent a new drug will be covered and reimbursed under Medicare. Private payors tend to follow the

coverage reimbursement policies established by CMS to a substantial degree. It is difficult to predict what CMS will decide with respect to reimbursement for products such as ours.

In July 2010, CMS released its final rule to implement a bundled prospective payment system for the treatment of ESRD patients as required by the Medicare Improvements for Patients and Providers Act, or MIPPA. The bundled payment covers a bundle of items and services routinely required for dialysis treatments furnished to Medicare beneficiaries in Medicare-certified ESRD facilities or at their home, including the cost of certain routine drugs. The final rule delayed the inclusion of oral medications without intravenous equivalents in the bundled payment until January 1, 2014 and in April 2014, President Obama signed the Protecting Access to Medicare Act of 2014, which further extended this implementation date to January 1, 2024. Additionally, section 204 of the Stephen Beck, Jr., Achieving a Better Life Experience Act of 2014, or ABLE, provides that payment for oral-only ESRD drugs cannot be made under the ESRD Prospective Payment System prior to January 1, 2025. As a result of the recent legislation, beginning in 2025, oral-only ESRD-related drugs may be included in the bundle and separate Medicare reimbursement will no longer be available for such drugs, as it is today under Medicare Part D. While it is too early to project the full impact that bundling may have on the industry, the impact could potentially cause dramatic price reductions for tenapanor, if approved. We may be unable to sell tenapanor, if approved, to dialysis providers on a profitable basis if third-party payors reduce their current levels of payment, or if our costs of production increase faster than increases in reimbursement levels.

Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost-containment initiatives in Europe, Canada, Japan, China and other countries has and will continue to put pressure on the pricing and usage of our product candidates. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. Other countries allow companies to fix their own prices for medicinal products, but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our product candidates. Accordingly, in markets outside the United States, the reimbursement for our products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenue and profits.

Moreover, increasing efforts by governmental and third-party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, these caps may not cover or provide adequate payment for our product candidates. We expect to experience pricing pressures in connection with the sale of any of our product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if any product we develop allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability, and a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our product candidates;
- injury to our reputation;
- withdrawal of clinical trial participants;

- costs to defend the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- regulatory investigations, product recalls or withdrawals, or labeling, marketing or promotional restrictions;
- loss of revenue; and
- the inability to commercialize or co-promote our product candidates.

Our inability to obtain and maintain sufficient product liability insurance at an acceptable cost and scope of coverage to protect against potential product liability claims could prevent or inhibit the commercialization of any products we develop. We currently carry product liability insurance covering use in our clinical trials in the amount of $10.0 million in the aggregate. Although we maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions and deductibles, and we may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Moreover, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses.

We are highly dependent on the services of our President and Chief Executive Officer, Michael Raab, our Chief Operating Officer, and our Chief Development Officer, David Rosenbaum, Ph.D. If we are not able to retain these members of our management team, or recruit additional management, clinical and scientific personnel, our business will suffer.

Our success depends in part on our continued ability to attract, retain and motivate highly qualified personnel. In particular, we are highly dependent upon Michael Raab, our President and Chief Executive Officer and David Rosenbaum, Ph.D., our Chief Development Officer. The loss of services of any of these individuals could delay or impair the successful development of our product pipeline, completion of our planned clinical trials or the commercialization of our product candidates. Although we have entered into employment agreements with our senior management team, including Mr. Raab and Dr. Rosenbaum, these agreements are terminable at will with or without notice and, therefore, we may not be able to retain their services as expected. Although we have not historically experienced unique difficulties attracting and retaining qualified employees, we could experience such problems in the future. For example, competition for qualified personnel in the biotechnology and pharmaceuticals field is intense due to the limited number of individuals who possess the skills and experience required by our industry. In addition to the competition for personnel, the San Francisco Bay area in particular is characterized by a high cost of living. As such, we could have difficulty attracting experienced personnel to our company and may be required to expend significant financial resources in our employee recruitment and retention efforts.

Our internal computer systems, or those of our CROs or other contractors or consultants, may fail or suffer data security breaches, which could adversely affect our business.

Our business is increasingly dependent on critical, complex and interdependent information technology systems to support business processes as well as internal and external communications. Despite the implementation of security measures, the size and complexity of our internal computer systems, and those of our CROs and other contractors, make them vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our programs. For example, the loss of clinical trial data from completed or ongoing clinical trials for any of our product candidates could result in delays in our regulatory approval efforts and significantly increase our costs to

recover or reproduce the data. In addition, our systems are potentially vulnerable to data security breaches, whether by employees or others, which may expose sensitive data to unauthorized persons. Such data security breaches could lead to the loss of trade secrets or other intellectual property, or could lead to the public exposure of personal information of our employees, clinical trial patients, customers, and others. Such disruptions and breaches of security could expose us to liability and have a material adverse effect on the operating results and financial condition of our business.

We incur significant costs as a result of operating as a public company, and our management will devote substantial time to new compliance initiatives. We may fail to comply with the rules that apply to public companies, including Section 404 of the Sarbanes-Oxley Act of 2002, which could result in sanctions or other penalties that would harm our business.

We incur significant legal, accounting and other expenses as a public company, including costs resulting from public company reporting obligations under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and regulations regarding corporate governance practices. The listing requirements of The Nasdaq Global Market require that we satisfy certain corporate governance requirements relating to director independence, distributing annual and interim reports, stockholder meetings, approvals and voting, soliciting proxies, conflicts of interest and a code of conduct. Our management and other personnel will need to devote a substantial amount of time to ensure that we comply with all of these requirements. Moreover, the reporting requirements, rules and regulations will increase our legal and financial compliance costs and will make some activities more time consuming and costly. Any changes we make to comply with these obligations may not be sufficient to allow us to satisfy our obligations as a public company on a timely basis, or at all. These reporting requirements, rules and regulations, coupled with the increase in potential litigation exposure associated with being a public company, could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or board committees or to serve as executive officers, or to obtain certain types of insurance, including directors' and officers' insurance, on acceptable terms.

We are subject to Section 404 of The Sarbanes-Oxley Act of 2002, or Section 404, and the related rules of the Securities and Exchange Commission, or SEC, which generally require our management and independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting. Section 404 requires an annual management assessment of the effectiveness of our internal control over financial reporting. However, for so long as we remain an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012, or JOBS Act, we intend to take advantage of certain exemptions from various reporting requirements that are applicable to public companies that are emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404. Once we are no longer an emerging growth company or, if prior to such date, we opt to no longer take advantage of the applicable exemption, we will be required to include an opinion from our independent registered public accounting firm on the effectiveness of our internal controls over financial reporting. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year following the fifth anniversary of the completion of our IPO (December 31, 2019), (2) the last day of the fiscal year in which we have total annual gross revenue of at least $1.07 billion, (3) the last day of the fiscal year in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of the prior June 30th, and (4) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

During the course of our review and testing of our internal controls, we may identify deficiencies and be unable to remediate them before we must provide the required reports. Furthermore, if we have a material weakness in our internal controls over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated. We or our independent registered public accounting firm may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting, which could harm our operating results, cause investors to lose confidence in our reported financial information and cause the trading price of our stock to fall. In addition, as a public company we are required to file accurate and timely quarterly and annual reports with the SEC under the Exchange Act. Any failure to report our financial results on an accurate and timely basis could result in sanctions, lawsuits, delisting of our shares from The Nasdaq Global Market or other adverse consequences that would materially harm our business.

We have formed in the past, and may form in the future, collaboration partnerships, joint ventures and/or licensing arrangements, and we may not realize the benefits of such collaborations.

We have current collaboration partnerships for the commercialization of tenapanor in certain foreign countries, and we currently expect to form additional collaboration partnerships, create joint ventures or enter into additional licensing arrangements with third parties in the United States and abroad that we believe will complement or augment our existing business. In particular, we have formed collaboration partnerships with Kyowa Hakko Kirin Co., Ltd. for commercialization of tenapanor for hyperphosphatemia in Japan, with Shanghai Fosun Pharmaceutical Industrial Development Co. Ltd. for commercialization of tenapanor for hyperphosphatemia and IBS-C in China and related territories, and in Canada with Knight Therapeutics Inc. for commercialization of tenapanor for IBS-C and hyperphosphatemia. We also expect to form one or more additional collaboration partnerships in connection with the commercialization of tenapanor, if approved. We face significant competition in seeking appropriate collaboration partners, and the process to identify an appropriate partner and negotiate appropriate terms is time-consuming and complex. Any delays in identifying suitable additional collaboration partners and entering into agreements to develop our product candidates could also delay the commercialization of our product candidates, which may reduce their competitiveness even if they reach the market. Moreover, we may not be successful in our efforts to establish such additional collaboration partnerships for tenapanor for IBS-C commercialization or for any future product candidates and programs on terms that are acceptable to us, or at all. With respect to tenapanor, this may be because third parties may not view tenapanor for the treatment of IBS-C as having sufficient potential to be successfully commercialized. If we are unable to establish a collaboration partnership for the commercialization of IBS-C in the United States, the commercialization of tenapanor for IBS-C, if approved, could be materially and adversely impacted, which could have a material adverse effect on our business, results of operations, financial condition and prospects. Additionally, we may not be successful in our efforts to establish collaboration partnerships for our other product candidates because our product candidates and programs may be deemed to be at too early of a stage of development for collaborative effort, our research and development pipeline may be viewed as insufficient, and/or third parties may not view such other product candidates and programs as having sufficient potential for commercialization, including the likelihood of an adequate safety and efficacy profile. There is no guarantee that our current collaboration partnerships or any such arrangements we enter into in the future will be successful, or that any collaboration partner will commit sufficient resources to the development, regulatory approval, and commercialization effort for such products, or that such alliances will result in us achieving revenues that justify such transactions.

We may engage in strategic transactions that could impact our liquidity, increase our expenses and present significant distractions to our management.

We may consider strategic transactions, such as acquisitions of companies, asset purchases, and or in-licensing of products, product candidates or technologies. In addition, if we are unable to access capital on a timely basis and on terms that are acceptable to us, we may be forced to restructure certain aspects of our business or identify and complete one or more strategic collaborations or other transactions in order to fund the development or commercialization of tenapanor or certain of our product candidates through the use of alternative structures. Additional potential transactions that we may consider include a variety of different business arrangements, including spin-offs, spin outs, collaboration partnerships, joint ventures, restructurings, divestitures, business combinations and investments. Any such transaction may require us to incur non-recurring or other charges, may increase our near- and long-term expenditures and may pose significant integration challenges or disrupt our management or business, which could adversely affect our operations and financial results. For example, these transactions may entail numerous operational and financial risks, including:

- up-front, milestone and royalty payments, equity investments and financial support of new research and development candidates including increase of personnel, all of which may be substantial;
- exposure to unknown liabilities;
- disruption of our business and diversion of our management’s time and attention in order to develop acquired products, product candidates or technologies;
- incurrence of substantial debt or dilutive issuances of equity securities to pay for acquisitions;

- higher-than-expected acquisition and integration costs;
- write-downs of assets or goodwill or impairment charges;
- increased amortization expenses;
- difficulty and cost in combining the operations and personnel of any acquired businesses with our operations and personnel;
- impairment of relationships with key suppliers or customers of any acquired businesses due to changes in management and ownership; and
- inability to retain key employees of any acquired businesses.

Accordingly, although there can be no assurance that we will undertake or successfully complete any transactions of the nature described above, any transactions that we do complete may be subject to the foregoing or other risks and could have a material adverse effect on our business, results of operations, financial condition and prospects.

If we seek and obtain approval to commercialize our product candidates outside of the United States, or otherwise engage in business outside of the United States, a variety of risks associated with international operations could materially adversely affect our business.

In addition to Japan, China and Canada, we or our collaboration partners may decide to seek marketing approval for certain of our product candidates outside the United States or otherwise engage in business outside the United States, including entering into contractual agreements with third-parties. We expect that we will be subject to additional risks related to entering these international business markets and relationships, including:

- different regulatory requirements for drug approvals in foreign countries;
- differing United States and foreign drug import and export rules;
- reduced protection for intellectual property rights in foreign countries;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- different reimbursement systems, and different competitive drugs;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad;
- potential liability resulting from development work conducted by these distributors; and

- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters.

Our business involves the use of hazardous materials and we and third-parties with whom we contract must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

Our research and development activities involve the controlled storage, use and disposal of hazardous materials, including the components of our product candidates and other hazardous compounds. We and manufacturers and suppliers with whom we may contract are subject to laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials. In some cases, these hazardous materials and various wastes resulting from their use are stored at our and our manufacturers' facilities pending their use and disposal. We cannot eliminate the risk of contamination, which could cause an interruption of our commercialization efforts, research and development efforts and business operations, environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. We cannot guarantee that the safety procedures utilized by third-party manufacturers and suppliers with whom we may contract will comply with the standards prescribed by laws and regulations or will eliminate the risk of accidental contamination or injury from these materials. In such an event, we may be held liable for any resulting damages and such liability could exceed our resources and state or federal or other applicable authorities may curtail our use of certain materials and/or interrupt our business operations. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance. We do not currently carry biological or hazardous waste insurance coverage.

We may be adversely affected by the global economic environment.

Our ability to attract and retain collaboration partners or customers, invest in and grow our business and meet our financial obligations depends on our operating and financial performance, which, in turn, is subject to numerous factors, including the prevailing economic conditions and financial, business and other factors beyond our control, such as the rate of unemployment, the number of uninsured persons in the United States, presidential elections, other political influences and inflationary pressures. Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. The 2008 global financial crisis caused extreme volatility and disruptions in the capital and credit markets. We cannot anticipate all the ways in which the global economic climate and global financial market conditions could adversely impact our business in the future.

We are exposed to risks associated with reduced profitability and the potential financial instability of our collaboration partners or customers, many of which may be adversely affected by volatile conditions in the financial markets. For example, unemployment and underemployment, and the resultant loss of insurance, may decrease the demand for healthcare services and pharmaceuticals. If fewer patients are seeking medical care because they do not have insurance coverage, our collaboration partners or customers may experience reductions in revenues, profitability and/or cash flow that could lead them to reduce their support of our programs or financing activities. If collaboration partners or customers are not successful in generating sufficient revenue or are precluded from securing financing, they may not be able to pay, or may delay payment of, accounts receivable that are owed to us. In addition, volatility in the financial markets could cause significant fluctuations in the interest rate and currency markets. We currently do not hedge for these risks. The foregoing events, in turn, could adversely affect our financial condition and liquidity. In addition, if economic challenges in the United States result in widespread and prolonged unemployment, either regionally or on a national basis, or if certain provisions of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively known as the Affordable Care Act, are repealed, a substantial number of people may become uninsured or underinsured. To the extent economic challenges result in fewer individuals pursuing or being able to afford our product candidates once commercialized, our business, results of operations, financial condition and cash flows could be adversely affected.

We may be adversely affected by earthquakes or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Our corporate headquarters and other facilities are located in the San Francisco Bay Area, which in the past has experienced severe earthquakes. We do not carry earthquake insurance. Earthquakes or other natural disasters could

severely disrupt our operations, and have a material adverse effect on our business, results of operations, financial condition and prospects.

If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as our enterprise financial systems or manufacturing resource planning and enterprise quality systems, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place currently are limited and are unlikely to prove adequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which, particularly when taken together with our lack of earthquake insurance, could have a material adverse effect on our business.

Risks Related to Government Regulation

The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable. If we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.

The research, testing, manufacturing, labeling, approval, selling, import, export, marketing and distribution of drug products are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, which regulations differ from country to country. Neither we nor any of our collaboration partners is permitted to market any drug product in the United States until we receive marketing approval from the FDA. We have not submitted an application or obtained marketing approval for any of our product candidates anywhere in the world. Obtaining regulatory approval of a NDA can be a lengthy, expensive and uncertain process. In addition, failure to comply with FDA and other applicable United States and foreign regulatory requirements may subject us to administrative or judicially imposed sanctions or other actions, including:

- warning letters;
- civil and criminal penalties;
- injunctions;
- withdrawal of regulatory approval of products;
- product seizure or detention;
- product recalls;
- total or partial suspension of production; and
- refusal to approve pending NDAs or supplements to approved NDAs.

Prior to obtaining approval to commercialize a drug candidate in the United States or abroad, we or our collaboration partners must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA or other foreign regulatory agencies, that such drug candidates are safe and effective for their intended uses. The number of nonclinical studies and clinical trials that will be required for FDA approval varies depending on the drug candidate, the disease or condition that the drug candidate is designed to address, and the regulations applicable to any particular drug candidate. Results from nonclinical studies and clinical trials can be interpreted in different ways. Even if we believe the nonclinical or clinical data for our drug candidates are promising, such data may not be sufficient to support approval by the FDA and other regulatory authorities. Administering drug candidates to humans may produce undesirable side effects, which could interrupt, delay or halt clinical trials and result in the FDA or other regulatory authorities denying approval of a drug candidate for any or all targeted indications.

The time required to obtain approval by the FDA and comparable foreign authorities is unpredictable, typically takes many years following the commencement of clinical studies, and depends upon numerous factors. The FDA and comparable foreign authorities have substantial discretion in the approval process and we may encounter matters with the FDA or such comparable authorities that requires us to expend additional time and resources and delay or prevent the approval of our product candidates. For example, the FDA may require us to conduct additional studies or trials for drug product either prior to or post-approval, such as additional drug-drug interaction studies or safety or efficacy studies or trials, or it may object to elements of our clinical development program such as the number of subjects in our current clinical trials from the United States. In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions, which may cause delays in the approval or result in a decision not to approve an application for regulatory approval. Despite the time and expense exerted, failure can occur at any stage.

Applications for our product candidates could fail to receive regulatory approval for many reasons, including but not limited to the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our, or our collaboration partners', clinical studies;
- the population studied in the clinical program may not be sufficiently broad or representative to assure safety in the full population for which approval is sought;
- the FDA or comparable foreign regulatory authorities may disagree with the interpretation of data from preclinical studies or clinical studies;
- the data collected from clinical studies of our product candidates may not be sufficient to support the submission of a NDA or other submission or to obtain regulatory approval in the United States or elsewhere;
- we or our collaboration partners may be unable to demonstrate to the FDA or comparable foreign regulatory authorities that a product candidate's risk-benefit ratio for its proposed indication is acceptable;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications, or facilities of third-party manufacturers responsible for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

This lengthy approval process, as well as the unpredictability of the results of clinical studies, may result in our failure and/or that of our collaboration partners to obtain regulatory approval to market any of our product candidates, which would significantly harm our business, results of operations, and prospects. Additionally, if the FDA requires that we conduct additional clinical studies, places limitations in our label, delays approval to market our product candidates or limits the use of our products, our business and results of operations may be harmed.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our products, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

Even if we receive regulatory approval for a product candidate, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense. Additionally, any product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal, and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.

Even if a drug is approved by the FDA or foreign regulatory authorities, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and GCP regulations for any clinical trials that we conduct post-approval. As such, we and our third-party contract manufacturers will be subject to continual review and periodic inspections to assess compliance with regulatory requirements. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production, and quality control. Regulatory authorities may also impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly post-marketing studies. Furthermore, any new legislation addressing drug safety issues could result in delays or increased costs to assure compliance.

We will also be required to report certain adverse reactions and production problems, if any, to the FDA, and to comply with requirements concerning advertising and promotion for our products. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. As such, we may not promote our products for indications or uses for which they do not have FDA approval.

Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- warning letters, fines or holds on clinical trials;
- restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market or voluntary or mandatory product recalls;
- injunctions or the imposition of civil or criminal penalties;
- suspension or revocation of existing regulatory approvals;
- suspension of any of our ongoing clinical trials;
- refusal to approve pending applications or supplements to approved applications submitted by us;
- restrictions on our or our contract manufacturers' operations; or
- product seizure or detention, or refusal to permit the import or export of products.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize our product candidates. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our company and our operating results will be adversely affected.

In addition, the FDA's policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we

may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. For example, certain policies of the Trump administration may impact our business and industry. Namely, the Trump administration has taken several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine regulatory and oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. It is difficult to predict how these Executive Orders will be implemented, and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If these executive actions impose constraints on FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

We and our contract manufacturers are subject to significant regulation with respect to manufacturing our product candidates. The manufacturing facilities on which we rely may not continue to meet regulatory requirements or may not be able to meet supply demands.

All entities involved in the preparation of product candidates for clinical studies or commercial sale, including our existing contract manufacturers for our product candidates are subject to extensive regulation. Components of a finished therapeutic product approved for commercial sale or used in late-stage clinical studies must be manufactured in accordance with cGMP regulations. These regulations govern manufacturing processes and procedures (including record keeping) and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Poor control of production processes can lead to the introduction of contaminants or to inadvertent changes in the properties or stability of our product candidates that may not be detectable in final product testing. We or our contract manufacturers must supply all necessary documentation in support of an NDA or comparable regulatory filing on a timely basis and must adhere to cGMP regulations enforced by the FDA and other regulatory agencies through their facilities inspection programs. The facilities and quality systems of some or all of our third-party contractors must pass a pre-approval inspection for compliance with the applicable regulations as a condition of regulatory approval of our product candidates. In addition, the regulatory authorities may, at any time, audit or inspect a manufacturing facility involved with the preparation of our product candidates or our other potential products or the associated quality systems for compliance with the regulations applicable to the activities being conducted. Although we oversee the contract manufacturers, we cannot control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements. If these facilities do not pass a pre-approval plant inspection, regulatory approval of the products may not be granted or may be substantially delayed until any violations are corrected to the satisfaction of the regulatory authority, if ever. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel.

The regulatory authorities also may, at any time following approval of a product for sale, audit the manufacturing facilities of our third-party contractors. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulations occurs independent of such an inspection or audit, we or the relevant regulatory authority may require remedial measures that may be costly and/or time consuming for us or a third party to implement, and that may include the temporary or permanent suspension of a clinical study or commercial sales or the temporary or permanent suspension of production or closure of a facility. Any such remedial measures imposed upon us or third parties with whom we contract could materially harm our business.

If we or any of our third-party manufacturers fail to maintain regulatory compliance, the FDA or other applicable regulatory authority can impose regulatory sanctions including, among other things, refusal to approve a pending application for a new drug product, withdrawal of an approval, or suspension of production. As a result, our business, financial condition, and results of operations may be materially harmed.

Additionally, if supply from one approved manufacturer is interrupted, an alternative manufacturer would need to be qualified through an NDA, a supplemental NDA or equivalent foreign regulatory filing, which could result in further delay. The regulatory agencies may also require additional studies if a new manufacturer is relied upon for commercial

production. Switching manufacturers may involve substantial costs and is likely to result in a delay in our desired clinical and commercial timelines.

These factors could cause us to incur higher costs and could cause the delay or termination of clinical studies, regulatory submissions, required approvals, or commercialization of our product candidates. Furthermore, if our suppliers fail to meet contractual requirements and we are unable to secure one or more replacement suppliers capable of production at a substantially equivalent cost, our clinical studies may be delayed or we could lose potential revenue.

If we fail to comply or are found to have failed to comply with FDA and other regulations related to the promotion of our products for unapproved uses, we could be subject to criminal penalties, substantial fines or other sanctions and damage awards.

The regulations relating to the promotion of products for unapproved uses are complex and subject to substantial interpretation by the FDA and other government agencies. If tenapanor or our other product candidates receive marketing approval, we and our collaboration partners, if any, will be restricted from marketing the product outside of its approved labeling, also referred to as off-label promotion. However, physicians may nevertheless prescribe an approved product to their patients in a manner that is inconsistent with the approved label, which is an off-label use. We intend to implement compliance and training programs designed to ensure that our sales and marketing practices comply with applicable regulations regarding off-label promotion. Notwithstanding these programs, the FDA or other government agencies may allege or find that our practices constitute prohibited promotion of our product candidates for unapproved uses. We also cannot be sure that our employees will comply with company policies and applicable regulations regarding the promotion of products for unapproved uses.

Over the past several years, a significant number of pharmaceutical and biotechnology companies have been the target of inquiries and investigations by various federal and state regulatory, investigative, prosecutorial and administrative entities in connection with the promotion of products for unapproved uses and other sales practices, including the Department of Justice and various U.S. Attorneys' Offices, the Office of Inspector General of the Department of Health and Human Services, the FDA, the Federal Trade Commission and various state Attorneys General offices. These investigations have alleged violations of various federal and state laws and regulations, including claims asserting antitrust violations, violations of the Food, Drug and Cosmetic Act, the False Claims Act, the Prescription Drug Marketing Act, anti-kickback laws, and other alleged violations in connection with the promotion of products for unapproved uses, pricing and Medicare and/or Medicaid reimbursement. Many of these investigations originate as "qui tam" actions under the False Claims Act. Under the False Claims Act, any individual can bring a claim on behalf of the government alleging that a person or entity has presented a false claim, or caused a false claim to be submitted, to the government for payment. The person bringing a qui tam suit is entitled to a share of any recovery or settlement. Qui tam suits, also commonly referred to as "whistleblower suits," are often brought by current or former employees. In a qui tam suit, the government must decide whether to intervene and prosecute the case. If it declines, the individual may pursue the case alone.

If the FDA or any other governmental agency initiates an enforcement action against us or if we are the subject of a qui tam suit and it is determined that we violated prohibitions relating to the promotion of products for unapproved uses, we could be subject to substantial civil or criminal fines or damage awards and other sanctions such as consent decrees and corporate integrity agreements pursuant to which our activities would be subject to ongoing scrutiny and monitoring to ensure compliance with applicable laws and regulations. Any such fines, awards or other sanctions would have an adverse effect on our revenue, business, financial prospects and reputation.

If approved, tenapanor and our other product candidates may cause or contribute to adverse medical events that we are required to report to regulatory agencies and if we fail to do so we could be subject to sanctions that would materially harm our business.

Some participants in clinical studies of tenapanor have reported adverse effects after being treated with tenapanor, including diarrhea, nausea, flatulence, abdominal discomfort, abdominal pain, abdominal distention and changes in electrolytes. If we are successful in commercializing any products, FDA and foreign regulatory agency regulations require that we report certain information about adverse medical events if those products may have caused or contributed to those adverse events. The timing of our obligation to report would be triggered by the date we become aware of the adverse

event as well as the nature of the event. We may fail to report adverse events we become aware of within the prescribed timeframe. We may also fail to appreciate that we have become aware of a reportable adverse event, especially if it is not reported to us as an adverse event or if it is an adverse event that is unexpected or removed in time from the use of our products. If we fail to comply with our reporting obligations, the FDA or a foreign regulatory agency could take action, including criminal prosecution, the imposition of civil monetary penalties, seizure of our products or delay in approval or clearance of future products.

Our employees, independent contractors, principal investigators, CROs, collaboration partners, consultants and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk that our employees, independent contractors, principal investigators, CROs, collaboration partners, consultants and vendors may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or unauthorized activities that violate: (1) FDA regulations, including those laws that require the reporting of true, complete and accurate information to the FDA; (2) manufacturing standards; (3) federal and state healthcare fraud and abuse laws and regulations; or (4) laws that require the reporting of true and accurate financial information and data. Specifically, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. These activities also include the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with such laws or regulations. Additionally, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, disgorgements, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, individual imprisonment, other sanctions, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Failure to obtain regulatory approvals in foreign jurisdictions would prevent us from marketing our products internationally.

In order to market any product in the EEA (which is composed of the 28 Member States of the European Union plus Norway, Iceland and Liechtenstein), and many other foreign jurisdictions, separate regulatory approvals are required. In the EEA, medicinal products can only be commercialized after obtaining a Marketing Authorization, or MA. Before granting the MA, the EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

The approval procedures vary among countries and can involve additional clinical testing, and the time required to obtain approval may differ from that required to obtain FDA approval. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one or more foreign regulatory authorities does not ensure approval by regulatory authorities in other foreign countries or by the FDA. However, a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in others. The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval. We may not be able to file for regulatory approvals or to do so on a timely basis, and even if we do file we may not receive necessary approvals to commercialize our products in any market.

We and our collaboration partners may be subject to healthcare laws, regulation and enforcement; our failure or the failure of any such collaboration partners to comply with these laws could have a material adverse effect on our results of operations and financial conditions.

Although we do not currently have any products on the market, once we begin commercializing our products, we and our collaboration partners may be subject to additional healthcare statutory and regulatory requirements and enforcement by the federal government and the states and foreign governments in which we conduct our business. The laws that may affect our ability to operate as a commercial organization include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs;

- federal false claims laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent;

- federal criminal laws that prohibit executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

- the federal Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, which governs the conduct of certain electronic healthcare transactions and protects the security and privacy of protected health information;

- the federal physician sunshine requirements under the Affordable Care Act, which requires manufacturers of drugs, devices, biologics, and medical supplies to report annually to the CMS information related to payments and other transfers of value to physicians, other healthcare providers, and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members;

- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers;

- state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the applicable compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources;

- state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or pricing information and marketing expenditures; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways, thus complicating compliance efforts; and

- European and other foreign law equivalents of each of the laws, including reporting requirements detailing interactions with and payments to healthcare providers.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. The risk of our being found in violation of these laws is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Further, the Affordable Care Act, among other things, amends the intent requirement of the federal anti-kickback and criminal health care fraud statutes. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. In addition, the Affordable Care Act provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the false claims

statutes. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. If our operations are found to be in violation of any of the laws described above or any other governmental laws and regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, the curtailment or restructuring of our operations, the exclusion from participation in federal and state healthcare programs and imprisonment, any of which could adversely affect our ability to market our products and adversely impact our financial results.

Legislative or regulatory healthcare reforms in the United States may make it more difficult and costly for us to obtain regulatory clearance or approval of our product candidates and to produce, market and distribute our products after clearance or approval is obtained.

From time to time, legislation is drafted and introduced in Congress that could significantly change the statutory provisions governing the regulatory clearance or approval, manufacture, and marketing of regulated products or the reimbursement thereof. In addition, FDA regulations and guidance are often revised or reinterpreted by the FDA in ways that may significantly affect our business and our products. Any new regulations or revisions or reinterpretations of existing regulations may impose additional costs or lengthen review times of our product candidates. We cannot determine what effect changes in regulations, statutes, legal interpretation or policies, when and if promulgated, enacted or adopted may have on our business in the future. Such changes could, among other things, require:

- additional clinical trials to be conducted prior to obtaining approval;
- changes to manufacturing methods;
- recall, replacement, or discontinuance of one or more of our products; and
- additional record keeping.

Each of these would likely entail substantial time and cost and could materially harm our business and our financial results. In addition, delays in receipt of or failure to receive regulatory clearances or approvals for any future products would harm our business, financial condition and results of operations.

In addition, the full impact of recent healthcare reform and other changes in the healthcare industry and in healthcare spending is currently unknown, and may adversely affect our business model. In the United States, the Affordable Care Act was enacted in 2010 with a goal of reducing the cost of healthcare and substantially changing the way healthcare is financed by both government and private insurers. The Affordable Care Act, among other things, increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extended the rebate program to individuals enrolled in Medicaid managed care organizations, established annual fees and taxes on manufacturers of certain branded prescription drugs, and created a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D.

We currently expect that federal and state legislatures within the United States and foreign governments will continue to consider changes to existing healthcare legislation, and we currently expect that the current Presidential Administration and U.S. Congress will seek to modify, or repeal all, or certain provisions of, the Affordable Care Act. There is still uncertainty with respect to any regulatory changes, and such regulatory changes could have an impact on coverage and reimbursement for healthcare items and services covered by plans that were otherwise authorized by the Affordable Care Act. However, we cannot predict the reform initiatives that may be adopted in the future or whether initiatives that have been adopted will be repealed or modified. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare may adversely affect the demand for any drug products for which we may obtain regulatory approval, our ability to set a price that we believe is fair for our products, our ability to obtain coverage and reimbursement approval for a product, our ability to generate revenues and achieve or maintain profitability, and the level of taxes that we are required to pay.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. These new laws, among other things, included aggregate reductions of Medicare payments to providers of 2% per fiscal year that will remain in effect through 2025 unless additional action is taken by Congress, additional specific reductions in Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers, and an increase in the statute of limitations period for the government to recover overpayments to providers from three to five years. Additionally, individual states have become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access, and to encourage importation from other countries and bulk purchasing. Recently, there has also been heightened governmental scrutiny over the manner in which drug manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed bills designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products.

Risks Related to Intellectual Property

We may become subject to claims alleging infringement of third parties' patents or proprietary rights and/or claims seeking to invalidate our patents, which would be costly, time consuming and, if successfully asserted against us, delay or prevent the development and commercialization of tenapanor or our other product candidates, or prevent or delay the continued use of our drug discovery and development platform, including APECCS.

There have been many lawsuits and other proceedings asserting infringement or misappropriation of patents and other intellectual property rights in the pharmaceutical and biotechnology industries. There can be no assurances that we will not be subject to claims alleging that the manufacture, use or sale of tenapanor or any other product candidates, or that the use of our drug discovery and development platform, including APECCS, infringes existing or future third-party patents, or that such claims, if any, will not be successful. Because patent applications can take many years to issue and may be confidential for 18 months or more after filing, and because pending patent claims can be revised before issuance, there may be applications now pending which may later result in issued patents that may be infringed by the manufacture, use or sale of tenapanor or other product candidates or by the use of APECCS. Moreover, we may face patent infringement claims from non-practicing entities that have no relevant product revenue and against whom our own patent portfolio may thus have no deterrent effect. We may be unaware of one or more issued patents that would be infringed by the manufacture, sale or use of tenapanor or our other product candidates, or by the use of APECCS.

We may be subject to third-party patent infringement claims in the future against us or our that would cause us to incur substantial expenses and, if successful against us, could cause us to pay substantial damages, including treble damages and attorney's fees if we are found to be willfully infringing a third party's patents. We may be required to indemnify future collaboration partners against such claims. We are not aware of any threatened or pending claims related to these matters, but in the future litigation may be necessary to defend against such claims. If a patent infringement suit were brought against us we could be forced to stop or delay research, development, manufacturing or sales of the product or product candidate that is the subject of the suit. In addition, if a patent infringement suit were brought against us regarding the use of APECCS, we could be forced to stop our use of APECCS or modify our processes to avoid infringement, which may not be possible at a reasonable cost, if at all, and which could result in substantial delay in our use of APECCS for the discovery of new product candidates or potential targets. As a result of patent infringement claims, or in order to avoid potential claims, we may choose to seek, or be required to seek, a license from the third party and would most likely be required to pay license fees or royalties or both. These licenses may not be available on acceptable terms, or at all. Even if we were able to obtain a license, we may be unable to maintain such licenses and the rights may be nonexclusive, which would give our competitors access to the same intellectual property. Ultimately, we could be prevented from commercializing a product, or forced to redesign it, or to cease our use of APECCS or some other aspect of our business operations if, as a result of actual or threatened patent infringement claims, we are unable to enter into licenses on acceptable terms, or unable to maintain such licenses when granted. Even if we are successful in defending against such claims, such litigation can be expensive and time consuming to litigate and would divert management's attention from our core business. Any of these events could harm our business significantly.

In addition to infringement claims against us, if third parties prepare and file patent applications in the United States that also claim technology similar or identical to ours, we may have to participate in interference or derivation proceedings

in the United States Patent and Trademark Office, or the USPTO, to determine which party is entitled to a patent on the disputed invention. We may also become involved in similar opposition proceedings in the European Patent Office or similar offices in other jurisdictions regarding our intellectual property rights with respect to our products and technology. Since patent applications are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our product candidates.

If our intellectual property related to our product candidates is not adequate or if we are not able to protect our trade secrets or our confidential information, we may not be able to compete effectively in our market.

We rely upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our product candidates, our drug discovery and development platform and our development programs. Any disclosure to or misappropriation by third parties of our confidential or proprietary information could enable competitors to quickly duplicate or surpass our technological achievements, thus eroding our competitive position in our market.

The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or license may fail to result in issued patents in the United States or in foreign countries. Additionally, our research and development efforts may result in product candidates for which patent protection is limited or not available. Even if patents do successfully issue, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. For example, U.S. patents can be challenged by any person before the new USPTO Patent Trial and Appeals Board at any time before one year after that person is served an infringement complaint based on the patents. Patents granted by the European Patent Office may be similarly opposed by any person within nine months from the publication of the grant. Similar proceedings are available in other jurisdictions, and in the United States, Europe and other jurisdictions third parties can raise questions of validity with a patent office even before a patent has granted. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing around our claims. For example, a third party may develop a competitive product that provides therapeutic benefits similar to one or more of our product candidates but has a sufficiently different composition to fall outside the scope of our patent protection. If the breadth or strength of protection provided by the patents and patent applications we hold or pursue with respect to our product candidates is successfully challenged, then our ability to commercialize such product candidates could be negatively affected, and we may face unexpected competition that could have a material adverse impact on our business. Further, if we encounter delays in our clinical trials, the period of time during which we or our collaboration partners could market tenapanor or other product candidates under patent protection would be reduced.

Even where laws provide protection, costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and the outcome of such litigation would be uncertain. If we or one of our collaboration partners were to initiate legal proceedings against a third party to enforce a patent covering the product candidate, the defendant could counterclaim that our patent is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to validity, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability against our intellectual property related to a product candidate, we would lose at least part, and perhaps all, of the patent protection on such product candidate. Such a loss of patent protection would have a material adverse impact on our business. Moreover, our competitors could counterclaim that we infringe their intellectual property, and some of our competitors have substantially greater intellectual property portfolios than we do.

We also rely on trade secret protection and confidentiality agreements to protect proprietary know-how that may not be patentable, processes for which patents may be difficult to obtain and/or enforce and any other elements of our drug discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. Although we require all of our employees, consultants, advisors and any third parties who have access to our

proprietary know-how, information or technology, to assign their inventions to us, and endeavor to execute confidentiality agreements with all such parties, we cannot be certain that we have executed such agreements with all parties who may have helped to develop our intellectual property or who had access to our proprietary information, nor can we be certain that our agreements will not be breached by such consultants, advisors or third parties, or by our former employees. The breach of such agreements by individuals or entities who are actively involved in the discovery and design of our potential drug candidates, or in the development of our discovery and design platform, including APECCS, could require us to pursue legal action to protect our trade secrets and confidential information, which would be expensive, and the outcome of which would be unpredictable. If we are not successful in prohibiting the continued breach of such agreements, our business could be negatively impacted. We cannot guarantee that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques.

Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent material disclosure of the intellectual property related to our technologies to third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, results of operations and financial condition.

If we do not obtain patent term extension in the United States under the Hatch-Waxman Act and in foreign countries under similar legislation, thereby potentially extending the term of marketing exclusivity for our product candidates, our business may be materially harmed.

Depending upon the timing, duration and specifics of FDA marketing approval of our product candidates, if any, one of the U.S. patents covering each of such approved product(s) or the use thereof may be eligible for up to five years of patent term restoration under the Hatch-Waxman Act. The Hatch-Waxman Act allows a maximum of one patent to be extended per FDA approved product. Patent term extension also may be available in certain foreign countries upon regulatory approval of our product candidates. Nevertheless, we may not be granted patent term extension either in the United States or in any foreign country because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the term of extension, as well as the scope of patent protection during any such extension, afforded by the governmental authority could be less than we request.

If we are unable to obtain patent term extension or restoration, or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product will be shortened and our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced, possibly materially.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The USPTO and various foreign patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions to maintain patent applications and issued patents. Noncompliance with these requirements can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case.

We may not be able to enforce our intellectual property rights throughout the world.

The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of some countries, particularly developing countries, do not favor

the enforcement of patents and other intellectual property protection, especially those relating to life sciences. This could make it difficult for us to stop the infringement of our patents or the misappropriation of our other intellectual property rights. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties.

Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business. Furthermore, while we intend to protect our intellectual property rights in our expected significant markets, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market our products. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate. In addition, changes in the law and legal decisions by courts in the United States and foreign countries may affect our ability to obtain and enforce adequate intellectual property protection for our technology.

We may be subject to claims that we or our employees have misappropriated the intellectual property, including know-how or trade secrets, of a third party, or claiming ownership of what we regard as our own intellectual property.

Many of our employees, consultants and contractors were previously employed at or engaged by other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Some of these employees, consultants and contractors, executed proprietary rights, non-disclosure and non-competition agreements in connection with such previous employment. Although we try to ensure that our employees, consultants and contractors do not use the intellectual property and other proprietary information or know-how or trade secrets of others in their work for us, and do not perform work for us that is in conflict with their obligations to another employer or any other entity, we may be subject to claims that we or these employees, consultants and contractors have used or disclosed such intellectual property, including know-how, trade secrets or other proprietary information. In addition, an employee, advisor or consultant who performs work for us may have obligations to a third party that are in conflict with their obligations to us, and as a result such third party may claim an ownership interest in the intellectual property arising out of work performed for us. We are not aware of any threatened or pending claims related to these matters, but in the future litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, or access to consultants and contractors. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, while we typically require our employees, consultants and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own, which may result in claims by or against us related to the ownership of such intellectual property. If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to our management and scientific personnel.

Risks Related to Our Common Stock

Our stock price may be volatile and our stockholders may not be able to resell shares of our common stock at or above the price they paid.

The trading price of our common stock is highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. These factors include those discussed in this “Risk Factors” section and others such as:

- results from, or any delays in, clinical trial programs relating to our product candidates, including the ongoing Phase 3 clinical trial for tenapanor for hyperphosphatemia;
- the success of our efforts to establish a collaboration partnership for the commercialization of tenapanor for IBS-C in the United States;

- our ability, alone or with collaboration partners, to commercialize or obtain regulatory approval for tenapanor, or delays in commercializing or obtaining regulatory approval;
- announcements of regulatory approval, a complete response letter or a refuse to file letter to tenapanor, or specific label restrictions or patient populations for its use, or changes or delays in the regulatory review process;
- announcements relating to our current or future collaboration partnerships;
- announcements of therapeutic innovations or new products by us or our competitors;
- adverse actions taken by regulatory agencies with respect to our clinical trials, manufacturing supply chain or sales and marketing activities;
- changes or developments in laws or regulations applicable to our product candidates;
- the success of our testing and clinical trials;
- failure to meet any of our projected timelines or goals with regard to the clinical development of any of our product candidates, including the Phase 3 clinical trial for tenapanor for hyperphosphatemia;
- failure to meet any of our projected timelines with regard to the filing of the NDA for tenapanor for IBS-C;
- the success of our efforts to acquire or license or discover additional product candidates;
- any intellectual property infringement actions in which we may become involved;
- the success of our efforts to obtain adequate intellectual property protection for our product candidates;
- announcements concerning our competitors or the pharmaceutical industry in general;
- achievement of expected product sales and profitability;
- manufacture, supply or distribution shortages;
- actual or anticipated fluctuations in our operating results;
- FDA or other U.S. or foreign regulatory actions affecting us or our industry or other healthcare reform measures in the United States;
- changes in financial estimates or recommendations by securities analysts;
- trading volume of our common stock;
- sales of our common stock by us, our executive officers and directors or our stockholders in the future;

sales of debt securities and sales or licensing of assets;

- general economic and market conditions and overall fluctuations in the United States equity markets; and
- the loss of any of our key scientific or management personnel.

In addition, the stock markets in general, and the markets for pharmaceutical, biopharmaceutical and biotechnology stocks in particular, have experienced extreme volatility that may have been unrelated to the operating performance of the issuer. These broad market fluctuations may adversely affect the trading price or liquidity of our common stock. In the past, when the market price of a stock has been volatile, holders of that stock have sometimes instituted securities class action litigation against the issuer. If any of our stockholders were to bring such a lawsuit against us, we could incur substantial costs defending the lawsuit and the attention of our management would be diverted from the operation of our business, which could seriously harm our financial position. Any adverse determination in litigation could also subject us to significant liabilities.

One of our stockholders owns a significant percentage of our stock and, together with our management, will be able to exert significant control over matters subject to stockholder approval.

As of June 30, 2018, entities affiliated with New Enterprise Associates, or NEA, a venture capital fund associated with one of our directors, collectively beneficially owned approximately 26.4% of our common stock, and NEA together with our executive officers and directors beneficially owned approximately 29.0% of our capital stock, including outstanding restricted stock units that will vest within 60 days of June 30, 2018, and warrants and stock options exercisable for shares of our common stock within 60 days of June 30, 2018. Therefore, these stockholders may be able to determine all matters requiring stockholder approval, and the entities affiliated with NEA alone will have significant ability to influence decisions through their ownership position. For example, these stockholders may be able to influence or control elections of directors, amendments to our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that certain stockholders may feel are in their best interest as one of our stockholders.

If we sell shares of our common stock in future financings, stockholders may experience immediate dilution and, as a result, our stock price may decline.

We may from time to time issue additional shares of common stock at a discount from the current trading price of our common stock. As a result, our stockholders would experience immediate dilution upon the purchase of any shares of our common stock sold at such discount. In addition, as opportunities present themselves, we may enter into financing or similar arrangements in the future, including the issuance of debt securities, preferred stock or common stock. If we issue common stock or securities convertible into common stock, our common stockholders would experience additional dilution and, as a result, our stock price may decline.

Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market, the trading price of our common stock could decline. As of June 30, 2018, we had 62,053,751 shares of common stock outstanding. Of those shares, approximately 15.7 million were held by current directors, executive officers and other affiliates, or may otherwise be subject to Rule 144 under the Securities Act of 1933, or the Securities Act.

As of June 30, 2018, approximately 0.6 million shares of common stock issuable upon vesting of outstanding restricted stock units and approximately 5.1 million shares of common stock issuable upon exercise of outstanding options were eligible for sale in the public market to the extent permitted by the provisions of the applicable vesting schedules, and Rule 144 and Rule 701 under the Securities Act. In addition, as of June 30, 2018, approximately 2.2 million shares of common stock issuable upon exercise of outstanding warrants were eligible for sale in the public market. If these additional shares of common stock are issued and sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

As of June 30, 2018, the holders of approximately 5.6 million shares of our outstanding common stock are entitled to rights with respect to the registration of their shares under the Securities Act. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares purchased by affiliates. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could significantly reduce the value of our shares to a potential acquirer or delay or prevent changes in control or changes in our management without the consent of our board of directors. The provisions in our charter documents include the following:

- a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- the required approval of at least two-thirds of the shares entitled to vote to remove a director for cause, and the prohibition on removal of directors without cause;
- the ability of our board of directors to authorize the issuance of shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- the ability of our board of directors to alter our bylaws without obtaining stockholder approval;
- the required approval of at least two-thirds of the shares entitled to vote at an election of directors to adopt, amend or repeal our bylaws or repeal the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by the chairman of the board of directors, the chief executive officer, the president or the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and
- advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

In addition, these provisions would apply even if we were to receive an offer that some stockholders may consider beneficial.

We are also subject to the anti-takeover provisions contained in Section 203 of the Delaware General Corporation Law. Under Section 203, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other exceptions, the board of directors has approved the transaction.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our amended and restated certificate of incorporation and amended and restated bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the Delaware General Corporation Law, our amended and restated bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- We will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.

- We may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law.

- We are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.

- We will not be obligated pursuant to our amended and restated bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification.

- The rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons.

- We may not retroactively amend our amended and restated bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

We do not currently intend to pay dividends on our common stock, and, consequently, our stockholders' ability to achieve a return on their investment will depend on appreciation in the price of our common stock.

We do not currently intend to pay any cash dividends on our common stock for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Additionally, the terms of our loan and security agreements could restrict our ability to pay dividends. Therefore, our stockholders are not likely to receive any dividends on our common stock for the foreseeable future. Since we do not intend to pay dividends, our stockholders' ability to receive a return on their investment will depend on any future appreciation in the market value of our common stock. There is no guarantee that our common stock will appreciate or even maintain the price at which our holders have purchased it.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Effective May 16, 2018, we entered into a loan and security agreement pursuant to which the Lenders agreed to provide us a $50.0 million term loan facility. Covenants in the loan and security agreement limit our ability to pay dividends or make other distributions. For additional information refer to Note 5 in the notes to our unaudited interim condensed consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10 Q.

Unregistered Sales of Equity Securities

None.

Use of Proceeds

Not applicable.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Date	Number	
10.1	Loan and Security Agreement, dated May 16, 2018, by and between the Company and Solar Capital Ltd. and Western Alliance Bank.				X
10.2	Exit Fee Agreement, dated May 16, 2018, by and between the Company and Solar Capital Ltd. and Western Alliance Bank.				X
10.3 #	Transition and Separation Agreement dated July 8, 2018, by and between the Company and Reginald Seeto, MBBS.				X
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32.1	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
101	The following financial statements, formatted in XBRL: (i) Condensed Consolidated Balance Sheets as of June 30, 2018 and December 31, 2017, (ii) Condensed Consolidated Statements of Operations and Comprehensive Loss for the three and six months ended June 30, 2018 and 2017, (iii) Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2018 and 2017; and (iv) Notes to Unaudited Condensed Consolidated Financial Statements.				X

# Indicates a management contract or compensatory plan or arrangement.

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, thereunto duly authorized.

Ardelyx, Inc.

Date: August 7, 2018

By: /s/ Mark Kaufmann
Mark Kaufmann
Chief Financial Officer
(Principal Financial and Accounting Officer)

LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT (as the same may be amended, restated, modified, or supplemented from time to time, this "**Agreement**") dated as of May 16, 2018 (the "**Effective Date**") among Solar Capital Ltd., a Maryland corporation with an office located at 500 Park Avenue, 3rd Floor, New York, NY 10022 ("**Solar**"), as collateral agent (in such capacity, together with its successors and assigns in such capacity, "**Collateral Agent**"), and the lenders listed on Schedule 1.1 hereof or otherwise a party hereto from time to time including Solar and Western Alliance Bank, an Arizona corporation ("**Western Alliance Bank**"), each in its capacity as a lender (together with any other lenders party hereto, the "**Lenders**" and each, a "**Lender**"), and Ardelyx, Inc., a Delaware corporation with offices located at 34175 Ardenwood Blvd., Suite 200, Fremont, California 94555 ("**Borrower**"), provides the terms on which the Lenders shall lend to Borrower and Borrower shall repay the Lenders. The parties agree as follows:

1. DEFINITIONS AND OTHER TERMS

1.1 Terms. Capitalized terms used herein shall have the meanings set forth in Section 1.3 to the extent defined therein. All other capitalized terms used but not defined herein shall have the meaning given to such terms in the Code. Any accounting term used but not defined herein shall be construed in accordance with GAAP and all calculations shall be made in accordance with GAAP. The term "financial statements" shall include the accompanying notes and schedules.

1.2 Section References. Any section, subsection, schedule or exhibit references are to this Agreement unless otherwise specified.

1.3 Definitions. The following terms are defined in the Sections or subsections referenced opposite such terms:

"Aggregate Bank Services Amount"	Exhibit B ,Section 11
"**Agreement**"	Preamble
"**Approved Lender**"	Section 12.1
"Bank Services"	Exhibit B ,Section 11
"**Borrower**"	Preamble
"Cash Collateral"	Exhibit B ,Section 11
"**Claims**"	Section 12.2
"**Closing Fee**"	Section 2.4(a)
"**Collateral Agent**"	Preamble
"**Collateral Agent Report**"	Exhibit B, Section 5
"**Communications**"	Section 10
"**Costs**"	Exhibit B, Section 6
"**Default Rate**"	Section 2.3(b)
"Deficiency"	Exhibit B ,Section 11
"**Effective Date**"	Preamble
"Enforcement Action"	Exhibit B, Section 10(d)
"Enforcing Lender"	Exhibit B, Section 10(d)
"**Event of Default**"	Section 8
"**Excluded Domestic Subsidiary**"	Section 6.10
"**Indemnified Person**"	Section 12.2
"**Lender**" and "**Lenders**"	Preamble
"**Lender Transfer**"	Section 12.1
"**New Subsidiary**"	Section 6.10
"**Non-Funding Lender**"	Exhibit B, Section 10(c)(ii)
"**Other Lender**"	Exhibit B, Section 10(c)(ii)
"**Perfection Certificate**" and "**Perfection Certificates**"	Section 5.1

"Reimbursement Obligations"	Exhibit B ,Section 11
"**Secured Promissory Note**"	Section 2.6
"**Solar**"	Preamble
"**Termination Date**"	Exhibit B, Section 8
"**Term Loan**"	Section 2.2(a)
"**Transfer**"	Section 7.1

In addition to the terms defined elsewhere in this Agreement, the following terms have the following meanings:

"**Account**" is any "account" as defined in the Code with such additions to such term as may hereafter be made under the Code, and includes, without limitation, all accounts receivable and other sums owing to Borrower.

"**Account Debtor**" is any "account debtor" as defined in the Code with such additions to such term as may hereafter be made under the Code.

"**Acquisition Consideration**" shall mean the purchase consideration for a Permitted Acquisition and all other payments, directly or indirectly, by Borrower or any of its Subsidiaries in exchange for, or as part of, or in connection with, a Permitted Acquisition, whether paid in cash or by exchange of equity interests or of properties or otherwise and whether payable at or prior to the consummation of a Permitted Acquisition or deferred for payment at any future time, whether or not any such future payment is subject to the occurrence of any contingency, and includes any and all payments representing the purchase price and any assumptions of Indebtedness, "earnouts" and other agreements to make any payment the amount of which is, or the terms of payment of which are, in any respect subject to or contingent upon the revenues, income, cash flow or profits (or the like) of any person or business; provided that any such future payment that is subject to a contingency shall be considered Acquisition Consideration only to the extent of the reserve, if any, required under GAAP (as determined at the time of the consummation of such Permitted Acquisition) to be established in respect thereof by the Borrower or any of its Subsidiaries.

"**Affiliate**" of any Person is 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.

"**Amortization Date**" means:

(a) December 1, 2020 if, prior to June 1, 2020, Borrower achieves (subject to evidence reasonably acceptable to the Collateral Agent) its Phase 3 Endpoint; or

(b) June 1, 2020, otherwise.

"**Anti-Terrorism Laws**" are any laws relating to terrorism or money laundering, including without limitation 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 FDA Threshold**" means the greater of (a) Five Hundred Thousand Dollars ($500,000), and (b) as of any date of determination, five percent (5%) of the Borrower's and its Subsidiaries' consolidated revenues for the trailing twelve months ending as of the last day of the month immediately prior to such date of determination.

"**Approved Fund**" is any (i) 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 its business or (ii) any Person (other than a natural person) which temporarily warehouses loans for any Lender or any entity described in the preceding clause (i) and that, with respect to each of the preceding clauses (i) and (ii), is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) a

Person (other than a natural person) or an Affiliate of a Person (other than a natural person) that administers or manages a Lender.

"**Blocked Person**" is any Person: (a) 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 which 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.

"**Borrower's Books**" are Borrower's or any of its Subsidiaries' books and records including ledgers, federal, and state tax returns, records regarding Borrower's or its Subsidiaries' assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

"**Business Day**" is any day that is not a Saturday, Sunday or a day on which commercial banks in New York, New York are required or authorized to be closed.

"**Cash Equivalents**" are (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (b) commercial paper maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor's Ratings Group or Moody's Investors Service, Inc., (c) certificates of deposit maturing no more than one (1) year after issue provided that the account in which any such certificate of deposit is maintained is subject to a Control Agreement in favor of Collateral Agent, (d) any money market or similar funds under Borrower's investment policy, as approved by Collateral Agent and the Lenders from time to time, and (e) money market or similar accounts held at Western Alliance Bank.

"**Code**" is the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the State of New York; provided, that, to the extent that the Code is used to define any term herein or in any Loan 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; 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, Collateral 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**" is any and all properties, rights and assets of Borrower described on Exhibit A.

"**Collateral Account**" is any Deposit Account, Securities Account, or Commodity Account, or any other bank account maintained by Borrower or any Subsidiary at any time.

"**Collateral Agent**" is Solar, not in its individual capacity, but solely in its capacity as collateral agent on behalf of and for the ratable benefit of the Secured Parties.

"**Commitment Percentage**" is set forth in Schedule 1.1, as amended from time to time.

"**Commodity Account**" is any "commodity account" as defined in the Code with such additions to such term as may hereafter be made under the Code.

"**Compliance Certificate**" is that certain certificate in substantially the form attached hereto as Exhibit D.

"**Contingent Obligation**" is, 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 in accordance with GAAP; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"**Control Agreement**" is any control agreement entered into among the depository institution at which Borrower or any of its Subsidiaries maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower or any of its Subsidiaries maintains a Securities Account or a Commodity Account, Borrower or such Subsidiary, as applicable, and Collateral Agent pursuant to which Collateral Agent, for the ratable benefit of the Secured Parties, obtains "control" (within the meaning of the Code) over such Deposit Account, Securities Account, or Commodity Account.

"**Convertible Indebtedness**" means Indebtedness of the Borrower that is (i) either (A) Subordinated Debt or (B) unsecured Indebtedness that is not-cross defaulted to the Obligations and (ii) convertible into equity securities of the Borrower.

"**Copyrights**" are any and all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

"**Default**" is any event that, with the giving of notice or passage of time or both, would constitute an Event of Default.

"**Deposit Account**" is any "deposit account" as defined in the Code with such additions to such term as may hereafter be made.

"**Disclosure Schedules**" the disclosure schedules to this agreement, as amended or supplemented from time to time by Borrower with the written consent of the Required Lenders (or as supplemented by Borrower pursuant to the terms of the Loan Documents), delivered by Borrower to the Lenders.

"**Dollars**," "**dollars**" and "$" each mean lawful money of the United States.

"**Domestic Subsidiary**" is any Subsidiary that is not a Foreign Subsidiary.

"**Eligible Assignee**" is (i) a Lender, (ii) an Affiliate of a Lender, (iii) an Approved Fund and (iv) any commercial bank, savings and loan association or savings bank or any other entity which is an "accredited investor" (as defined in Regulation D under the Securities Act of 1933, as amended) and which extends credit or buys loans as one of its businesses, including insurance companies, mutual funds, lease financing companies and commercial finance companies, in each case, which either (A) has a rating of BBB or higher from Standard & Poor's Rating Group and a rating of Baa2 or higher from Moody's Investors Service, Inc. at the date that it becomes a Lender or (B) has total assets in excess of Two Billion Five Hundred Million Dollars ($2,500,000,000.00), and in each case of clauses (i) through (iv), which, through its applicable lending office, is capable of lending to Borrower without the imposition of any withholding or similar taxes; provided that notwithstanding the foregoing, "Eligible Assignee" shall not include, unless an Event of Default has occurred and is continuing, (i) Borrower or any of Borrower's Affiliates or Subsidiaries or (ii) a direct competitor of Borrower or a vulture hedge fund, each as determined by Collateral Agent in its reasonable discretion. Notwithstanding the foregoing, (x) in connection with any assignment made by a Lender as a result of 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 and (y) in connection with a Lender's own financing or securitization transactions, the restrictions set forth herein shall not apply and Eligible Assignee shall mean any Person or party providing such financing or formed to undertake such securitization transaction and

any transferee of such Person or party upon the occurrence of a default, event of default or similar occurrence with respect to such financing or securitization transaction; provided that no such sale, transfer, pledge or assignment under this clause (y) shall release such Lender from any of its obligations hereunder or substitute any such Person or party for such Lender as a party hereto until Collateral Agent shall have received and accepted an effective assignment agreement from such Person or party in form satisfactory to Collateral Agent executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such Eligible Assignee as Collateral Agent reasonably shall require.

"**Equipment**" is 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**" is the Employee Retirement Income Security Act of 1974, as amended, and its regulations.

"**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 Loan or Term Loan Commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Loan or Term Loan Commitment or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 2.5, 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 Section 2.5(e) and (d) any U.S. federal withholding Taxes imposed under FATCA.

"**Exigent Circumstance**" means any event or circumstance that, in the reasonable judgment of Collateral Agent, imminently threatens the ability of Collateral 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 or any of its Subsidiaries after reasonable demand to maintain or reinstate adequate casualty insurance coverage, or which, in the judgment of Collateral Agent, could reasonably be expected to result in a material diminution in value of the Collateral.

"**Exit Fee Agreement**" means that certain Exit Fee agreement, entered into on May 16, 2018 by and between Lenders and Borrower.

"**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 and any agreements entered into pursuant to Section 1471(b)(1) of the IRC, any intergovernmental agreement entered into in connection with the implementation of such Sections of the IRC and any fiscal or regulatory legislation, rules or practices adopted pursuant to such intergovernmental agreement.

"**FDA**" means the U.S. Food and Drug Administration or any successor thereto or any other comparable Governmental Authority.

"**Final Fee**" is a payment (in addition to and not a substitution for the regular monthly payments of principal plus accrued interest or any other fee payable hereunder) (a) due on the earliest to occur of (i) the Maturity Date, (ii) the acceleration of the Term Loan, and (iii) the prepayment of the Term Loan pursuant to Section 2.2(c) or (d), and (b) equal to three and ninety-five hundredths of a percent (3.95%) of the aggregate principal amount of the Term Loan advanced hereunder. The Final Fee shall be fully earned on the date so paid, non-refundable for any reason and payable ninety percent (90%) to Solar and ten percent (10%) to Western Alliance Bank.

"**Financing Proposal**" means that certain letter agreement, dated April 19, 2018, by and between Solar, Western Alliance Bank and the Borrower.

"**Foreign Currency**" means lawful money of a country other than the United States.

"Foreign Lender" means (a) if the Borrower is a U.S. Person, a Lender that is not a U.S. Person, and (b) if the Borrower is not a U.S. Person, a Lender that is resident or organized under the laws of a jurisdiction other than that in which the Borrower is resident for Tax purposes.

"**Foreign Subsidiary**" is a Subsidiary that is not an entity organized under the laws of the United States or any state thereof or the District of Columbia.

"**GAAP**" is 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; provided that for purposes of the defined term "Permitted Indebtedness," GAAP shall be GAAP as in effect on the Effective Date.

"**General Intangibles**" are all "general intangibles" as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made under the Code, 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 Approval**" is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

"**Governmental Authority**" is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body (including, without limitation, the FDA), 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**" is any Person providing a Guaranty in favor of Collateral Agent for the benefit of the Secured Parties (including without limitation pursuant to Section 6.10).

"**Guaranty**" is any guarantee of all or any part of the Obligations, as the same may from time to time be amended, restated, modified or otherwise supplemented.

"**Hyperphosphatemia**" means elevated serum phosphorus.

"**Immaterial Subsidiary**" is any Foreign Subsidiary that holds assets worth less than One Hundred Thousand Dollars ($100,000) in book value.

"**Indebtedness**" is (a) indebtedness for borrowed money or the deferred price of 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, and (d) Contingent Obligations.

"**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 any Loan Document and (b) to the extent not otherwise described in (a), Other Taxes.

"**Insolvency Proceeding**" is 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 or proceedings seeking reorganization, arrangement, or other relief.

"**Insolvent**" means not Solvent.

"**Intellectual Property**" means all of Borrower's or any of its Subsidiaries' right, title and interest in and to the following:

(a) its Copyrights, Trademarks and Patents;

(b) any and all trade secrets and trade secret rights, including, without limitation, any rights to unpatented inventions, know-how, operating manuals;

(c) any and all source code;

(d) any and all design rights which may be available to Borrower;

(e) any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and

(f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents.

"**Inventory**" is all "inventory" as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made under the Code, 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 any Person's custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

"**Investment**" is any beneficial ownership interest in any Person (including stock, partnership interest or other securities), and any loan, advance or capital contribution to any Person.

"**IRC**" means the Internal Revenue Code of 1986, as amended, and the Treasury Regulations adopted thereunder.

"**Key Person**" is each of Borrower's (i) Chief Executive Officer, who is Mike Raab as of the Effective Date and (ii) Chief Financial Officer, who is Mark Kaufmann as of the Effective Date.

"**Knowledge**" means to the "best of" Borrower's knowledge, or with a similar qualification, knowledge or awareness means the actual knowledge, after reasonable investigation, of the Responsible Officers.

"**Lender**" is any one of the Lenders.

"**Lenders**" are the Persons identified on Schedule 1.1 hereto and each assignee that becomes a party to this Agreement pursuant to Section 12.1.

"**Lenders' Expenses**" are (a) all reasonable audit fees and expenses, costs, and expenses (including reasonable attorneys' fees and expenses, as well as appraisal fees, fees incurred on account of lien searches, inspection fees, and filing fees) for preparing, amending, negotiating and administering the Loan Documents, and

(b) all fees and expenses (including attorneys' fees and expenses , as well as appraisal fees, fees incurred on account of lien searches, inspection fees, and filing fees) for defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred by Collateral Agent and/or the Lenders in connection with the Loan Documents. The Diligence Deposit (as defined in the Financing Proposal) paid by the Borrower to the Collateral Agent prior to the Effective Date shall be applied to the Lenders' Expenses, subject to the conditions set forth in the Financing Proposal.

"**LIBOR Rate**" means the rate per annum rate published by the Intercontinental Exchange Benchmark Administration Ltd. (the "**Service**") (or on any successor or substitute page of such Service, or any successor to or substitute for such Service) for a term of one (1) month, which determination by Collateral Agent shall be conclusive in the absence of manifest error.

"**Lien**" is a claim, mortgage, deed of trust, 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.

"**Loan Documents**" are, collectively, this Agreement, the Exit Fee Agreement, the Perfection Certificates, the Disclosure Schedules, each Compliance Certificate, each Loan Payment Request Form, any Guarantees, any subordination agreements, any note, or notes or guaranties executed by Borrower or any other Person, any agreements creating or perfecting rights in the Collateral (including all insurance certificates and endorsements, landlord consents and bailee consents) and any other present or future agreement entered into by Borrower, any Guarantor or any other Person for the benefit of the Lenders and Collateral Agent, as applicable, in connection with this Agreement; all as amended, restated, or otherwise modified.

"**Loan Payment Request Form**" is that certain form attached hereto as Exhibit C.

"**Material Adverse Change**" is (a) a material adverse change in the business, operations or condition (financial or otherwise) of Borrower and its Subsidiaries, when taken as a whole; or (b) a material impairment of (i) the prospect of repayment of any portion of the Obligations, (ii) the legality, validity or enforceability of any Loan Document, (iii) the rights and remedies of Collateral Agent or Lenders under any Loan Document except as the result of the action or inaction of the Collateral Agent or Lenders or (iv) the validity, perfection or priority of any Lien in favor of Collateral Agent for the benefit of the Secured Parties on any of the Collateral except as the result of the action or inaction of the Collateral Agent or Lenders.

"**Material Agreement**" is (i) as long as Borrower is a publicly reporting entity under the Securities Exchange Act of 1934, any license, agreement or other contractual arrangement required to be disclosed (including amendments thereto) under regulations promulgated under the Securities Act of 1933 or Securities Exchange Act of 1934, as each may be amended, or (ii) if Borrower is not such a publicly reporting entity, any license, agreement or other contractual arrangement whereby Borrower or any of its Subsidiaries is reasonably likely to be required to transfer, either in-kind or in cash, prior to the Maturity Date, assets or property valued (book or market) at more than One Million Dollars ($1,000,000) per year.

"**Maturity Date**" is November 1, 2022 .

"**Obligations**" are all of Borrower's obligations to pay when due any debts, principal, interest, Lenders' Expenses, the Prepayment Premium, the Final Fee, and any other amounts Borrower owes the Collateral Agent or the Lenders now or later, in connection with, related to, following, or arising from, out of or under, this Agreement or, the other Loan Documents (other than the Exit Fee Agreement and any fees payable thereunder), and including interest accruing after Insolvency Proceedings begin (whether or not allowed) and debts, liabilities, or obligations of Borrower assigned to the Lenders and/or Collateral Agent in connection with this Agreement and the other Loan Documents (other than the Exit Fee Agreement), and the performance of Borrower's duties under the Loan Documents (other than the Exit Fee Agreement and any fees payable thereunder).

"**OFAC**" is the U.S. Department of Treasury Office of Foreign Assets Control.

"**OFAC Lists**" are, 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.

"**Operating Documents**" are, for any Person, such Person's formation documents, as certified by the Secretary of State (or equivalent agency) of such Person's jurisdiction of organization on a date that is no earlier than thirty (30) days prior to the Effective 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.

"**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 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 Loan Document, or sold or assigned an interest in any Loan or Loan Document).

"**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, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment.

"**Patents**" means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

"**Payment Date**" is the first (1st) calendar day of each calendar month, commencing on June 1, 2018.

"**Permitted Acquisition**" means any consensual transaction or series of related transactions for the direct or indirect (a) acquisition of all or substantially all of the property of any Person, or of any business or division of any Person, (b) acquisition of greater than ninety percent (90.0%) of the equity interests of any Person, and otherwise causing such person to become a Subsidiary of such Person, (c) merger or consolidation or any other combination with any Person or (d) the acquisition of any Intellectual Property and related ancillary rights or assets of any person, if each of the following conditions is met:

(i) no Default or Event of Default exists immediately prior thereto, and no Default or Event of Default would immediately result therefrom;

(ii) the Person, business or asset to be acquired (other than non-core assets, if any, with respect to such acquisition) shall be, or shall be engaged in, a business of the type that the Borrower is then permitted to be engaged in and the property acquired in connection with any such transaction shall be made subject to the Lien of the Loan Documents to the extent required in accordance with Section 6.10 and shall be free and clear of any Liens (other than Permitted Liens);

(iii) the Borrower shall be, after taking into account the payment of the Acquisition Consideration, in compliance with Section 7.13;

(iv) the Board of Directors or other governing body of the Person to be acquired shall not have indicated its opposition to the consummation of such acquisition (which opposition has not been publicly withdrawn);

(v) the Acquisition Consideration in respect of such acquisition is funded with cash or Permitted Investments of the Borrower or the proceeds of a cash equity contribution to any Borrower;

(vi) the Acquisition Consideration shall not exceed Five Million Dollars ($5,000,000) in the aggregate for all such acquisitions, unless, in each case, funded with the proceeds of an equity contribution or convertible Indebtedness permitted hereunder received by the Borrower;

(vii) on a consolidated basis, the Borrower's and its Subsidiaries' rate of usage of cash and Cash Equivalents shall not increase as a result of such transaction by more than five percent (5%) over the forecasted rate of usage of cash and Cash Equivalents approved by the Lenders as of the Effective Date; provided that the amount of such increase shall be determined net of any proceeds of equity contributions over the succeeding twenty-four (24) months raised in connection with such acquisition; and

(viii) on or prior to the proposed date of consummation of such transaction, the Borrower shall have delivered to the Collateral Agent and the Lenders a certificate of a Responsible Officer of the Borrower certifying that such transaction complies with this definition.

"**Permitted Indebtedness**" is:

(a) Borrower's Indebtedness to the Lenders and Collateral Agent under this Agreement and the other Loan Documents;

(b) Indebtedness existing on the Effective Date and disclosed on the Disclosure Schedules;

(c) Subordinated Debt;

(d) unsecured Indebtedness to trade creditors incurred in the ordinary course of business;

(e) unsecured Indebtedness in connection with credit cards incurred in the ordinary course of business;

(f) Indebtedness consisting of capitalized lease obligations and purchase money Indebtedness, in each case incurred by Borrower or any of its Subsidiaries to finance the acquisition, repair, improvement or construction of fixed or capital assets of such person, provided that (i) the aggregate outstanding principal amount of all such Indebtedness does not exceed Seven Hundred Fifty Thousand Dollars ($750,000) at any time and (ii) the principal amount of such Indebtedness does not exceed the lower of the cost or fair market value of the property so acquired or built or of such repairs or improvements financed with such Indebtedness (each measured at the time of such acquisition, repair, improvement or construction is made);

(g) Indebtedness consisting of the obligation to pay rent when due under real property leases entered into in the ordinary course of Borrower's business;

(h) other unsecured Indebtedness at any time not to exceed Three Hundred Seventy Five Thousand Dollars ($375,000) in the aggregate;

(i) reimbursement obligations in respect of letters of credit in the aggregate amount not to exceed (1) One Million Five Hundred Thousand Dollars ($1,500,000) at any time for any letters of credit with a maturity date of six (6) months or less, and (2) Five Hundred Thousand Dollars ($500,000) at any time for any letters of credit with a maturity date of six (6) months or more, in each case as incurred in the ordinary course of business;

(j) Indebtedness incurred as a result of endorsing negotiable instruments received in the ordinary course of Borrower's business;

(k) Convertible Indebtedness in the aggregate amount not to exceed Two Hundred Million Dollars ($200,000,000) at any time;

(l) Hedges and similar transactions with respect to currency risk entered into in the ordinary course of business and not for speculative purposes;

(m) Surety bonds and similar Indebtedness entered into in the ordinary course of business and in an amount not exceeding Two Hundred Fifty Thousand Dollars ($250,000) outstanding at any time; and

(n) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (h) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose materially more burdensome terms upon Borrower, or its Subsidiary, as the case may be.

"**Permitted Investments**" are:

(a) Investments disclosed on the Disclosure Schedules and existing on the Effective Date;

(b) (i) Investments consisting of cash and Cash Equivalents, and (ii) any Investments 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 Collateral Agent;

(c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower;

(d) Investments consisting of Deposit Accounts in which Collateral Agent has a perfected Lien (subject to the terms of this Agreement) for the ratable benefit of the Secured Parties;

(e) Investments in connection with Permitted Indebtedness, Permitted Liens and with Transfers permitted by Section 7.1;

(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; not to exceed Two Hundred Thousand Dollars ($200,000) in the aggregate for (i) and (ii) in any fiscal year;

(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 notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (h) shall not apply to Investments of Borrower in any Subsidiary;

(i) Investments in Subsidiaries that are Guarantors;

(j) Investments in Subsidiaries that are not Guarantors, the aggregate of which shall not to exceed One Hundred Thousand Dollars ($100,000) per fiscal year;

(k) Permitted Acquisitions; and

(l) Investments in joint ventures, corporate collaborations, or strategic alliances in the ordinary course of Borrower's business consisting of the licensing of technology (in compliance with the definition of "Permitted Licenses"), the development of technology or the providing of technical support and provided that the aggregate amount for cash consideration for all such Investments cannot exceed Two Hundred Fifty Thousand Dollars ($250,000) per year and Seven Hundred Fifty Thousand Dollars ($750,000) in the aggregate.

"**Permitted Licenses**" are (A) licenses of over-the-counter software that is commercially available to the public, (B) non-exclusive licenses for the use of the Intellectual Property of Borrower or any of its Subsidiaries entered into in the ordinary course of business, provided, that, with respect to each such license described in clause (B), the license constitutes an arms-length transaction, the terms of which, on their face, do not provide for a sale or assignment of any Intellectual Property and do not restrict the ability of Borrower or any of its Subsidiaries, as applicable, to pledge, grant a security interest in or lien on, or assign or otherwise Transfer any Intellectual Property, (C) exclusive licenses for the use of the Intellectual Property of Borrower or any of its Subsidiaries entered into in the ordinary course of business, provided, that, with respect to each such license described in this clause (C), the license (i) constitutes an arms-length transaction, the terms of which, on their face, do not provide for a sale or assignment of any Intellectual Property and do not restrict the ability of Borrower or any of its Subsidiaries, as applicable, to pledge, grant a security interest in or lien on, or assign or otherwise Transfer any Intellectual Property, (ii) is limited in territory with respect to a specific geographic country or region (i.e. Japan, Germany, northern China) outside of the United States, and (iii) Borrower has used commercially reasonable efforts to obtain the consent and acknowledgment of the counterparty to such license for the collateral assignment of such license to the Collateral Agent for the benefit of the Lenders, (D) exclusive licenses for the use of the Intellectual Property of Borrower or any of its Subsidiaries (excluding such Intellectual Property related to treatment of Hyperphosphatemia) in the United States entered into in the ordinary course of business, provided, that, with respect to each such license described in this clause (D), the license (i) constitutes an arms-length transaction, the terms of which, on their face, do not provide for a sale or assignment of any Intellectual Property and do not restrict the ability of Borrower or any of its Subsidiaries, as applicable, to pledge, grant a security interest in or lien on, or assign or otherwise Transfer any Intellectual Property, (ii) Borrower has used commercially reasonable efforts to obtain the consent and acknowledgment of the counterparty to such license for the collateral assignment of such license to the Collateral Agent for the benefit of the Lenders, (iii) either (x) the Borrower shall have obtained the prior written consent of the Required Lenders to enter into such license or (y) the Borrower maintains cash and Cash Equivalents in an amount equal to or greater than Fifty Million Dollars ($50,000,000) until the Borrower achieves (subject to evidence reasonably acceptable to the Collateral Agent) its Phase 3 Endpoint, (E) exclusive licenses for the use in the United States of the Intellectual Property of Borrower or any of its Subsidiaries related to treatment of Hyperphosphatemia entered into in the ordinary course of business, provided, that, with respect to each such license described in this clause (E), the Borrower shall have obtained the prior written consent of the Required Lenders to enter into such license, and (F) licenses in connection with the Borrower's TGR5 and FXR programs.

"**Permitted Liens**" are:

(a) Liens existing on the Effective Date and disclosed on the Disclosure Schedules or arising under this Agreement and the other Loan Documents;

(b) Liens for taxes, fees, assessments or other government charges or levies, either (i) not due and payable or (ii) being contested in good faith and for which Borrower maintains adequate reserves on its Books in accordance with GAAP, provided that no notice of any such Lien has been filed or recorded in favor of the United States Treasury in accordance with the applicable provisions of the IRC;

(c) Liens securing Indebtedness permitted under clause (f) of the definition of "Permitted Indebtedness," provided that (i) such liens exist prior to the acquisition of, or attach substantially simultaneous with, or within twenty (20) days after the, acquisition, lease, repair, improvement or construction of, such property financed or leased by such Indebtedness and (ii) such liens do not extend to any property of Borrower other than the property (and proceeds thereof) acquired, leased or built, or the improvements or repairs, financed by such Indebtedness;

(d) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed Two Hundred Fifty Thousand Dollars ($250,000), and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(e) 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);

(f) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) through (c), 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;

(g) leases or subleases of real property granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), if the leases, subleases, licenses and sublicenses do not prohibit granting Collateral Agent or any Lender a security interest therein;

(h) banker's liens, rights of setoff and Liens in favor of financial institutions incurred in the ordinary course of business arising in connection with Borrower's deposit accounts or securities accounts held at such institutions solely to secure payment of fees and similar costs and expenses and provided such accounts are maintained in compliance with Section 6.6(a) hereof;

(i) Liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default under Section 8.4 or 8.7;

(j) Liens on cash that stand as security for letter of credit reimbursement obligations and cash management obligations in the aggregate amount not to exceed Five Hundred Thousand Dollars ($500,000); and

(k) Permitted Licenses.

"**Person**" is 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.

"**Phase 3 Endpoint**" means the primary endpoint in the Phase 3 study of tenapanor for the treatment of Hyperphosphatemia in End-Stage Renal Disease Patients on Dialysis (ESRD-HD), namely the change in serum phosphorus levels during placebo controlled randomized withdrawal period in the responder population.

"**Prepayment Premium**" is, with respect to the Term Loan subject to prepayment prior to the Maturity Date, whether by mandatory or voluntary prepayment, acceleration or otherwise, an additional fee payable to the Lenders in amount equal to:

(i) for a prepayment made on or after the Effective Date through and including the first anniversary of the Effective Date, three percent (3.00%) of the principal amount of the Term Loan prepaid;

(ii) for a prepayment made after the date which is after the first anniversary of the Effective Date through and including the second anniversary of the Effective Date, two percent (2.00%) of the principal amount of the Term Loan prepaid; and

(iii) for a prepayment made after the date which is after the second anniversary of the Effective Date and prior to the Maturity Date, one percent (1.00%) of the principal amount of the Term Loan prepaid.

"**Property**" means any interest in any kind of property or asset, whether real, personal or mixed, and whether tangible or intangible.

"**Pro Rata Share**" is, as of any date of determination, with respect to each Lender, a percentage (expressed as a decimal, rounded to the ninth decimal place) determined by dividing the outstanding principal amount of Term Loans held by such Lender by the aggregate outstanding principal amount of all Term Loans.

"**Recipient**" means the Collateral Agent or any Lender, as applicable.

"**Registered Organization**" is any "registered organization" as defined in the Code with such additions to such term as may hereafter be made under the Code.

"**Registration**" means any registration, authorization, approval, license, permit, clearance, certificate, and exemption issued or allowed by the FDA (including, without limitation, new drug applications, abbreviated new drug applications, biologics license applications, investigational new drug applications, over-the-counter drug monograph, device pre-market approval applications, device pre-market notifications, investigational device exemptions, product recertifications, manufacturing approvals, registrations and authorizations, CE Marks, pricing and reimbursement approvals, labeling approvals or their foreign equivalent, controlled substance registrations, and wholesale distributor permits).

"**Regulatory Action**" means an administrative or regulatory enforcement action, proceeding, investigation or inspection, FDA Form 483 notice of inspectional observation, warning letter, untitled letter, other notice of violation letter, recall, seizure, Section 305 notice or other similar written communication, or consent decree, issued by the FDA.

"**Related Persons**" means, with respect to any Person, each Affiliate of such Person and each director, officer, employee, agent, trustee, representative, attorney, accountant and each insurance, environmental, legal, financial and other advisor and other consultants and agents of or to such Person or any of its Affiliates.

"**Required Lenders**" means (i) for so long as all of the Persons that are Lenders on the Effective Date (each an "**Original Lender**") have not assigned or transferred any of their interests in their Term Loan other than to an Affiliate of such Lender, Lenders holding one hundred percent (100%) of the aggregate outstanding principal balance of the Term Loan, or (ii) at any time from and after any Original Lender has assigned or transferred any interest in its Term Loan, Lenders holding at least sixty six and two thirds percent (66.67%) of the aggregate outstanding principal balance of the Term Loan and, in respect of this clause (ii), (A) each Original Lender that has not assigned or transferred any portion of its Term Loan, (B) each assignee or transferee of an Original Lender's interest in the Term Loan, but only to the extent that such assignee or transferee is an Affiliate or Approved Fund of such Original Lender, and (C) any Person providing financing to any Person described in clauses (A) and (B) above; provided, however, that this clause (C) shall only apply upon the occurrence of a default, event of default or similar occurrence with respect to such financing.

"**Requirement of Law**" is as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

"**Responsible Officer**" is any of the President, Chief Executive Officer, or Chief Financial Officer of Borrower acting alone.

"**Secured Parties**" means the Collateral Agent and the Lenders.

"**Securities Account**" is any "securities account" as defined in the Code with such additions to such term as may hereafter be made under the Code.

"**Solvent**" means, with respect to any Person, that (a) the fair salable value of such Person's consolidated assets (including goodwill minus disposition costs) exceeds the fair value of such Person's liabilities, (b) such Person is not left with unreasonably small capital after giving effect to the transactions contemplated by this

Agreement and the other Loan Documents, and (c) such Person is able to pay its debts (including trade debts) as they mature in the ordinary course.

"**Subordinated Debt**" is indebtedness incurred by Borrower or any of its Subsidiaries subordinated to all Indebtedness of Borrower and/or its Subsidiaries to the Lenders (pursuant to a subordination, intercreditor, or other similar agreement in form and substance satisfactory to Collateral Agent and the Required Lenders entered into between Collateral Agent, Borrower, and/or any of its Subsidiaries, and the other creditor).

"**Subsidiary**" is, with respect to any Person, any Person of which more than fifty percent (50%) 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 or through one or more intermediaries.

"**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.

"**Tenapanor**" is an inhibitor of NHE3 with the chemical name (S)-N,N'-(10,17-dioxo-3,6,21,24-tetraoxa-9,11,16,18-tetraazahexacosane-1,26-diyl)bis(3-((S)-6,8-dichloro-2-methyl-1,2,3,4-tetrahydroisoquinolin-4-yl)benzenesulfonamide) dihydrochloride.

"**Term Loan Commitment**" is, for any Lender, the obligation of such Lender to make a Term Loan, up to the principal amount shown on Schedule 1.1**.**

"**Term Loan Commitments**" means the aggregate amount of such commitments of all Lenders.

"**Trademarks**" means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks.

"**Withholding Agent**" means the Borrower and the Collateral Agent.

2. LOANS AND TERMS OF PAYMENT

2.1 Promise to Pay. Borrower hereby unconditionally promises to pay each Lender, the outstanding principal amount of the Term Loan advanced to Borrower by such Lender and accrued and unpaid interest thereon and any other amounts due hereunder as and when due in accordance with this Agreement.

2.2 Term Loans.

(a) Availability. Subject to the terms and conditions of this Agreement, the Lenders agree, severally and not jointly, to make term loans to Borrower on the Effective Date in an aggregate principal amount of Fifty Million Dollars ($50,000,000) according to each Lender's Term Loan Commitment as set forth on Schedule 1.1 hereto (such term loans are hereinafter referred to singly as a "**Term Loan**" and collectively as the "**Term Loans**"). After repayment, no Term Loan may be re-borrowed.

(b) Repayment.

(i) Interest-Only Payments. Borrower shall make monthly payments of interest only commencing on the first Payment Date following the Effective Date, and on each Payment Date thereafter prior to the Amortization Date.

(ii) Commencing on the Amortization Date, and continuing on the Payment Date of each month thereafter, Borrower shall (i) make monthly payments of interest to the respective Lender to which such payments are owed in accordance with their respective Pro Rata Shares, as calculated by Collateral Agent (which calculations shall be deemed correct absent manifest error) based upon the effective rate of interest applicable to the

Term Loan, as determined in Section 2.3(a) plus (ii) make consecutive equal monthly payments of principal to the respective Lender to which such payments are owed in accordance with their respective Pro Rata Shares, as calculated by Collateral Agent (which calculations shall be deemed correct absent manifest error) based upon: (A) the respective principal amounts of such Lender's Term Loan outstanding, and (B) a repayment schedule equal to (a) if the Amortization Date shall be determined by reference to clause (a) of the definition thereof, twenty-four (24) months; and (b) if the Amortization Date shall be determined by reference to clause (b) of the definition thereof, thirty (30) months. All unpaid principal and accrued and unpaid interest with respect to each such Term Loan is due and payable in full on the Maturity Date. The Term Loan may only be prepaid in accordance with Sections 2.2(c) and 2.2(d).

(c) Mandatory Prepayments. If the Term Loan is accelerated following the occurrence of an Event of Default, Borrower shall immediately pay to Lenders, payable to each Lender in accordance with its respective Pro Rata Share, an amount equal to the sum of: (i) all outstanding principal of the Term Loan plus accrued and unpaid interest thereon through the prepayment date, (ii) the applicable Final Fee, (iii) the Prepayment Premium plus (iv) all other Obligations that are due and payable, including Lenders' Expenses and interest at the Default Rate (if any) with respect to any past due amounts. Notwithstanding (but without duplication with) the foregoing, on the Maturity Date, if the Final Fee had not previously been paid in full in connection with the prepayment of the Term Loan in full, Borrower shall pay to the respective Lender to which such payments are owed, the Final Fee in respect of the Term Loan.

(d) Permitted Prepayment of Term Loan. Borrower shall have the option to prepay all, but not less than all, of the outstanding principal balance of the Term Loan advanced by the Lenders under this Agreement, provided Borrower (i) provides written notice to Collateral Agent of its election to prepay the Term Loan at least five (5) Business Days prior to such prepayment, and (ii) pays to the Lenders on the date of such prepayment, payable to the respective Lender to which such payments are owed in accordance with their respective Pro Rata Shares, an amount equal to the sum of (A) the outstanding principal of the Term Loan plus accrued and unpaid interest thereon through the prepayment date, (B) the Final Fee, (C) the Prepayment Premium, plus (D) all other Obligations that are due and payable on such prepayment date, including any Lenders' Expenses and interest at the Default Rate (if any) with respect to any past due amounts.

2.3 Payment of Interest on the Term Loan.

(a) Interest Rate. Subject to Section 2.3(b), the principal amount outstanding under the Term Loan shall accrue interest at a floating per annum rate equal to the LIBOR Rate in effect from time to time *plus* 7.45%, which aggregate interest rate shall be determined by Collateral Agent in accordance with the definition of "LIBOR Rate" on the third Business Day prior to the Effective Date and on the date occurring on the first Business Day of the month prior to each Payment Date occurring thereafter, which interest shall be payable monthly in arrears in accordance with Sections 2.2(b) and 2.3(e). Except as set forth in Section 2.2(b), such interest shall accrue on the Term Loan commencing on, and including, the Effective Date, and shall accrue on the principal amount outstanding under such Term Loan through and including the day on which such Term Loan is paid in full (or any payment is made hereunder).

(b) Default Rate. Immediately upon the occurrence and during the continuance of an Event of Default, all Obligations shall accrue interest at a fixed per annum rate equal to the rate that is otherwise applicable thereto plus four percentage points (4%) (the "**Default Rate**"). Payment or acceptance of the increased interest rate provided in this Section 2.3(b) 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 Collateral Agent.

(c) 360-Day Year. Interest shall be computed on the basis of a three hundred sixty (360) day year for the actual number of days elapsed.

(d) Debit of Accounts. Collateral Agent and each Lender (if no more than two Lenders) may debit (or ACH) any deposit accounts, maintained by Borrower or any of its Subsidiaries for principal and interest payments or any other amounts Borrower owes the Lenders under the Loan Documents when due. Any such debits (or ACH activity) shall not constitute a set-off.

(e) Payments. Except as otherwise expressly provided herein, all payments by Borrower under the Loan Documents shall be made to the respective Lender to which such payments are owed, at such Person's office in immediately available funds on the date specified herein. Unless otherwise provided, interest is payable monthly on the Payment Date of each month. Payments of principal and/or interest received after 2:00 p.m. Eastern 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 hereunder or under any other Loan Document, including payments of principal and interest, and all fees, expenses, indemnities and reimbursements, shall be made without set-off, recoupment or counterclaim, in lawful money of the United States and in immediately available funds.

2.4 Fees. Borrower shall pay to Collateral Agent:

(a) Closing Fee. A fully-earned, non-refundable closing fee in the amount of Five Hundred Thousand Dollars ($500,000) (the "**Closing Fee**"), which shall be due on the Effective Date, to be shared between the Lenders ninety percent (90%) to Solar and ten percent (10%) to Western Alliance Bank;

(b) Final Fee. The Final Fee, when due hereunder, ninety percent (90%) to Solar and ten percent (10%) to Western Alliance Bank;

(c) Prepayment Premium. The Prepayment Premium, when due hereunder, to be shared between the Lenders in accordance with their respective Pro Rata Shares; and

(d) Lenders' Expenses. All Lenders' Expenses (including reasonable attorneys' fees and expenses for documentation and negotiation of this Agreement) incurred through and after the Effective Date, when due.

2.5 Taxes.

(a) Payments Free of Taxes. Any and all payments by or on account of any obligation of the Borrower under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by applicable law. 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 the 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) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

(b) Payment of Other Taxes by the Borrower. The Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable law, or at the option of the Lender timely reimburse it for the payment of, any Other Taxes.

(c) Indemnification by the Borrower. The Borrower shall indemnify each Recipient, within 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) 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 the Borrower by a Lender (with a copy to the Collateral Agent), or by the Collateral Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(d) Evidence of Payments. As soon as practicable after any payment of Taxes by the Borrower to a Governmental Authority pursuant to this Section 2.5, the Borrower shall deliver to the Collateral

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 the Collateral Agent.

(e) Status of Lenders.

(i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to the Borrower, at the time or times reasonably requested by the Borrower, such properly completed and executed documentation reasonably requested by the Borrower 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 the Borrower, shall deliver such other documentation prescribed by applicable law or reasonably requested by the Borrower as will enable the Borrower 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 sentences, the completion, execution and submission of such documentation 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.

(ii) Without limiting the generality of the foregoing, in the event that the Borrower is a U.S. Borrower,

(1) any Lender that is a U.S. Person shall deliver to the Borrower 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 the Borrower), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(2) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower (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 the Borrower), whichever of the following is applicable:

a. 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 any Loan Document, executed copies of IRS Form W-8BEN or W-8BEN-E 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 any Loan Document, IRS Form W-8BEN or W-8BEN-E 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.

b. executed copies of IRS Form W-8ECI;

c. in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the IRC, (x) a certificate substantially in the form of Exhibit G-1 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 the Borrower within the meaning of Section 881(c)(3)(B) of the IRC, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the IRC (a "U.S. Tax Compliance Certificate") and (y) executed copies of IRS Form W-8BEN or W-8BEN-E; or

d. 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, W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit G-2 or Exhibit G-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit G-4 on behalf of each such direct and indirect partner;

(3) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower (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 the Borrower), 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 supplementary documentation as may be prescribed by applicable law to permit the Borrower to determine the withholding or deduction required to be made; and

(4) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if 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), such Lender shall deliver to the Borrower at the time or times prescribed by law and at such time or times reasonably requested by the Borrower such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the IRC) and such additional documentation reasonably requested by the Borrower as may be necessary for the Borrower to comply with their obligations under FATCA and to determine that such Lender has complied with 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.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower in writing of its legal inability to do so.

(f) Survival**.** Each party's obligations under this Section 2.5 shall survive the resignation or replacement of the Collateral Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Term Loan Commitments and the repayment, satisfaction or discharge of all obligations under any Loan Document.

2.6 Secured Promissory Notes. If requested by a Lender, the Term Loans shall be evidenced by a Secured Promissory Note or Notes in the form attached as Exhibit F hereto (each a "**Secured Promissory Note**"), and shall be repayable as set forth in this Agreement. Borrower irrevocably authorizes each Lender to make or cause to be made, on or about the Effective Date of the Term Loan or at the time of receipt of any payment of principal on such Lender's Secured Promissory Note, an appropriate notation on such Lender's Secured Promissory Note Record reflecting the making of such Term Loan or (as the case may be) the receipt of such payment. The outstanding amount of the Term Loan set forth on such Lender's Secured Promissory Note Record shall be, absent manifest error, prima facie evidence of the principal amount thereof owing and unpaid to such Lender, but the failure to record, or any error in so recording, any such amount on such Lender's Secured Promissory Note Record shall not limit or otherwise affect the obligations of Borrower under any Secured Promissory Note or any other Loan Document to make payments of principal of or interest on any Secured Promissory Note when due. 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 LOANS

3.1 Conditions Precedent to the Term Loan. Each Lender's obligation to make a Term Loan is subject to the condition precedent that Collateral Agent and each Lender shall consent to or shall have received, in form and substance satisfactory to Collateral Agent and each Lender, such documents, and completion of such other matters, as Collateral Agent and each Lender may reasonably deem necessary or appropriate, including, without limitation:

(a) original Loan Documents, each duly executed by Borrower and each Subsidiary, as applicable;

(b) a completed Perfection Certificate and Disclosure Schedules for Borrower and each of its Subsidiaries;

(c) duly executed original Control Agreements with respect to Collateral Accounts maintained by Borrower or any of its Subsidiaries which in the aggregate contain at least than Fifty Five Million Dollars ($55,000,000) on the Effective Date;

(d) the Operating Documents and good standing certificates of Borrower and its Subsidiaries certified by the Secretary of State (or equivalent agency) of Borrower's and such Subsidiaries' jurisdiction of organization or formation and each jurisdiction in which Borrower and each Subsidiary is qualified to conduct business, each as of a date no earlier than thirty (30) days prior to the Effective Date**;**

(e) a certificate of Borrower in substantially the form of Exhibit E hereto executed by the Secretary of Borrower with appropriate insertions and attachments, including with respect to (i) the Operating Documents of such Person (which Certificate of Incorporation or Certificate of Formation of such Person shall be certified by the Secretary of State of the State of Delaware) and (ii) the resolutions adopted by such Person's board of directors or other governing body for the purpose of approving the transactions contemplated by the Loan Documents;

(f) certified copies, dated as of date no earlier than thirty (30) days prior to the Effective Date, of financing statement searches, as Collateral 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 Term Loan, will be terminated or released;

(g) a duly executed legal opinion of counsel to Borrower dated the Effective Date;

(h) evidence satisfactory to Collateral Agent and the Lenders that the insurance policies required by Section 6.5 hereof are in full force and effect, together with appropriate evidence showing loss payable and/or additional insured clauses or endorsements in favor of Collateral Agent, for the ratable benefit of the Secured Parties;

(i) the duly executed Exit Fee Agreement;

(j) payment of the Closing Fee and Lenders' Expenses then due as specified in Section 2.4 hereof;

(k) a landlord's consent duly executed in favor of Collateral Agent in respect of the Borrower's leased location located at 34175 Ardenwood Blvd, Fremont, CA 94555; and

(l) bailee waivers duly executed in favor of Collateral Agent in respect of each of the following third party bailee locations:

(i) Patheon, located at 2110 E Galbraith Rd, Cincinnati, OH 45237;

(ii) Sherpa Clinical Packaging, located at 6166 Nancy Ridge Dr, San Diego, CA 92121; and

(iii) Bellwyck Clinical Services Bellwyck Packaging Solutions Inc, located at 8946 Global Way West Chester Township, OH 45069.

3.2 Conditions Precedent to the Term Loans. The obligation of each Lender to extend the Term Loan is subject to the following additional conditions precedent:

(a) receipt by Collateral Agent of an executed Loan Payment Request Form in the form of Exhibit C attached hereto;

(b) the representations and warranties in Section 5 hereof shall be true, accurate and complete in all material respects on the Effective Date; 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, and no Event of Default shall have occurred and be continuing or result from the funding of such Term Loan;

(c) in such Lender's reasonable discretion, there has not been any Material Adverse Change;

(d) No Event of Default or Default, shall exist; and

(e) payment of the fees and Lenders' Expenses then due as specified in Section 2.4 hereof.

3.3 Covenant to Deliver. Borrower agrees to deliver to Collateral Agent and the Lenders each item required to be delivered to Collateral Agent under this Agreement as a condition precedent to the funding of the Term Loan. Borrower expressly agrees that a Term Loan made prior to the receipt by Collateral Agent or any Lender of any such item shall not constitute a waiver by Collateral Agent or any Lender of Borrower's obligation to deliver such item, and any such Term Loan in the absence of a required item shall be made in each Lender's sole discretion.

3.4 Procedures for Borrowing. Subject to the prior satisfaction of all other applicable conditions to the making of a Term Loan set forth in this Agreement, to obtain a Term Loan (other than the Term Loan funded on the Effective Date), Borrower shall notify the Lenders (which notice shall be irrevocable) by electronic mail, facsimile, or telephone by 2:00 p.m. New York City time three (3) Business Days prior to the date the Term Loan is to be made. Together with any such electronic, facsimile or telephonic notification, Borrower shall deliver to Collateral Agent by electronic mail or facsimile a completed Loan Payment Request Form executed by a Responsible Officer or his or her designee. The Collateral Agent may rely on any telephone notice given by a person whom Collateral Agent reasonably believes is a Responsible Officer or designee. On the Effective Date, each Lender shall credit and/or transfer (as applicable) to accounts designated by Borrower and agreed to by the Lenders, in an amount equal to its Term Loan Commitment in respect of such Term Loan.

4. CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Borrower hereby grants Collateral Agent, for the ratable benefit of the Secured Parties, to secure the payment and performance in full of all of the Obligations in full and, until payment in cash of all Obligations (other than (a) inchoate indemnity obligations and (b) other obligations that survive termination of this Agreement, in each case, for which no claim has been made) and the Exit Fee (as defined in the Exit Fee Agreement), a continuing security interest in, and pledges to Collateral Agent, for the ratable benefit of the Secured Parties, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products and supporting obligations (as defined in the Code) in respect thereof. If Borrower shall acquire any commercial tort claim (as defined in the Code) in an amount greater than Fifty Thousand Dollars ($50,000), Borrower shall grant to Collateral Agent, for the ratable benefit of the Secured Parties, a security interest therein and in the proceeds and products and supporting obligations (as defined in the Code) thereof, all upon the terms of this Agreement, with such writing to be in form and substance reasonably satisfactory to Collateral Agent.

If this Agreement is terminated, Collateral Agent's Lien in the Collateral shall continue until the Obligations (other than (a) inchoate indemnity obligations and (b) other obligations that survive termination of this Agreement, in each case, for which no claim has been made) are repaid in full in cash. Upon payment in full in cash of the Obligations (other than (a) inchoate indemnity obligations and (b) other obligations that survive termination of this Agreement, in each case, for which no claim has been made) and at such time as the Lenders' obligation to extend Term Loans has terminated, Collateral Agent shall, at the sole cost and expense of Borrower, release its Liens in the Collateral (and enter into any documentation reasonably requested by Borrower) and all rights therein shall revert to Borrower.

4.2 Authorization to File Financing Statements. Borrower hereby authorizes Collateral Agent to file financing statements or take any other action required to perfect Collateral Agent's security interests in the Collateral (held for the ratable benefit of the Secured Parties), without notice to Borrower, with all appropriate

jurisdictions to perfect or protect Collateral Agent's interest or rights under the Loan Documents; provided, however, that Borrower shall have no obligation to deliver to Collateral Agent share certificates with respect to its security interests in any Immaterial Subsidiary unless and until the first to occur of (a) an Event of Default or (b) the value of such Immaterial Subsidiary, on a book value, equals or exceeds One Hundred Thousand Dollars ($100,000).

5. REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants to Collateral Agent and the Lenders as follows:

5.1 Due Organization, Authorization: Power and Authority. Borrower and each of its Subsidiaries is duly existing and in good standing as a Registered Organization in its jurisdictions of organization or formation and Borrower and each of its Subsidiaries is qualified and licensed to do business and is in good standing in any jurisdiction in which the conduct of its businesses or its ownership of property requires that it be so qualified except where the failure to do so could not reasonably be expected to have a Material Adverse Change. In connection with this Agreement, Borrower and each of its Subsidiaries has delivered to Collateral Agent a completed perfection certificate and any updates or supplements thereto on, before or after the Effective Date (each a "**Perfection Certificate**" and collectively, the "**Perfection Certificates**"). Borrower represents and warrants that all the information set forth on the Perfection Certificates pertaining to Borrower and each of its Subsidiaries is accurate and complete (other than clerical mistakes in addresses and other contact information).

The execution, delivery and performance by Borrower and each of its Subsidiaries of the Loan Documents to which it is, or they are, a party have been duly authorized, and do not (i) conflict with any of Borrower's or such Subsidiaries' organizational documents, including its respective Operating Documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law applicable thereto, (iii) contravene, conflict or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which Borrower or such Subsidiary, or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental Approvals which have already been obtained and are in full force and effect) or are being obtained pursuant to Section 6.1(b), or (v) constitute an event of default under any material agreement by which Borrower, any of its Subsidiaries or any of their respective properties, is bound. Neither Borrower nor any of its Subsidiaries is in default under any agreement to which it is a party or by which it or any of its assets is bound in which such default could reasonably be expected to have a Material Adverse Change.

5.2 Collateral.

(a) Borrower and each its Subsidiaries have good title to, have rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien under the Loan Documents, free and clear of any and all Liens except Permitted Liens, and neither Borrower nor any of its Subsidiaries have any Deposit Accounts, Securities Accounts, Commodity Accounts or other investment accounts other than the Collateral Accounts or the other investment accounts, if any, described in the Perfection Certificates delivered to Collateral Agent in connection herewith in respect of which Borrower or such Subsidiary has given Collateral Agent notice and taken such actions as are necessary to give Collateral Agent a perfected security interest therein as required under this Agreement. The Accounts are bona fide, existing obligations of the Account Debtors.

(b) 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, under applicable law, have priority over Collateral Agent's Lien.

(c) On the Effective Date, and except as disclosed on the Disclosure Schedules (i) the Collateral is not in the possession of any third party bailee, and (ii) no such third party bailee possesses components of the Collateral in excess of Five Hundred Thousand Dollars ($500,000) in book value.

(d) All Inventory and Equipment is in all material respects of good and marketable quality, free from material defects.

(e) Borrower and each of its Subsidiaries is the sole owner of the Intellectual Property each respectively purports to own, free and clear of all Liens other than Permitted Liens. Except as noted on the Disclosure Schedules (which shall be updated within 45 days after the end of each fiscal quarter to reflect the consummation of any transaction not prohibited by this Agreement) or to be included in the next-delivered Compliance Certificate, neither Borrower nor any of its Subsidiaries is a party to, nor is bound by, any material license or other Material Agreement.

5.3 Litigation. Except as disclosed on the Perfection Certificate or with respect to which Borrower has provided notice as required hereunder, there are no actions, suits, investigations, or proceedings pending or, to the knowledge of the Responsible Officers, threatened in writing by or against Borrower or any of its Subsidiaries involving more than Two Hundred Fifty Thousand Dollars ($250,000).

5.4 No Material Adverse Change; Financial Statements. All consolidated financial statements for Borrower and its consolidated Subsidiaries, delivered to Collateral Agent fairly present, in conformity with GAAP, and in all material respects the consolidated financial condition of Borrower and its consolidated Subsidiaries, and the consolidated results of operations of Borrower and its consolidated Subsidiaries. Since December 31, 2017, there has not been a Material Adverse Change.

5.5 Solvency. Borrower is Solvent. Borrower and each of its Subsidiaries, when taken as a whole, is Solvent.

5.6 Regulatory Compliance. Neither Borrower nor any of its Subsidiaries is an "investment company" or a company "controlled" by an "investment company" under the Investment Company Act of 1940, as amended. Neither Borrower nor any of its Subsidiaries is engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower and each of its Subsidiaries has complied in all material respects with the Federal Fair Labor Standards Act. Neither Borrower nor any of its Subsidiaries is a "holding company" or an "affiliate" of a "holding company" or a "subsidiary company" of a "holding company" as each term is defined and used in the Public Utility Holding Company Act of 2005. Neither Borrower nor any of its Subsidiaries has violated any laws, ordinances or rules, the violation of which could reasonably be expected to have a Material Adverse Change. Neither Borrower's nor any of its Subsidiaries' properties or assets has been used by Borrower or such Subsidiary or, to Borrower's knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than in material compliance with applicable laws. Borrower and each of its Subsidiaries has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to continue their respective businesses as currently conducted.

None of Borrower, any of its Subsidiaries, or any of Borrower's or its Subsidiaries' Affiliates or any of their respective agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement is (i) in violation of any Anti-Terrorism Law, (ii) engaging in or conspiring 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 any Anti-Terrorism Law, or (iii) is a Blocked Person. None of Borrower, any of its Subsidiaries, or to the knowledge of Borrower and any of their Affiliates or agents, acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement, (x) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Blocked Person, or (y) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law.

5.7 Investments. Neither Borrower nor any of its Subsidiaries owns any stock, shares, partnership interests or other equity securities except for Permitted Investments.

5.8 Tax Returns and Payments; Pension Contributions. Borrower and each of its Subsidiaries has timely filed all required tax returns and reports, each such tax return is true, correct and complete in all material respects, and Borrower and each of its Subsidiaries, has timely paid all foreign, federal, state, and local taxes, assessments, deposits and contributions owed by Borrower and such Subsidiaries in an amount greater than Fifty Thousand Dollars ($50,000), in all jurisdictions in which Borrower or any such Subsidiary is subject to taxes, including the United States, unless such taxes are being contested in accordance with the next sentence. Borrower

and each of its Subsidiaries, may defer payment of any contested taxes, provided that Borrower or such Subsidiary, (a) in good faith contests its obligation to pay the taxes by appropriate proceedings promptly and diligently instituted and conducted; (b) notifies Collateral Agent of the commencement of, and any material development in, the proceeding; and (c) adequate reserves or other appropriate provisions are maintained on the books of such Borrower or Subsidiary, as applicable, in accordance with GAAP and which do not involve, in the reasonable judgment of the Collateral Agent, any risk of the sale, forfeiture or loss of any material portion of the Collateral. Neither Borrower nor any of its Subsidiaries is aware of any claims or adjustments proposed for any of Borrower's or such Subsidiaries', prior tax years which could result in additional taxes becoming due and payable by Borrower or its Subsidiaries. Borrower and each of its Subsidiaries have paid all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, and neither Borrower nor any of its Subsidiaries have, withdrawn from participation in, and have not permitted partial or complete termination of, or permitted the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower or its Subsidiaries, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other Governmental Authority.

5.9 Use of Proceeds. Borrower shall use the proceeds of the Term Loan as working capital and to fund its general business requirements, and not for personal, family, household or agricultural purposes.

5.10 Full Disclosure. No written representation, warranty or other statement of Borrower or any of its Subsidiaries in any certificate or written statement, when taken as a whole, given to Collateral Agent or any Lender, as of the date such representation, warranty, or other statement was made, taken together with all such written certificates and written statements given to Collateral Agent or any Lender, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading (it being recognized that projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

6. AFFIRMATIVE COVENANTS

Borrower shall, and shall cause each of its Subsidiaries to, do all of the following:

6.1 Government Compliance.

(a) Other than specifically permitted hereunder, maintain its and all its Subsidiaries' legal existence and good standing in their respective jurisdictions of organization and maintain qualification in each jurisdiction in which the failure to so qualify could reasonably be expected to have a Material Adverse Change. Comply with all laws, ordinances and regulations to which Borrower or any of its Subsidiaries is subject, the noncompliance with which could reasonably be expected to have a Material Adverse Change.

(b) Obtain and keep in full force and effect, all of the material Governmental Approvals necessary for the performance by Borrower and its Subsidiaries of their respective businesses and obligations under the Loan Documents and the grant of a security interest to Collateral Agent for the ratable benefit of the Secured Parties, in all of the Collateral.

6.2 Financial Statements, Reports, Certificates; Notices.

(a) Deliver to Collateral Agent:

(i) commencing with the month ending May 31, 2018, as soon as available, but no later than thirty (30) days after the last day of each month (forty-five (45) days after the last day of the final month of each quarter), a company prepared consolidated and, if prepared by Borrower or if reasonably requested by the Lenders, consolidating balance sheet, income statement and cash flow statement covering the consolidated operations of Borrower and its consolidated Subsidiaries for such month certified by a Responsible Officer and in a form reasonably acceptable to the Collateral Agent;

(ii) as soon as available, but no later than ninety (90) days after the last day of Borrower's fiscal year or within five (5) days of filing of the same with the SEC, audited consolidated financial statements covering the consolidated operations of Borrower and its consolidated Subsidiaries for such fiscal year, prepared under GAAP, consistently applied, together with an unqualified opinion (other than with respect to a going concern limitation based solely on the amount of cash and Cash Equivalents held by Borrower) on the financial statements from an independent certified public accounting firm acceptable to Collateral Agent in its reasonable discretion;

(iii) no later than sixty (60) days after the last day of Borrower's fiscal year, but no later than ten (10) days' after approval thereof by the Borrower's board of directors, Borrower's annual financial projections for the entire current fiscal year as approved by Borrower's board of directors; provided that, any revisions to such projections approved by Borrower's board of directors shall be delivered to Collateral Agent and the Lenders no later than seven (7) days after such approval);

(iv) together with the delivery of the Compliance Certificate, copies of all non-ministerial statements, reports and notices made available to Borrower's security holders or holders of Subordinated Debt (except as otherwise required to be delivered hereunder, other than materials provided to members of Borrower's board of directors solely in their capacities as board members or management of Borrower) or holders of Subordinated Debt (except as otherwise required to be delivered hereunder, other than materials provided to members of Borrower's board of directors solely in their capacities as board members or management of Borrower);

(v) with each Compliance Certificate, copies of the month-end account statements for each Collateral Account maintained by Borrower or its Subsidiaries, which statements may be provided to Collateral Agent and each Lender by Borrower or directly from the applicable institution(s);

(vi) prompt delivery of (and in any event within five (5) 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 Governmental Approvals material to Borrower's business or that otherwise could reasonably be expected to have a Material Adverse Change;

(vii) prompt notice of any event that (A) could reasonably be expected to materially and adversely affect the value of the Intellectual Property or (B) could reasonably be expected to result in a Material Adverse Change;

(viii) written notice delivered at least five (5) days' prior to Borrower's creation of a New Subsidiary in accordance with the terms of Section 6.10;

(ix) written notice delivered at least twenty (20) days' prior to Borrower's (A) adding any new offices or business locations, including warehouses (unless such new offices or business locations contain less than Five Hundred Thousand Dollars ($500,000) in assets or property of Borrower or any of its Subsidiaries), (B) changing its respective jurisdiction of organization, (C) changing its organizational structure or type, (D) changing its respective legal name, or (E) changing any organizational number(s) (if any) assigned by its respective jurisdiction of organization;

(x) upon Borrower becoming aware of the existence of any Event of Default or event which, with the giving of notice or passage of time, or both, would constitute an Event of Default, prompt (and in any event within three (3) Business Days) written notice of such occurrence, which such notice shall include a reasonably detailed description of such Event of Default or event which, with the giving of notice or passage of time, or both, would constitute an Event of Default, and Borrower's proposal regarding how to cure such Event of Default or event;

(xi) immediate notice if Borrower or such Subsidiary has knowledge that Borrower, or any Subsidiary or Affiliate of Borrower, 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;

(xii) together with the delivery of the Compliance Certificate, notice of any commercial tort claim (as defined in the Code) or letter of credit rights (as defined in the Code) held by Borrower or any Guarantor, in each case in an amount greater than One Hundred Thousand Dollars ($100,000) and of the general details thereof;

(xiii) if Borrower has any Subsidiaries any of which is not a Registered Organization upon formation thereof but later becomes one, written notice of such occurrence and information regarding such Person's organizational identification number within seven (7) Business Days of receiving such organizational identification number;

(xiv) no later than 45 days after the end of each fiscal quarter an updated Perfection Certificate to reflect any amendments, modifications and updates, if any, to certain information in the Perfection Certificate after the Effective Date; and

(xv) other information as reasonably requested by Collateral Agent or any Lender.

Notwithstanding the terms herein, documents and notices required to be delivered pursuant to the terms hereof (to the extent any such documents and notices are included in materials otherwise 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) Concurrently with the delivery of the financial statements specified in Section 6.2(a)(i) above but no later than thirty (30) days after the last day of each month, deliver to Collateral Agent:

(i) a duly completed Compliance Certificate signed by a Responsible Officer;

(ii) copies of any material Governmental Approvals obtained by Borrower or any of its Subsidiaries;

(iii) written notice of the commencement of, and any material development in, the proceedings contemplated by Section 5.8 hereof;

(iv) written notice of any litigation or governmental proceedings pending or threatened (in writing) against Borrower or any of its Subsidiaries, which could reasonably be expected to result in damages or costs to Borrower or any of its Subsidiaries of Two Hundred Fifty Thousand Dollars ($250,000); and

(v) written notice of all returns, recoveries, disputes and claims regarding Inventory that involve more than Five Hundred Thousand Dollars ($500,000) individually or in the aggregate in any calendar year.

(c) Keep proper, complete and true books of record and account in accordance with GAAP in all material respects. Borrower shall, and shall cause each of its Subsidiaries to, allow, at the sole cost of Borrower, Collateral Agent or any Lender, during regular business hours upon reasonable prior notice (provided that no notice shall be required when an Event of Default has occurred and is continuing), to visit and inspect any of its properties, to examine and make abstracts or copies from any of its books and records, and to conduct a collateral audit and analysis of its operations and the Collateral. Such audits shall be conducted no more often than twice every year unless (and more frequently if) an Event of Default has occurred and is continuing.

6.3 Inventory; Returns. Keep all Inventory in good and marketable condition, free from material defects. Returns and allowances between Borrower, or any of its Subsidiaries, as applicable, and their respective Account Debtors shall follow Borrower's, or such Subsidiary's, as applicable, customary practices.

6.4 Taxes; Pensions. Timely file and require each of its Subsidiaries to timely file, all required tax returns and reports and timely pay, and require each of its Subsidiaries to timely pay, all foreign, federal, state, and local taxes, assessments, deposits and contributions owed by Borrower or its Subsidiaries, as applicable, except as

otherwise permitted pursuant to the terms of Section 5.8 hereof, and shall deliver to Collateral Agent, on demand, appropriate certificates attesting to such payments, and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with the terms of such plans.

6.5 Insurance. Keep Borrower's and its Subsidiaries' business and the Collateral insured for risks and in amounts standard for companies in Borrower's and its Subsidiaries' industry and location and as Collateral Agent may reasonably request. Insurance policies shall be in a form, with companies, and in amounts that are standard for companies in Borrower's industry and location. All property policies shall have a lender's loss payable endorsement showing Collateral Agent as lender loss payee and shall waive subrogation against Collateral Agent, and all liability policies shall show, or have endorsements showing, Collateral Agent (for the ratable benefit of the Secured Parties), as additional insured. The Collateral Agent shall be named as lender loss payee and/or additional insured with respect to any such insurance providing coverage in respect of any Collateral, and each provider of any such insurance shall agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to the Collateral Agent, that it will give the Collateral Agent thirty (30) days prior written notice before any such policy or policies shall be canceled (except in the case of nonpayment). At Collateral Agent's request, Borrower shall deliver to the Collateral Agent certified copies of policies and evidence of all premium payments. Proceeds payable under any policy shall, at Collateral Agent's option, be payable to Collateral Agent, for the ratable benefit of the Secured Parties, on account of the then-outstanding Obligations. Notwithstanding the foregoing, (a) so long as no Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any casualty policy within ninety (90) days of receipt thereof up to Three Hundred Thousand Dollars ($300,000) with respect to any loss, but not exceeding Six Hundred Thousand Dollars ($600,000), in the aggregate for all losses under all casualty policies in any one year, toward the replacement or repair of destroyed or damaged property; provided that any such replaced or repaired property (i) shall be of equal or like value as the replaced or repaired Collateral and (ii) shall be deemed Collateral in which Collateral Agent has been granted a first priority security interest, and (b) after the occurrence and during the continuance of an Event of Default, all proceeds payable under such casualty policy shall, at the option of Collateral Agent, be payable to Collateral Agent, for the ratable benefit of the Lenders, on account of the Obligations. If Borrower or any of its Subsidiaries 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, Collateral Agent may make (but has no obligation to do so), at Borrower's expense, all or part of such payment or obtain such insurance policies required in this Section 6.5, and take any action under the policies Collateral Agent deems prudent.

6.6 Operating Accounts.

(a) Within fifteen (15) days after the Effective Date, maintain Borrower's and Guarantors Collateral Accounts depositary institutions that have agreed to execute Control Agreements in favor of Collateral Agent with respect to such Collateral Accounts. The provisions of the previous sentence shall not apply to Deposit Accounts exclusively used for cash collateral for Permitted Liens under clause (j) of the definition thereof, payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of Borrower's, or any Guarantor's, employees and identified to Collateral Agent by Borrower as such in the Disclosure Schedules.

(b) Borrower shall provide Collateral Agent ten (10) days' prior written notice before Borrower or any Guarantor establishes any Collateral Account. In addition, for each Collateral Account that Borrower or any Guarantor, at any time maintains, Borrower or such Guarantor shall cause the applicable bank or financial institution at or with which such Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect Collateral Agent's Lien in such Collateral Account (held for the ratable benefit of the Secured Parties) in accordance with the terms hereunder prior to the establishment of such Collateral Account. The provisions of the previous sentence shall not apply to Deposit Accounts exclusively used for cash collateral for Permitted Liens under clause (j) of the definition thereof, payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of Borrower's, or any Guarantor's, employees and identified to Collateral Agent by Borrower as such in the Disclosure Schedules or otherwise in writing to the Collateral Agent.

(c) Neither Borrower nor any Guarantor shall maintain any Collateral Accounts except Collateral Accounts maintained in accordance with this Section 6.6.

(d) Beginning on the date that is forty-five (45) days after the Effective Date, Borrower shall maintain at all times at least Twenty-Five Million Dollars ($25,000,000) (or, if Borrower's total cash and Cash Equivalents is less than Twenty-Five Million Dollars ($25,000,000), such lesser amount) in cash or Cash Equivalents in one or more demand deposit or money market accounts held in Borrower's name at Western Alliance Bank pursuant to account agreements reasonably satisfactory to Borrower.

6.7 Protection of Intellectual Property Rights. Borrower and each of its Subsidiaries shall: (a) use commercially reasonable efforts to protect, defend and maintain the validity and enforceability of its respective Intellectual Property that is material to its business; (b) promptly advise Collateral Agent in writing of material infringement by a third party of its respective Intellectual Property; and (c) not allow any of its respective Intellectual Property material to its respective business to be abandoned, forfeited or dedicated to the public without Collateral Agent's prior written consent.

6.8 Litigation Cooperation. Commencing on the Effective Date and continuing through the termination of this Agreement, make available to Collateral Agent, without expense to Collateral Agent or the Lenders, Borrower and each of Borrower's officers, employees and agents and Borrower's Books, to the extent that Collateral Agent may reasonably deem them necessary to prosecute or defend any third-party suit or proceeding instituted by or against Collateral Agent with respect to any Collateral or relating to Borrower.

6.9 Landlord Waivers; Bailee Waivers. In the event that Borrower or any of its Subsidiaries, after the Effective Date, intends to add any new offices or business locations, including warehouses, or otherwise store any portion of the Collateral with, or deliver any portion of the Collateral to, a bailee, in each case pursuant to Section 7.2, then, in the event that the Collateral at any new location is valued (based on book value) in excess of Five Hundred Thousand Dollars ($500,000) in the aggregate, at Collateral Agent's election, Borrower or such Subsidiary shall use commercially reasonable efforts to cause such bailee or landlord, as applicable, to execute and deliver a bailee waiver or landlord waiver, as applicable, in form and substance reasonably satisfactory to Collateral Agent prior to the addition of any new offices or business locations, or any such storage with or delivery to any such bailee, as the case may be.

6.10 Creation/Acquisition of Subsidiaries. In the event any Borrower or any Subsidiary of any Borrower creates or acquires any Subsidiary after the Effective Date, Borrower or such Subsidiary shall promptly notify the Collateral Agent of such creation or acquisition, and Borrower or such Subsidiary shall take all actions reasonably requested by the Collateral Agent to achieve any of the following with respect to such "**New Subsidiary**" (defined as a Subsidiary formed after the date hereof during the term of this Agreement): (i) if such New Subsidiary is a Domestic Subsidiary (except for a Domestic Subsidiary (1) substantially all of the assets of which consist of the equity interests of one or more Foreign Subsidiaries or (2) that is a subsidiary of a Foreign Subsidiary (each, an "**Excluded Domestic Subsidiary**")), to cause such New Subsidiary to become either a co-Borrower hereunder, or a secured guarantor with respect to the Obligations; and (ii) with respect to New Subsidiaries owned directly by Borrower or a Guarantor, to grant and pledge to Collateral Agent a perfected security interest in (A) 100% of the stock, units or other evidence of ownership held by Borrower or its Subsidiaries of any such New Subsidiary that is a Domestic Subsidiary (except if such New Subsidiary is an Excluded Domestic Subsidiary), or (B) 65% of the stock, units or other evidence of ownership held by Borrower or a Guarantor of any such New Subsidiary which is a Foreign Subsidiary or an Excluded Domestic Subsidiary.

6.11 Further Assurances. Execute any further instruments and take further action as Collateral Agent or any Lender reasonably requests to perfect or continue Collateral Agent's Lien in the Collateral or to effect the purposes of this Agreement.

7. NEGATIVE COVENANTS

Borrower shall not, and shall not permit any of its Subsidiaries to, do any of the following without the prior written consent of the Required Lenders:

7.1 Dispositions. Convey, sell, lease, transfer, assign, dispose of (collectively, "**Transfer**"), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (a) of Inventory in the ordinary course of business; (b) of worn-out or obsolete Equipment; (c) in connection with Permitted Liens,

Permitted Investments and Permitted Licenses; (d) cash or Cash Equivalents pursuant to transactions not prohibited by this Agreement; or (e) other Transfers not exceed Two Hundred Fifty Thousand Dollars ($250,000) in any 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 engaged in by Borrower or such Subsidiary, as applicable, as of the Effective Date or reasonably related thereto; (b) liquidate or dissolve; or (c) (i) permit any Key Person to cease being actively engaged in the management of Borrower unless written notice thereof is provided to Collateral Agent within ten (10) Business Days of such cessation, or (ii) enter into any transaction or series of related transactions in which (A) the stockholders of Borrower who were not stockholders immediately prior to the first such transaction own more than 49% of the voting stock of Borrower immediately after giving effect to such transaction or related series of such transactions and (B) except as permitted by Section 7.3, Borrower ceases to own, directly or indirectly, 100% of the ownership interests in each Subsidiary of Borrower. Borrower shall not, and shall not permit any of its Subsidiaries to, without at least twenty (20) days' prior written notice to Collateral Agent: (A) add any new offices or business locations, including warehouses (unless such new offices or business locations contain less than Five Hundred Thousand Dollars ($500,000) in assets or property of Borrower or any of its Subsidiaries, as applicable); (B) change its respective jurisdiction of organization, (C) except as permitted by Section 7.3, change its respective organizational structure or type, (D) change its respective legal name, or (E) change any organizational number(s) (if any) assigned by its respective jurisdiction of organization.

7.3 Mergers or Acquisitions. Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock, shares or property of another Person, other than Permitted Acquisitions. A Subsidiary may merge or consolidate into another Subsidiary (provided such surviving Subsidiary is a "co-Borrower" hereunder or has provided a secured Guaranty of Borrower's Obligations hereunder in accordance with Section 6.10) or with (or into) Borrower provided Borrower is the surviving legal entity, and as long as no Event of Default is occurring prior thereto or arises as a result therefrom.

7.4 Indebtedness. Create, incur, assume, or be liable for any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness.

7.5 Encumbrance. Create, incur, allow, or suffer any Lien on any of its property, or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens, or permit any Collateral not to be subject to the first priority security interest granted herein (except for Permitted Liens), or enter into any agreement, document, instrument or other arrangement (except with or in favor of Collateral Agent, for the ratable benefit of the Secured Parties) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower, or any of its Subsidiaries, from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower's or such Subsidiary's Intellectual Property, except as is otherwise permitted in Section 7.1 hereof and the definition of "Permitted Liens".

7.6 Maintenance of Collateral Accounts. With respect to Borrower and any Guarantors, maintain any Collateral Account except pursuant to the terms of Section 6.6 hereof.

7.7 Restricted Payments. (a) Declare or pay any dividends (other than dividends payable solely in capital stock) or make any other distribution or payment on account of or redeem, retire or purchase any capital stock (other than (i) the declaration or payment of dividends to Borrower, (ii) so long as no Event of Default or Default exists or would result therefrom, the declaration or payment of any dividends solely in the form of equity securities, and (iii) repurchases pursuant to the terms of employee stock purchase plans, employee restricted stock agreements, stockholder rights plans, director or consultant stock option plans, similar plans to any of the foregoing, or payments in connection with tax withholding obligations in connection with the foregoing, provided such repurchases do not exceed Three Hundred Fifty Thousand Dollars ($350,000) in the aggregate per fiscal year and One Million Dollars ($1,000,000) over the term of this Agreement), (b) other than the Obligations in accordance with the terms hereof, purchase, redeem, defease or prepay any principal of, premium, if any, interest or other amount payable in respect of any Indebtedness prior to its scheduled maturity unless being replaced with Indebtedness of at least the same principal amount and such new Indebtedness is Permitted Indebtedness, or (c) be a

party to or bound by an agreement that restricts a Subsidiary from paying dividends or otherwise distributing property to Borrower other than this Agreement.

7.8 Investments. Directly or indirectly make any Investment other than Permitted Investments, or permit any of its Subsidiaries to do so other than Permitted Investments.

7.9 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower or any of its Subsidiaries, except for (a) transactions that are in the ordinary course of Borrower's or such Subsidiary's business, upon fair and reasonable terms that are no less favorable to Borrower or such Subsidiary than would be obtained in an arm's length transaction with a non-affiliated Person, (b) Subordinated Debt or equity investments by Borrower's investors in Borrower or its Subsidiaries, and (c) compensation arrangements for Borrower's and its Subsidiaries' officers, directors and employees that are customary in Borrower's industry.

7.10 Subordinated Debt. (a) Make or permit any payment on any Subordinated Debt, except under the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt which would increase the amount thereof or adversely affect the subordination thereof to Obligations owed to the Lenders.

7.11 Compliance. (a) 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 (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of the Term Loan for that purpose; (b) fail to meet the minimum funding requirements of ERISA; (c) permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur; (d) fail to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation could reasonably be expected to have a Material Adverse Change, or permit any of its Subsidiaries to do so; or (e) withdraw or permit any Subsidiary to withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which could reasonably be expected to result in any liability of Borrower or any of its Subsidiaries, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other Governmental Authority.

7.12 Compliance with Anti-Terrorism Laws. Neither Borrower nor any of its Subsidiaries shall, nor shall Borrower or any of its Subsidiaries permit any Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. Neither Borrower nor any of its Subsidiaries shall, nor shall Borrower or any of its Subsidiaries, permit any Affiliate to, directly or indirectly, (a) 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, (b) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224 or any similar executive order or other Anti-Terrorism Law, or (c) 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.

7.13 Minimum Liquidity.

(a) Borrower shall not allow, at any time, its unrestricted cash and Cash Equivalents to be an amount less than the sum of (i) the principal payments due on interest-bearing liabilities for the upcoming seven (7) fiscal months (using Borrower's reasonable judgment as to when the Amortization Date will occur) and (ii) seven times (7x) the cash spent in respect of operations and capital expenditures by Borrower per month as determined based on the average taken over the most recently completed seven fiscal months (excluding principal payments made in respect of interest- bearing liabilities made in such period); provided, however, this covenant shall no longer apply after the Borrower provides evidence reasonably satisfactory to the Collateral Agent that Borrower has received at least Forty Six Million Five Hundred Thousand Dollars ($46,500,000) in aggregate unrestricted net cash proceeds from the sale and issuance of Borrower's stock pursuant to one or more bona fide equity financings on terms reasonably acceptable to the Collateral Agent.

(b) Borrower shall not allow, at any time that a Permitted License is in effect under clause (D)(iii)(y) in the definition thereof, its cash and Cash Equivalents to be an amount less than Fifty Million Dollars ($50,000,000) until the Borrower achieves (subject to evidence reasonably acceptable to the Collateral Agent) its Phase 3 Endpoint.

8. EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an "**Event of Default**") under this Agreement:

8.1 Payment Default. Borrower fails to (a) make any payment of principal or interest on the Term Loan on its due date, or (b) pay any other Obligation 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 or acceleration pursuant to Section 9.1(a) hereof);

8.2 Covenant Default.

(a) Borrower or any of its Subsidiaries fails or neglects to perform any obligation in Sections 6.2 (Financial Statements, Reports, Certificates), 6.4 (Taxes), 6.5 (Insurance), 6.6 (Operating Accounts), 6.7 (Protection of Intellectual Property Rights), 6.9 (Landlord Waivers; Bailee Waivers), 6.10 (Creation/Acquisition of Subsidiaries) or Borrower violates any provision in Section 7; or

(b) Borrower, or any of its Subsidiaries, fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any other Loan Document to which such person is a party, and as to any default (other than those specified in this Section 8) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within fifteen (15) days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the fifteen (15) day period or cannot after diligent attempts by Borrower or such Subsidiary, as applicable, be cured within such fifteen (15) day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to cure the default shall not be deemed an Event of Default.

8.3 Material Adverse Change. Required Lenders determine that a Material Adverse Change has occurred;

8.4 Attachment; Levy; Restraint on Business.

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of Borrower or any of its Subsidiaries or of any entity under control of Borrower or its Subsidiaries on deposit with any institution at which Borrower or any of its Subsidiaries maintains a Collateral Account, or (ii) a notice of lien, levy, or assessment is filed against Borrower or any of its Subsidiaries or their respective assets by any government agency, and the same under subclauses (i) and (ii) of this clause (a) are not, within ten (10) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); and

(b) (i) any material portion of Borrower's or any of its Subsidiaries' assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents Borrower or any of its Subsidiaries from conducting any part of its business;

8.5 Insolvency. (a) Borrower or any of its Subsidiaries is or becomes Insolvent; (b) Borrower or any of its Subsidiaries begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Borrower or any of its Subsidiaries and not dismissed or stayed within forty-five (45) days;

8.6 Other Agreements. There is a default in any agreement to which Borrower or any of its Subsidiaries is a party with a third party or parties resulting in a right by such third party or parties, whether or not

exercised, to accelerate the maturity of any Indebtedness in an amount in excess of Three Hundred Fifty Thousand Dollars ($350,000) or that could reasonably be expected to have a Material Adverse Change;

8.7 Judgments. One or more judgments, orders, or decrees for the payment of money in an amount, individually or in the aggregate, of at least Three Hundred Fifty Thousand Dollars ($350,000) (not covered by independent third-party insurance as to which (a) Borrower reasonably believes such insurance carrier will accept liability, (b) Borrower or the applicable Subsidiary has submitted such claim to such insurance carrier and (c) liability has not been rejected by such insurance carrier) shall be rendered against Borrower or any of its Subsidiaries and shall remain unsatisfied, unvacated, or unstayed for a period of ten (10) days after the entry thereof;

8.8 Misrepresentations. Borrower or any of its Subsidiaries or any Person acting for Borrower or any of its Subsidiaries makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Collateral Agent and/or the Lenders or to induce Collateral Agent and/or the Lenders to enter this Agreement or any Loan Document, and such representation, warranty, or other statement, when taken as a whole, is incorrect in any material respect when made;

8.9 Subordinated Debt. A default or breach occurs under any subordination agreement, or any creditor that has signed such an agreement with Collateral Agent or the Lenders breaches any terms of such agreement;

8.10 Guaranty. (a) Any Guaranty terminates or ceases for any reason to be in full force and effect; (b) any Guarantor does not perform any obligation or covenant under any Guaranty; or (c) any circumstance described in Section 8 occurs with respect to any Guarantor;

8.11 Governmental Approvals; FDA Action. (a) Any Governmental Approval shall have been revoked, rescinded, suspended, modified in an adverse manner, or not renewed in the ordinary course for a full term *and* such revocation, rescission, suspension, modification or non-renewal has resulted in or could reasonably be expected to result in a Material Adverse Change; or (b) (i) the FDA initiates a Regulatory Action or any other enforcement action against Borrower or any of its Subsidiaries or any supplier of Borrower or any of its Subsidiaries that causes Borrower or any of its Subsidiaries to recall, withdraw, remove or discontinue marketing any of its products; (ii) the FDA issues a warning letter to Borrower or any of its Subsidiaries with respect to any of its activities or products which could reasonably be expected to result in a Material Adverse Change; (iii) Borrower or any of its Subsidiaries conducts a mandatory or voluntary recall which could reasonably be expected to result in liability and expense to Borrower or any of its Subsidiaries of the Applicable FDA Threshold or more; (iv) Borrower or any of its Subsidiaries enters into a settlement agreement with the FDA that results in aggregate liability as to any single or related series of transactions, incidents or conditions, of the Applicable FDA Threshold or more, or that could reasonably be expected to result in a Material Adverse Change; or (v) the FDA revokes any authorization or permission granted under any Registration, or Borrower or any of its Subsidiaries withdraws any Registration, that could reasonably be expected to result in a Material Adverse Change.

8.12 Lien Priority. Except as the result of the action or inaction of the Collateral Agent or the Lenders, any Lien created hereunder or by any other Loan Document shall at any time fail to constitute a valid and perfected Lien (to the extent required to be perfected) on any material Collateral purported to be secured thereby, subject to no prior or equal Lien, other than Permitted Liens arising as a matter of applicable law.

9. RIGHTS AND REMEDIES

9.1 Rights and Remedies.

(a) Upon the occurrence and during the continuance of an Event of Default, Collateral Agent shall at the written direction of Required Lenders, 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 Borrower declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations shall be immediately due and payable without any action by Collateral Agent or the Lenders) or (iii) by notice to 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 Borrower and Collateral Agent and/or the Lenders (but if an Event of Default described in Section 8.5 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 Collateral Agent and/or the Lenders shall be immediately terminated without any action by Collateral Agent or the Lenders).

(b) Without limiting the rights of Collateral Agent and the Lenders set forth in Section 9.1(a) above, upon the occurrence and during the continuance of an Event of Default, Collateral Agent shall at the written direction of the Required Lenders, without notice or demand, to do any or all of the following:

(i) foreclose upon and/or sell or otherwise liquidate, the Collateral;

(ii) make a demand for payment upon any Guarantor pursuant to the Guaranty delivered by such Guarantor;

(iii) apply to the Obligations any (A) balances and deposits of Borrower that Collateral Agent or any Lender holds or controls, (B) any amount held or controlled by Collateral Agent or any Lender owing to or for the credit or the account of Borrower, or (C) amounts received from any Guarantors in accordance with the respective Guaranty delivered by such Guarantor; and/or

(iv) commence and prosecute an Insolvency Proceeding or consent to Borrower commencing any Insolvency Proceeding.

(c) Without limiting the rights of Collateral Agent and the Lenders set forth in Sections 9.1(a) and (b) above, upon the occurrence and during the continuance of an Event of Default, Collateral Agent shall at the written direction of the Required Lenders, without notice or demand, to do any or all of the following:

(i) settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Collateral Agent considers advisable, notify any Person owing Borrower money of Collateral Agent's security interest in such funds, and verify the amount of such account;

(ii) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its Liens in the Collateral (held for the ratable benefit of the Secured Parties). Borrower shall assemble the Collateral if Collateral Agent requests and make it available at such location as Collateral Agent reasonably designates. Collateral Agent may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Borrower grants Collateral Agent a license to enter and occupy any of its premises, without charge, to exercise any of Collateral Agent's rights or remedies;

(iii) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, and/or advertise for sale, any of the Collateral. Collateral Agent is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's and each of its Subsidiaries' 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, in connection with Collateral Agent's exercise of its rights under this Section 9.1, Borrower's and each of its Subsidiaries' rights under all licenses and all franchise agreements inure to Collateral Agent, for the benefit of the Lenders;

(iv) place a "hold" on any Collateral Account maintained with Collateral Agent or any Lender or otherwise in respect of which a Control Agreement has been delivered in favor of Collateral Agent (for the ratable benefit of the Secured Parties) 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;

(v) demand and receive possession of Borrower's Books;

(vi) appoint a receiver to seize, manage and realize any of the Collateral, and such receiver shall have any right and authority as any competent court will grant or authorize in accordance with any applicable law, including any power or authority to manage the business of Borrower or any of its Subsidiaries; and

(vii) subject to clauses 9.1(a) and (b), exercise all rights and remedies available to Collateral Agent and each Lender under the Loan Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof).

Notwithstanding any provision of this Section 9.1 to the contrary, upon the occurrence of any Event of Default, Collateral Agent shall have the right to exercise any and all remedies referenced in this Section 9.1 without the written consent of Required Lenders following the occurrence and during the continuance of an Exigent Circumstance.

9.2 Power of Attorney. Borrower hereby irrevocably appoints Collateral Agent as its lawful attorney-in-fact, exercisable upon the occurrence and during the continuance of an Event of Default, to: (a) endorse Borrower's or any of its Subsidiaries' name on any checks or other forms of payment or security; (b) sign Borrower's or any of its Subsidiaries' name on any invoice or bill of lading for any Account or drafts against Account Debtors; (c) settle and adjust disputes and claims about the Accounts of Borrower directly with the applicable Account Debtors, for amounts and on terms Collateral Agent determines reasonable; (d) make, settle, and adjust all claims under Borrower's insurance policies; (e) 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; and (f) transfer the Collateral into the name of Collateral Agent or a third party as the Code or any applicable law permits. Borrower hereby appoints Collateral Agent as its lawful attorney-in-fact to sign Borrower's or any of its Subsidiaries' name on any documents necessary to perfect or continue the perfection of Collateral Agent's security interest in the Collateral regardless of whether an Event of Default has occurred until all Obligations (other than (a) inchoate indemnity obligations and (b) other obligations that survive termination of this Agreement, in each case, for which no claim has been made) have been satisfied in full and Collateral Agent and the Lenders are under no further obligation to extend the Term Loan hereunder. Collateral Agent's foregoing appointment as Borrower's or any of its Subsidiaries' attorney in fact, and all of Collateral Agent's rights and powers, coupled with an interest, are irrevocable until all Obligations (other than (a) inchoate indemnity obligations and (b) other obligations that survive termination of this Agreement, in each case, for which no claim has been made) have been fully repaid and performed and Collateral Agent's and the Lenders' obligation to provide the Term Loan terminates.

9.3 Protective Payments. If Borrower or any of its Subsidiaries fail to obtain the insurance called for by Section 6.5 or fail to pay any premium thereon or fail to pay any other amount which Borrower or any of its Subsidiaries is obligated to pay under this Agreement or any other Loan Document, Collateral Agent may obtain such insurance or make such payment, and all amounts so paid by Collateral Agent are Lenders' Expenses and immediately due and payable, bearing interest at the Default Rate, and secured by the Collateral. Collateral Agent will make reasonable efforts to provide Borrower with notice of Collateral Agent obtaining such insurance or making such payment at the time it is obtained or paid or within a reasonable time thereafter. No such payments by Collateral Agent are deemed an agreement to make similar payments in the future or Collateral Agent's waiver of any Event of Default.

9.4 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, (a) Borrower irrevocably waives the right to direct the application of any and all payments at any time or times thereafter received by Collateral Agent from or on behalf of Borrower or any of its Subsidiaries of all or any part of the Obligations, and, as between Borrower on the one hand and Collateral Agent and Lenders on the other, Collateral 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 Collateral Agent may deem advisable notwithstanding any previous application by Collateral Agent, and (b) the proceeds of any sale of, or other realization upon all or any part of the Collateral shall be applied: first, to the Lenders' Expenses; 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 Obligations owing to Collateral Agent or any Lender under the Loan Documents. Any balance remaining shall be delivered to Borrower or to whoever may be lawfully

entitled to receive such balance or as a court of competent jurisdiction may direct. 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. 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 the Lenders' Pro Rata Shares unless expressly provided otherwise. Collateral Agent, or if applicable, each Lender, shall promptly remit to the other Lenders such sums as may be necessary to ensure the ratable repayment of each Lender's Pro Rata Share of the Term Loan and the ratable distribution of interest, fees and reimbursements paid or made by Borrower. Notwithstanding the foregoing, 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 later determined that a Lender received more than its Pro Rata Share of scheduled payments made on any date or dates, then such Lender shall remit to Collateral Agent or other the Lenders such sums as may be necessary to ensure the ratable payment of such scheduled payments, as instructed by Collateral Agent. If any payment or distribution of any kind or character, whether in cash, properties or securities, shall be received by a Lender in excess of its Pro Rata Share, then the portion of such payment or distribution in excess of such Lender's Pro Rata Share shall be received and held by such Lender in trust for and shall be promptly paid over to the other Lenders (in accordance with their respective Pro Rata Shares) for application to the payments of amounts due on such other Lenders' claims. To the extent any payment for the account of Borrower is required to be returned as a voidable transfer or otherwise, the Lenders shall contribute to one another as is necessary to ensure that such return of payment is on a pro rata basis. If any Lender shall obtain possession of any Collateral, it shall hold such Collateral for itself and as agent and bailee for the Secured Parties for purposes of perfecting Collateral Agent's security interest therein (held for the ratable benefit of the Secured Parties).

9.5 Liability for Collateral. So long as Collateral Agent and the Lenders comply with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Collateral Agent and the Lenders, Collateral 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.

9.6 No Waiver; Remedies Cumulative. Failure by Collateral Agent or any Lender, at any time or times, to require strict performance by Borrower of any provision of this Agreement or by Borrower or any other Loan Document shall not waive, affect, or diminish any right of Collateral Agent or any Lender thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by Collateral Agent and the Required Lenders and then is only effective for the specific instance and purpose for which it is given. The rights and remedies of Collateral Agent and the Lenders under this Agreement and the other Loan Documents are cumulative. Collateral Agent and the Lenders have all rights and remedies provided under the Code, any applicable law, by law, or in equity. The exercise by Collateral Agent or any Lender of one right or remedy is not an election, and Collateral Agent's or any Lender's waiver of any Event of Default is not a continuing waiver. Collateral Agent's or any Lender's delay in exercising any remedy is not a waiver, election, or acquiescence.

9.7 Demand Waiver. Borrower waives, to the fullest extent permitted by law, demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Collateral Agent or any Lender on which Borrower or any Subsidiary is liable.

10. NOTICES

Other than as specifically provided herein, all notices, consents, requests, approvals, demands, or other communication (collectively, "**Communications**") by any party to this Agreement or any other Loan 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 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 Collateral Agent, Lender or Borrower may change its mailing address or facsimile number by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to Borrower:	ARDELYX, INC. 34175 Ardenwood Blvd., Suite 200 Fremont, California 94555 Attn: Mark Kaufmann Email: mkaufmann@ardelyx.com
with a copy (which shall not constitute notice) to:	LATHAM & WATKINS LLP 140 Scott Drive Menlo Park, CA 94025 Attn: Mark Roeder Email: mark.roeder@lw.com
If to Collateral Agent:	SOLAR CAPITAL LTD. 500 Park Avenue, 3rd Floor New York, NY 10022 Attention: Anthony Storino Email: storino@Solarcapltd.com
with a copy (which shall not constitute notice) to:	MORRISON & FOERSTER LLP 425 Market St. San Francisco, CA 94105 Attn: Jeff Kayes Email: jkayes@mofo.com

11. CHOICE OF LAW, VENUE AND JURY TRIAL WAIVER

11.1 Waiver of Jury Trial. EACH OF BORROWER, COLLATERAL AGENT AND LENDERS UNCONDITIONALLY WAIVES ANY AND ALL RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, ANY OF THE OTHER LOAN DOCUMENTS, ANY OF THE INDEBTEDNESS SECURED HEREBY, ANY DEALINGS AMONG BORROWER, COLLATERAL AGENT AND/OR LENDERS RELATING TO THE SUBJECT MATTER OF THIS TRANSACTION OR ANY RELATED TRANSACTIONS, AND/OR THE RELATIONSHIP THAT IS BEING ESTABLISHED AMONG BORROWER, COLLATERAL AGENT AND/OR LENDERS. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT. THIS WAIVER IS IRREVOCABLE. THIS WAIVER MAY NOT BE MODIFIED EITHER ORALLY OR IN WRITING. THE WAIVER ALSO SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT, ANY OTHER LOAN DOCUMENTS, OR TO ANY OTHER DOCUMENTS OR AGREEMENTS RELATING TO THIS TRANSACTION OR ANY RELATED TRANSACTION. THIS AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.

11.2 Governing Law and Jurisdiction. THIS AGREEMENT, THE OTHER LOAN DOCUMENTS (EXCLUDING THOSE LOAN DOCUMENTS THAT BY THEIR OWN TERMS ARE EXPRESSLY GOVERNED BY THE LAWS OF ANOTHER JURISDICTION) AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER AND THEREUNDER SHALL IN ALL RESPECTS BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF NEW YORK (WITHOUT REGARD TO THE CONFLICT OF LAWS PRINCIPLES OF SUCH STATE (OTHER THAN SECTION 5-1401 OF THE GENERAL OBLIGATIONS LAW)), INCLUDING ALL MATTERS OF CONSTRUCTION, VALIDITY AND PERFORMANCE, REGARDLESS OF THE LOCATION OF THE

COLLATERAL, PROVIDED, HOWEVER, THAT IF THE LAWS OF ANY JURISDICTION OTHER THAN NEW YORK SHALL GOVERN IN REGARD TO THE VALIDITY, PERFECTION OR EFFECT OF PERFECTION OF ANY LIEN OR IN REGARD TO PROCEDURAL MATTERS AFFECTING ENFORCEMENT OF ANY LIENS IN COLLATERAL, SUCH LAWS OF SUCH OTHER JURISDICTIONS SHALL CONTINUE TO APPLY TO THAT EXTENT.

11.3 Submission to Jurisdiction. Any legal action or proceeding with respect to the Loan Documents shall be brought exclusively in the courts of the State of New York located in the City of New York, Borough of Manhattan, or of the United States of America for the Southern District of New York and, by execution and delivery of this Agreement, Borrower hereby accepts for itself and in respect of its Property, generally and unconditionally, the jurisdiction of the aforesaid courts. Notwithstanding the foregoing, Collateral Agent and Lenders shall have the right to bring any action or proceeding against Borrower (or any property of Borrower) in the court of any other jurisdiction Collateral Agent or Lenders deem necessary or appropriate in order to realize on the Collateral or other security for the Obligations. The parties hereto hereby irrevocably waive any objection, including any objection to the laying of venue or based on the grounds of *forum non conveniens*, that any of them may now or hereafter have to the bringing of any such action or proceeding in such jurisdictions.

11.4 Service of Process. Borrower irrevocably waives personal service of any and all legal process, summons, notices and other documents and other service of process of any kind and consents to such service in any suit, action or proceeding brought in the United States of America with respect to or otherwise arising out of or in connection with any Loan Document by any means permitted by applicable requirements of law, including by the mailing thereof (by registered or certified mail, postage prepaid) to the address of Borrower specified herein (and shall be effective when such mailing shall be effective, as provided therein). Borrower 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.

11.5 Non-exclusive Jurisdiction. Nothing contained in this Article 11 shall affect the right of Collateral Agent or Lenders to serve process in any other manner permitted by applicable requirements of law or commence legal proceedings or otherwise proceed against Borrower in any other jurisdiction.

12. GENERAL PROVISIONS

12.1 Successors and Assigns. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not transfer, pledge or assign this Agreement or any rights or obligations under it without Collateral Agent's prior written consent (which may be granted or withheld in Collateral Agent's discretion, subject to Section 12.5). The Lenders have the right, without the consent of or notice to Borrower, to sell, transfer, assign, pledge, negotiate, or grant participation in (any such sale, transfer, assignment, negotiation**,** or grant of a participation, a **"Lender Transfer"**) all or any part of, or any interest in, the Lenders' obligations, rights, and benefits under this Agreement and the other Loan Documents; *provided*, *however*, that any such Lender Transfer (other than (i) any Transfer at any time that an Event of Default has occurred and is continuing, or (ii) a transfer, pledge, sale or assignment to an Eligible Assignee) of its obligations, rights, and benefits under this Agreement and the other Loan Documents shall require the prior written consent of the Collateral Agent (such approved assignee, an "**Approved Lender**"); and *provided, further*, that on the date it becomes a party to this Agreement, an Approved Lender must be capable, through its applicable lending office, of receiving payments of interest from Borrower without the imposition of any withholding taxes that would be required to be borne by Borrower or requiring the payment of any additional amounts by Borrower pursuant to Section 2.5 hereof. Borrower and Collateral Agent shall be entitled to continue to deal solely and directly with such Lender in connection with the interests so assigned until Collateral Agent shall have received and accepted an effective assignment agreement in form satisfactory to Collateral Agent executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such Eligible Assignee or Approved Lender as Collateral Agent reasonably shall require. Collateral Agent shall use commercially reasonable efforts to provide notice to Borrower of each Lender Transfer promptly following such Lender Transfer. Notwithstanding anything to the contrary contained herein, so long as no Event of Default has occurred and is continuing, no Lender Transfer (other than a Lender Transfer in connection with (x) assignments by a Lender due to a forced divestiture at the request of any regulatory agency; or (y) upon the occurrence of a default, event of default or similar occurrence with respect to a Lender's own financing or securitization transactions) shall be permitted,

without Borrower's consent, to any Person which is an Affiliate or Subsidiary of Borrower, a direct competitor of Borrower or a vulture hedge fund, each as reasonably determined by Collateral Agent at the time of such assignment.

12.2 Indemnification. Subject to Section 2.5, Borrower agrees to indemnify, defend and hold each Secured Party and their respective directors, officers, employees, consultants, agents, attorneys, or any other Person affiliated with or representing such Secured Party (each, an "**Indemnified Person**") harmless against: (a) all obligations, demands, claims, and liabilities (collectively, "**Claims**") asserted by any other party in connection with; related to; following; or arising from, out of or under, the transactions contemplated by the Loan Documents; and (b) all losses and Lenders' Expenses incurred, or paid by Indemnified Person in connection with; related to; following; or arising from, out of or under, the transactions contemplated by the Loan Documents (including reasonable attorneys' fees and expenses), except, in each case, for Claims and/or losses directly caused by such Indemnified Person's gross negligence or willful misconduct. Borrower hereby further agrees to indemnify, defend and hold each Indemnified Person harmless 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 fees and disbursements of counsel for such Indemnified Person) in connection with any investigative, response, remedial, administrative or judicial matter or proceeding, whether or not such Indemnified Person shall be designated a party thereto and including any such proceeding initiated by or on behalf of Borrower, 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 Collateral Agent or Lenders) asserting any right to payment for the transactions contemplated hereby which may be imposed on, incurred by or asserted against such Indemnified Person as a result of or in connection with the transactions contemplated hereby and the use or intended use of the proceeds of the loan proceeds except for liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, expenses and disbursements directly caused by such Indemnified Person's gross negligence or willful misconduct. Notwithstanding the foregoing, if no direct conflict of interest is apparent in connection with the defense of any Claim, Collateral Agent and the Lenders shall first take commercially reasonable efforts to use the same counsel as Borrower, or, if a conflict does exist, use only one counsel among all Indemnified Persons with respect to the defense of any Claim.

12.3 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.4 Correction of Loan Documents. Collateral Agent may correct patent errors and fill in any blanks in this Agreement and the other Loan Documents consistent with the agreement of the parties**.**

12.5 Amendments in Writing; Integration. (a) No amendment, modification, termination or waiver of any provision of this Agreement or any other Loan Document, no approval or consent thereunder, or any consent to any departure by Borrower or any of its Subsidiaries therefrom, shall in any event be effective unless the same shall be in writing and signed by Borrower, Collateral Agent and the Required Lenders provided that:

(i) no such amendment, waiver or other modification that would have the effect of increasing or reducing a Lender's Term Loan Commitment or Commitment Percentage shall be effective as to such Lender without such Lender's written consent;

(ii) no such amendment, waiver or modification that would affect the rights and duties of Collateral Agent shall be effective without Collateral Agent's written consent or signature; and

(iii) no such amendment, waiver or other modification shall, unless signed by all the Lenders directly affected thereby, (A) reduce the principal of, rate of interest on or any fees with respect to the Term Loan or forgive any principal, interest (other than default interest) or fees (other than late charges) with respect to the Term Loan (B) postpone the date fixed for, or waive, any payment of principal of the Term Loan or of interest on the Term Loan (other than default interest) or any fees provided for hereunder (other than late charges or for any termination of any commitment); (C) change the definition of the term "Required Lenders" or the percentage of Lenders which shall be required for the Lenders to take any action hereunder; (D) release all or substantially all of any material portion of the Collateral, authorize Borrower to sell or otherwise dispose of all or substantially all or any material portion of the Collateral or release any Guarantor of all or any portion of the Obligations or its

Guaranty obligations with respect thereto, except, in each case with respect to this clause (D), as otherwise may be expressly permitted under this Agreement or the other Loan Documents (including in connection with any disposition permitted hereunder); (E) amend, waive or otherwise modify this Section 12.5 or the definitions of the terms used in this Section 12.5 insofar as the definitions affect the substance of this Section 12.5; (F) consent to the assignment, delegation or other transfer by Borrower of any of its rights and obligations under any Loan Document or release Borrower of its payment obligations under any Loan Document, except, in each case with respect to this clause (F), pursuant to a merger or consolidation permitted pursuant to this Agreement; (G) amend any of the provisions of Section 9.4 or amend any of the definitions of Pro Rata Share, Term Loan Commitment, Commitment Percentage or that provide for the Lenders to receive their Pro Rata Shares of any fees, payments, setoffs or proceeds of Collateral hereunder; (H) subordinate the Liens granted in favor of Collateral Agent securing the Obligations; or (I) amend any of the provisions of Section 12.5. It is hereby understood and agreed that all Lenders shall be deemed directly affected by an amendment, waiver or other modification of the type described in the preceding clauses (C), (D), (E), (F), (G) and (H) of the immediately preceding sentence.

(b) Other than as expressly provided for in Section 12.5(a)(i)-(iii), Collateral Agent may, if requested by the Required Lenders, from time to time designate covenants in this Agreement less restrictive by notification to a representative of Borrower.

(c) This Agreement and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements with respect to such subject matter. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Agreement and the Loan Documents merge into this Agreement and the Loan Documents.

12.6 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.

12.7 Survival. All covenants, representations and warranties made in this Agreement continue in full force and effect until this Agreement has terminated pursuant to its terms and all Obligations (other than (a) inchoate indemnity obligations and (b) other obligations that survive termination of this Agreement, in each case, for which no claim has been made) have been satisfied. The obligation of Borrower in Section 12.2 to indemnify each Lender and Collateral Agent, as well as the confidentiality provisions in Section 12.8 below, shall survive until the statute of limitations with respect to such claim or cause of action shall have run.

12.8 Confidentiality. In handling any confidential information of Borrower, each of the Lenders and Collateral Agent shall exercise the same degree of care that it exercises for their own proprietary information, but disclosure of information may be made: (a) subject to the terms and conditions of this Agreement, to the Lenders' and Collateral Agent's Subsidiaries or Affiliates, or in connection with a Lender's own financing or securitization transactions and upon the occurrence of a default, event of default or similar occurrence with respect to such financing or securitization transaction; (b) to prospective transferees (other than those identified in (a) above) or purchasers of any interest in the Term Loans (provided, however, the Lenders and Collateral Agent shall obtain such prospective transferee's or purchaser's agreement to the terms of this provision or to similar confidentiality terms); (c) as required by law, regulation, subpoena, or other order; (d) to Lenders' or Collateral Agent's regulators or as otherwise required in connection with an examination or audit; (e) as Collateral Agent reasonably considers appropriate in exercising remedies under the Loan Documents; and (f) to third party service providers of the Lenders and/or Collateral Agent so long as such service providers have executed a confidentiality agreement or have agreed to similar confidentiality terms with the Lenders and/or Collateral Agent, as applicable, with terms no less restrictive than those contained herein. Confidential information does not include information that either: (i) is in the public domain or in the Lenders' and/or Collateral Agent's possession when disclosed to the Lenders and/or Collateral Agent, or becomes part of the public domain after disclosure to the Lenders and/or Collateral Agent through no fault of the Lenders or the Collateral Agent; or (ii) is disclosed to the Lenders and/or Collateral Agent by a third party, if the Lenders and/or Collateral Agent does not know that the third party is prohibited from disclosing the information. Collateral Agent and the Lenders may use confidential information for any purpose, including, without limitation, for the development of client databases, reporting purposes, and market analysis. The provisions of the immediately preceding sentence shall survive the termination of this Agreement. The agreements provided under this

Section 12.8 supersede all prior agreements, understanding, representations, warranties, and negotiations between the parties about the subject matter of this Section 12.8.

12.9 Right of Set Off. Borrower hereby grants to Collateral Agent and to each Lender, a Lien, security interest and right of set off as security for all Obligations to Secured Parties 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 any Secured Party or any entity under the control of such Secured Party (including a Collateral Agent 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, any Secured Party 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 COLLATERAL AGENT TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED BY BORROWER.

12.10 Cooperation of Borrower. If necessary, Borrower agrees to (i) execute any documents reasonably required to effectuate and acknowledge each assignment of a Term Loan Commitment (or portion thereof) or Term Loan (or portion thereof) to an assignee in accordance with Section 12.1, (ii) make Borrower's management personnel available to meet with Collateral Agent and prospective participants and assignees of Term Loan Commitments, the Term Loans or portions thereof (which meetings shall be conducted no more often than twice every twelve months unless an Event of Default has occurred and is continuing), and (iii) assist Collateral Agent and the Lenders in the preparation of information relating to the financial affairs of Borrower for any prospective participant or assignee of a Term Loan Commitment (or portions thereof) or Term Loan (or portions thereof) as Collateral Agent or such Lender may reasonably may request. Subject to the provisions of Section 12.8, Borrower authorizes each Lender to disclose to any prospective participant or assignee of a Term Loan Commitment (or portions thereof), any and all information in such Lender's possession concerning Borrower and its financial affairs which has been delivered to such Lender by or on behalf of Borrower pursuant to this Agreement, or which has been delivered to such Lender by or on behalf of Borrower in connection with such Lender's credit evaluation of Borrower prior to entering into this Agreement, in each case subject to Section 12.8.

12.11 Public Announcement. Collateral Agent and each Lender may, with the consent of Borrower (which consent may not be unreasonably conditioned, withheld or delayed), make a public announcement of the transactions contemplated by this Agreement, and may publicize the same in marketing materials, newspapers and other publications, and otherwise, and in connection therewith may use Borrower's name, tradenames and logos. Notwithstanding the foregoing, such consent from Borrower shall not be required for any disclosures by Collateral Agent or the Lenders required by the Securities and Exchange Commission or other governmental agency and any other public disclosure with investors, other governmental agencies or other related persons, in each case, subject to applicable law and regulations.

12.12 Collateral Agent and Lender Agreement. Collateral Agent and each Lender hereby agree to the terms and conditions set forth on Exhibit B attached hereto. Borrower acknowledges and agrees to the terms and conditions set forth on Exhibit B attached hereto.

12.13 Time of Essence. Time is of the essence for the performance of Obligations under this Agreement.

12.14 Termination Prior to Maturity Date; 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 have been satisfied (other than (a) inchoate indemnity obligations and (b) other obligations that survive termination of this Agreement, in each case, for which no claim has been made). So long as Borrower has satisfied the Obligations (other than (a) inchoate indemnity obligations and (b) other obligations that survive termination of this Agreement, in each case, for which no claim has been made) in accordance with the terms of this Agreement, this Agreement may be terminated prior to the Maturity Date by Borrower, effective three (3) Business Days after written notice of termination is given to the Collateral Agent and the Lenders.

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the Effective Date.

BORROWER:

ARDELYX, INC.

By _____
Name: _____
Title: _____

COLLATERAL AGENT AND LENDER:

SOLAR CAPITAL LTD.

By _____
Name: _____
Title: _____

LENDER:

WESTERN ALLIANCE BANK

By _____
Name: _____
Title: _____

SCHEDULE 1.1

Lenders and Commitments

Lender	Term Loan Commitment	Commitment Percentage
Solar Capital Ltd.	$35,000,000	70.00%
Western Alliance Bank	$15,000,000	30.00%
TOTAL	**$50,000,000**	**100.00%**

EXHIBIT A

Description of Collateral

The Collateral consists of all of Borrower's and Guarantors' right, title and interest in and to the following personal property:

All goods, Accounts (including health care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles (except as noted below), commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit 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

All Borrower's Books relating to the foregoing, 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.

Notwithstanding the foregoing, the Collateral does not include (a) (1) more than 65% of the presently existing and hereafter arising issued and outstanding shares of capital stock owned by Borrower or any Guarantor of any Foreign Subsidiary or any Excluded Domestic Subsidiary which shares entitle the holder thereof to vote for directors or any other matter or (2) any of the stock or other equity interests in any Foreign Subsidiary that is not owned by Borrower or a Guarantor, (b) any interest of Borrower as a lessee or sublessee under a real property lease; (c) rights held under a license or other agreement that are not assignable by their terms without the consent of the counterparty thereof (but only to the extent such restriction on assignment is effective under Section 9-406, 9-407, 9-408 or 9-409 of the Code (or any successor provision or provisions) of any relevant jurisdiction or any other applicable law (including the Bankruptcy Code) or principles of equity); (d) any interest of Borrower or any Guarantor as a lessee or borrower under an Equipment lease or Equipment financing if Borrower or such Guarantor, as applicable, is prohibited by the terms of such agreement from granting a security interest in such lease or agreement or under which such an assignment or Lien would cause a default to occur under such lease; provided, however, that upon termination of such prohibition, such interest shall immediately become Collateral without any action by Borrower (or such Guarantor, as applicable), Collateral Agent or any Lender, or (e) any Intellectual Property; provided, however, the Collateral shall include, all Accounts with respect to Intellectual Property and all proceeds of Intellectual Property and any sale of Intellectual Property. If a judicial authority (including a U.S. Bankruptcy Court) would hold that a security interest in the underlying Intellectual Property is necessary to have a security interest in such Accounts and such property that are proceeds of Intellectual Property, then the Collateral shall automatically, and effective as of the Effective Date, include the Intellectual Property to the extent necessary to permit perfection of Collateral Agent's security interest in such Accounts and such other property of Borrower that are proceeds of the Intellectual Property.

EXHIBIT B

Collateral Agent and Lender Terms

1. Appointment of Collateral Agent.

(a) Each Lender hereby appoints Solar (together with any successor Collateral Agent pursuant to Section 7 of this Exhibit B) as Collateral Agent under the Loan Documents and authorizes Collateral Agent to (i) execute and deliver the Loan Documents and accept delivery thereof on its behalf from Borrower, (ii) take such action on its behalf and to exercise all rights, powers and remedies and perform the duties as are expressly delegated to Collateral Agent under such Loan Documents and (iii) exercise such powers as are reasonably incidental thereto.

(b) Without limiting the generality of clause (a) above, Collateral Agent shall have the sole and exclusive right and authority (to the exclusion of the Lenders), and is hereby authorized, to (i) act as the disbursing and collecting agent for the Lenders with respect to all payments and collections arising in connection with the Loan Documents (including in any other bankruptcy, insolvency or similar proceeding), and each Person making any payment in connection with any Loan Document to any Lender is hereby authorized to make such payment to Collateral Agent, (ii) file and prove claims and file other documents necessary or desirable to allow the claims of Collateral Agent and Lenders with respect to any Obligation in any bankruptcy, insolvency or similar proceeding (but not to vote, consent or otherwise act on behalf of such Lender), (iii) act as collateral agent for the Secured Parties for purposes of the perfection of all Liens created by the Loan Documents and all other purposes stated therein, (iv) manage, supervise and otherwise deal with the Collateral as permitted pursuant to the Loan Agreement, (v) 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 Loan Documents, (vi) except as may be otherwise specified in any Loan Document, exercise all remedies given to Collateral Agent and the other Lenders with respect to Borrower and/or the Collateral, whether under the Loan Documents, applicable Requirements of Law or otherwise and (vii) execute any amendment, consent or waiver under the Loan Documents on behalf of any Lender that has consented in writing to such amendment, consent or waiver; provided, however, that Collateral Agent hereby appoints, authorizes and directs each Lender to act as collateral sub-agent for Collateral Agent and the Lenders for purposes of the perfection of all Liens with respect to the Collateral, including any Deposit Account maintained by Borrower or any Guarantor 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 Collateral Agent, and each Lender hereby agrees to take such further actions to the extent, and only to the extent, so authorized and directed. Collateral Agent may, upon any term or condition it specifies, delegate or exercise any of its rights, powers and remedies under, and delegate or perform any of its duties or any other action with respect to, any Loan Document by or through any trustee, co-agent, employee, attorney-in-fact and any other Person (including any Lender). Any such Person shall benefit from this Exhibit B to the extent provided by Collateral Agent.

(c) Under the Loan Documents, and except as expressly set forth in this Exhibit B, Collateral Agent (i) is acting solely on behalf of the Lenders, with duties that are entirely administrative in nature, notwithstanding the use of the defined term "Collateral Agent", the terms "agent", "Collateral Agent" and "collateral agent" and similar terms in any Loan Document to refer to Collateral Agent, which terms are used for title purposes only, (ii) is not assuming any obligation under any Loan Document other than as expressly set forth therein or any role as agent, fiduciary or trustee of or for any Lender or any other Person and (iii) shall have no implied functions, responsibilities, duties, obligations or other liabilities under any Loan Document, and each Lender, by accepting the benefits of the Loan Documents, hereby waives and agrees not to assert any claim against Collateral Agent based on the roles, duties and legal relationships expressly disclaimed in clauses (i) through (iii) above. Except as expressly set forth in the Loan Documents, Collateral Agent shall not have any duty to disclose, and shall not be liable for failure to disclose, any information relating to Borrower or any of its Subsidiaries that is communicated to or obtained by Solar or any of its Affiliates in any capacity.

2. Binding Effect; Use of Discretion; E-Systems.

(a) Each Lender, by accepting the benefits of the Loan Documents, agrees that (i) any action taken by Collateral Agent or the Required Lenders (or, if expressly required in any Loan Document, a greater proportion of the Lenders) in accordance with the provisions of the Loan Documents, (ii) any action taken by Collateral Agent in reliance upon the instructions of the Required Lenders (or, where so required, such greater proportion) and (iii) the exercise by Collateral Agent or the Required Lenders (or, where so required, such greater proportion) of the powers set forth herein or therein, together with such other powers as are reasonably incidental thereto, shall be authorized and binding upon all of Lenders.

(b) If Collateral Agent shall request instructions from the Required Lenders or all affected Lenders with respect to any act or action (including failure to act) in connection with any Loan Document, then Collateral Agent shall be entitled to refrain from such act or taking such action unless and until Collateral Agent shall have received instructions from the Required Lenders or all affected Lenders, as the case may be, and Collateral Agent shall not incur liability to any Person by reason of so refraining. Collateral Agent shall be fully justified in failing or refusing to take any action under any Loan Document (i) if such action would, in the opinion of Collateral Agent, be contrary to any Requirement of Law or any Loan Document, (ii) if such action would, in the opinion of Collateral Agent, expose Collateral Agent to any potential liability under any Requirement of Law or (iii) if Collateral Agent shall not first be indemnified to its satisfaction against any and all liability and expense which may be incurred by it by reason of taking or continuing to take any such action. Without limiting the foregoing, no Lender shall have any right of action whatsoever against Collateral Agent as a result of Collateral Agent acting or refraining from acting under any Loan Document in accordance with the instructions of the Required Lenders or all affected Lenders, as applicable.

(c) Collateral Agent is hereby authorized by Borrower and each Lender to establish procedures (and to amend such procedures from time to time) to facilitate administration and servicing of the Term Loans and other matters incidental thereto. Without limiting the generality of the foregoing, Collateral Agent is hereby authorized to establish procedures to make available or deliver, or to accept, notices, documents (including, without limitation, borrowing base certificates) and similar items on, by posting to or submitting and/or completion, on E-Systems. Borrower and each Lender acknowledges and agrees that the use of transmissions via an E-System or electronic mail is not necessarily secure and that there are risks associated with such use, including risks of interception, disclosure and abuse, and Borrower and each Lender assumes and accepts such risks by hereby authorizing the transmission via E-Systems or electronic mail. Each “e-signature” on any such posting shall be deemed sufficient to satisfy any requirement for a “signature”, and each such posting shall be deemed sufficient to satisfy any requirement for a “writing”, in each case including pursuant to any Loan Document, any applicable provision of any Code, the federal Uniform Electronic Transactions Act, the Electronic Signatures in Global and National Commerce Act and any substantive or procedural Requirement of Law governing such subject matter. All uses of an E-System shall be governed by and subject to, in addition to this Section, the separate terms, conditions and privacy policy posted or referenced in such E-System (or such terms, conditions and privacy policy as may be updated from time to time, including on such E-System) and related contractual obligations executed by Collateral Agent, Borrower and/or Lenders in connection with the use of such E-System. ALL E-SYSTEMS AND ELECTRONIC TRANSMISSIONS SHALL BE PROVIDED “AS IS” AND “AS AVAILABLE”. NO REPRESENTATION OR WARRANTY OF ANY KIND IS MADE BY AGENT, ANY LENDER OR ANY OF THEIR RELATED PERSONS IN CONNECTION WITH ANY E-SYSTEMS.

3. Collateral Agent’s Reliance, Etc. Collateral Agent may, without incurring any liability hereunder, (a) consult with any of its Related Persons and, whether or not selected by it, any other advisors, accountants and other experts (including advisors to, and accountants and experts engaged by, Borrower) and (b) rely and act upon any document and information (including those transmitted by electronic transmission) and any telephone message or conversation, in each case believed by it in good faith to be genuine and transmitted, signed or otherwise authenticated by the appropriate parties. None of Collateral Agent and its Related Persons shall be liable for any action taken or omitted to be taken by any of them under or in connection with any Loan Document, and each Lender and Borrower hereby waives and shall not assert (and Borrower shall cause its Subsidiaries to waive and agree not to assert) any right, claim or cause of action based thereon, except to the extent of liabilities resulting from the gross negligence or willful misconduct of Collateral Agent or, as the case may be, such Related Person (each as determined in a final, non-appealable judgment of a court of competent jurisdiction) in connection with the duties of Collateral Agent expressly set forth herein. Without limiting the foregoing, Collateral Agent: (i) shall not be responsible or otherwise incur liability for any action or omission taken in reliance upon the

instructions of the Required Lenders or for the actions or omissions of any of its Related Persons, except to the extent that a court of competent jurisdiction determines in a final non-appealable judgment that Collateral Agent acted with gross negligence or willful misconduct in the selection of such Related Person; (ii) shall not be responsible to any Lender or other Person for the due execution, legality, validity, enforceability, effectiveness, genuineness, sufficiency or value of, or the attachment, perfection or priority of any Lien created or purported to be created under or in connection with, any Loan Document; (iii) makes no warranty or representation, and shall not be responsible, to any Lender or other Person for any statement, document, information, representation or warranty made or furnished by or on behalf of Borrower or any Related Person of Borrower in connection with any Loan Document or any transaction contemplated therein or any other document or information with respect to Borrower, whether or not transmitted or (except for documents expressly required under any Loan Document to be transmitted to the Lenders) omitted to be transmitted by Collateral Agent, including as to completeness, accuracy, scope or adequacy thereof, or for the scope, nature or results of any due diligence performed by Collateral Agent in connection with the Loan Documents; and (iv) shall not have any duty to ascertain or to inquire as to the performance or observance of any provision of any Loan Document, whether any condition set forth in any Loan Document is satisfied or waived, as to the financial condition of Borrower or as to the existence or continuation or possible occurrence or continuation of any Event of Default, and shall not be deemed to have notice or knowledge of such occurrence or continuation unless it has received a notice from Borrower or any Lender describing such Event of Default that is clearly labeled "notice of default" (in which case Collateral Agent shall promptly give notice of such receipt to all Lenders.

4. Collateral Agent Individually. To the extent Collateral Agent or any of its Affiliates becomes a Lender hereunder, it shall have and may exercise the same rights and powers hereunder and shall be subject to the same obligations and liabilities as any other Lender and the terms "Lender", "Required Lender" and any similar terms shall, except where otherwise expressly provided in any Loan Document, include, without limitation, Collateral Agent or such Affiliate, as the case may be, in its individual capacity as Lender, or as one of the Required Lenders.

5. Lender Credit Decision; Collateral Agent Report. Each Lender acknowledges that it shall, independently and without reliance upon Collateral Agent, any Lender or any of their Related Persons or upon any document solely or in part because such document was transmitted by Collateral Agent or any of its Related Persons, conduct its own independent investigation of the financial condition and affairs of Borrower and make and continue to make its own credit decisions in connection with entering into, and taking or not taking any action under, any Loan Document or with respect to any transaction contemplated in any Loan Document, in each case based on such documents and information as it shall deem appropriate. Except for documents expressly required by any Loan Document to be transmitted by Collateral Agent to the Lenders, Collateral 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 Borrower or any Affiliate of Borrower that may come in to the possession of Collateral Agent or any of its Related Persons. Each Lender agrees that is shall not rely on any field examination, audit or other report provided by Collateral Agent or its Related Persons (an "**Collateral Agent Report**"). Each Lender further acknowledges that any Collateral Agent Report (a) is provided to the Lenders solely as a courtesy, without consideration, and based upon the understanding that such Lender will not rely on such Collateral Agent Report, (b) was prepared by Collateral Agent or its Related Persons based upon information provided by Borrower solely for Collateral Agent's own internal use, and (c) may not be complete and may not reflect all information and findings obtained by Collateral Agent or its Related Persons regarding the operations and condition of Borrower. Neither Collateral Agent nor any of its Related Persons makes any representations or warranties of any kind with respect to (i) any existing or proposed financing, (ii) the accuracy or completeness of the information contained in any Collateral Agent Report or in any related documentation, (iii) the scope or adequacy of Collateral Agent's and its Related Persons' due diligence, or the presence or absence of any errors or omissions contained in any Collateral Agent Report or in any related documentation, and (iv) any work performed by Collateral Agent or Collateral Agent's Related Persons in connection with or using any Collateral Agent Report or any related documentation. Neither Collateral Agent nor any of its Related Persons shall have any duties or obligations in connection with or as a result of any Lender receiving a copy of any Collateral Agent Report. Without limiting the generality of the forgoing, neither Collateral Agent nor any of its Related Persons shall have any responsibility for the accuracy or completeness of any Collateral Agent Report, or the appropriateness of any Collateral Agent Report for any Lender's purposes, and shall have no duty or responsibility to correct or update any Collateral Agent Report or disclose to any Lender any other information not embodied in any Collateral Agent

Report, including any supplemental information obtained after the date of any Collateral Agent Report. Each Lender releases, and agrees that it will not assert, any claim against Collateral Agent or its Related Persons that in any way relates to any Collateral Agent Report or arises out of any Lender having access to any Collateral Agent Report or any discussion of its contents, and agrees to indemnify and hold harmless Collateral Agent and its Related Persons from all claims, liabilities and expenses relating to a breach by any Lender arising out of such Lender's access to any Collateral Agent Report or any discussion of its contents.

6. Indemnification. Each Lender agrees to reimburse Collateral Agent and each of its Related Persons (to the extent not reimbursed by Borrower as required under the Loan Documents (including pursuant to Section 12.2 of the Agreement)) promptly upon demand for its Pro Rata Share of any out-of-pocket costs and expenses (including, without limitation, fees, charges and disbursements of financial, legal and other advisors and any taxes or insurance paid in the name of, or on behalf of, Borrower) incurred by Collateral Agent or any of its Related Persons in connection with the preparation, syndication, execution, delivery, administration, modification, amendment, consent, waiver or enforcement of, or the taking of any other action (whether through negotiations, through any work-out, bankruptcy, restructuring or other legal or other proceeding (including, without limitation, preparation for and/or response to any subpoena or request for document production relating thereto) or otherwise) in respect of, or legal advice with respect to, its rights or responsibilities under, any Loan Document (collectively, "**Costs**"); provided, that no Lender shall be liable for the payment to Collateral Agent of any Costs which resulted from the gross negligence or willful misconduct of Collateral Agent or, as the case may be, such Related Person, as determined by a final non-appealable judgment of a court of competent jurisdiction. Each Lender further agrees to indemnify Collateral Agent and each of its Related Persons (to the extent not reimbursed by Borrower as required under the Loan Documents (including pursuant to Section 12.2 of the Agreement)), ratably according to its Pro Rata Share, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind or nature whatsoever (including, to the extent not indemnified by the applicable Lender, taxes, interests and penalties imposed for not properly withholding or backup withholding on payments made to or for the account of any Lender) that may be imposed on, incurred by, or asserted against Collateral Agent or any of its Related Persons in any matter relating to or arising out of, in connection with or as a result of any Loan Document or any other act, event or transaction related, contemplated in or attendant to any such document, or, in each case, any action taken or omitted to be taken by Collateral Agent or any of its Related Persons under or with respect to the foregoing; provided that no Lender shall be liable to Collateral Agent or any of its Related Persons under this Section 6 of this Exhibit B to the extent such liability has resulted from the gross negligence or willful misconduct of Collateral Agent or, as the case may be, such Related Person, as determined by a final non-appealable judgment of a court of competent jurisdiction.

7. Successor Collateral Agent. Collateral Agent may resign at any time by delivering notice of such resignation to the Lenders and Borrower, effective on the date set forth in such notice or, if no such date is set forth therein, upon the date such notice shall be effective, in accordance with the terms of this Section 7 of this Exhibit B. If Collateral Agent delivers any such notice, the Required Lenders shall have the right to appoint a successor Collateral Agent. If, after 30 days after the date of the retiring Collateral Agent's notice of resignation, no successor Collateral Agent has been appointed by the Required Lenders and has accepted such appointment, then the retiring Collateral Agent may, on behalf of the Lenders, appoint a successor Collateral Agent from among the Original Lenders, if any, and if none, from among the Lenders. Effective immediately upon its resignation, (a) the retiring Collateral Agent shall be discharged from its duties and obligations under the Loan Documents, (b) the Lenders shall assume and perform all of the duties of Collateral Agent until a successor Collateral Agent shall have accepted a valid appointment hereunder, (c) the retiring Collateral Agent and its Related Persons shall no longer have the benefit of any provision of any Loan Document other than with respect to any actions taken or omitted to be taken while such retiring Collateral Agent was, or because such Collateral Agent had been, validly acting as Collateral Agent under the Loan Documents, and (d) subject to its rights under Section 2(b) of this Exhibit B, the retiring Collateral Agent shall take such action as may be reasonably necessary to assign to the successor Collateral Agent its rights as Collateral Agent under the Loan Documents. Effective immediately upon its acceptance of a valid appointment as Collateral Agent, a successor Collateral Agent shall succeed to, and become vested with, all the rights, powers, privileges and duties of the retiring Collateral Agent under the Loan Documents.

8. Release of Collateral. Each Lender hereby consents to the release and hereby directs Collateral Agent to release (or in the case of clause (b)(ii) below, release or subordinate) the following:

(a) any Guarantor or co-Borrower if all of the stock of such Subsidiary owned by Borrower is sold or transferred in a transaction permitted under the Loan Documents (including pursuant to a valid waiver or consent), to the extent that, after giving effect to such transaction, such Subsidiary would not be required to guaranty any Obligations pursuant to any Loan Document; and

(b) any Lien held by Collateral Agent for the benefit of the Secured Parties against (i) any Collateral that is sold or otherwise disposed of by Borrower or any Guarantor in a transaction permitted by the Loan Documents (including pursuant to a valid waiver or consent), (ii) any Collateral subject to a Lien that is expressly permitted under clause (c) of the definition of the term "Permitted Lien" and (iii) all of the Collateral, Borrower and any Guarantor, upon (A) termination of all of the Term Loan Commitments, (B) the payment in full in cash of all of the Obligations (other than (a) inchoate indemnity obligations and (b) other obligations that survive termination of this Agreement, in each case, for which no claim has been made), and (C) to the extent requested by Collateral Agent or a Lender, receipt by Collateral Agent and Lenders of liability releases from Borrower in form and substance acceptable to Collateral Agent and the Lenders (the satisfaction of the conditions in this clause (iii), the "**Termination Date**").

9. Setoff and Sharing of Payments. In addition to any rights now or hereafter granted under any applicable Requirement of Law and not by way of limitation of any such rights, upon the occurrence and during the continuance of any Event of Default and subject to Section 10(d) of this Exhibit B, each Lender is hereby authorized at any time or from time to time upon the direction of Collateral Agent, without notice to Borrower or any other Person, any such notice being hereby expressly waived, to setoff and to appropriate and to apply any and all balances held by it at any of its offices for the account of Borrower (regardless of whether such balances are then due to Borrower) and any other properties or assets at any time held or owing by that Lender or that holder to or for the credit or for the account of Borrower against and on account of any of the Obligations that are not paid when due. Any Lender exercising a right of setoff or otherwise receiving any payment on account of the Obligations in excess of its Pro Rata Share thereof shall purchase for cash (and the other Lenders or holders shall sell) such participations in each such other Lender's or holder's Pro Rata Share of the Obligations as would be necessary to cause such Lender to share the amount so offset or otherwise received with each other Lender or holder in accordance with their respective Pro Rata Shares of the Obligations. Borrower agrees, to the fullest extent permitted by law, that (a) any Lender may exercise its right to offset with respect to amounts in excess of its Pro Rata Share of the Obligations and may purchase participations in accordance with the preceding sentence and (b) any Lender so purchasing a participation in the Term Loans made or other Obligations held by other Lenders or holders may exercise all rights of offset, bankers' liens, counterclaims or similar rights with respect to such participation as fully as if such Lender or holder were a direct holder of the Term Loans and the other Obligations in the amount of such participation. Notwithstanding the foregoing, if all or any portion of the offset amount or payment otherwise received is thereafter recovered from the Lender that has exercised the right of offset, the purchase of participations by that Lender shall be rescinded and the purchase price restored without interest.

10. Advances; Payments; Non-Funding Lenders; Actions in Concert.

(a) Advances; Payments. If Collateral Agent receives any payment with respect to the Term Loan for the account of the Lenders on or prior to 2:00 p.m. (New York time) on any Business Day, Collateral Agent shall pay to each applicable Lender such Lender's Pro Rata Share of such payment on such Business Day. If Collateral Agent receives any payment with respect to the Term Loan for the account of Lenders after 2:00 p.m. (New York time) on any Business Day, Collateral Agent shall pay to each applicable Lender such Lender's Pro Rata Share of such payment on the next Business Day.

(b) Return of Payments.

(i) If Collateral 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 Collateral Agent or on behalf of from Borrower and such related payment is not received by Collateral Agent, then Collateral Agent will be entitled to recover such amount (including interest accruing on such amount at the rate otherwise applicable to such Obligation) from such Lender on demand without setoff, counterclaim or deduction of any kind.

(ii) If Collateral Agent determines at any time that any amount received by Collateral Agent under any Loan Document must be returned to Borrower or paid to any other Person pursuant to any insolvency law or otherwise, then, notwithstanding any other term or condition of any Loan Document, Collateral Agent will not be required to distribute any portion thereof to any Lender. In addition, each Lender will repay to Collateral Agent on demand any portion of such amount that Collateral Agent has distributed to such Lender, together with interest at such rate, if any, as Collateral Agent is required to pay to Borrower or such other Person, without setoff, counterclaim or deduction of any kind and Collateral Agent will be entitled to set off against future distributions to such Lender any such amounts (with interest) that are not repaid on demand.

(c) Non-Funding Lenders.

(i) To the extent that any Lender has failed to fund the Term Loan or any other payments required to be made by it under the Loan Documents after the Term Loan is required to be made or such payment is due (a "**Non-Funding Lender**"), Collateral 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 or on behalf of Borrower thereunder. The failure of any Non-Funding Lender to make the Term Loan 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 such Term Loan, but neither any Other Lender nor Collateral Agent shall be responsible for the failure of any Non-Funding Lender to make such Term Loan 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 Loan Document or constitute a "Lender" (or be included in the calculation of "Required Lenders" hereunder) for any voting or consent rights under or with respect to any Loan Document. At Borrower's request, Collateral Agent or a Person reasonably acceptable to Collateral Agent shall have the right with Collateral Agent's consent and in Collateral Agent's sole discretion (but Collateral Agent or any such Person shall have no obligation) to purchase from any Non-Funding Lender, and each Lender agrees that if it becomes a Non-Funding Lender it shall, at Collateral Agent's request, sell and assign to Collateral Agent or such Person, all of the Term Loan Commitment (if any), and all of the outstanding Term Loan of that Non-Funding Lender for an amount equal to the aggregate outstanding principal balance of the Term Loan held by such Non-Funding Lender and all accrued interest with respect thereto through the date of sale, such purchase and sale to be consummated pursuant to an executed assignment agreement in form and substance reasonably satisfactory to, and acknowledged by, Collateral Agent.

(d) Actions in Concert. Anything in this Agreement to the contrary notwithstanding, each Lender hereby agrees with each other Lender that no Lender shall take any action to protect or enforce its rights arising out of any Loan Document (including exercising any rights of setoff) without first obtaining the prior written consent of the Required Lenders, it being the intent of Lenders that any such action to protect or enforce rights under any Loan Document shall be taken in concert and at the direction or with the consent of the Required Lenders. Notwithstanding the immediately preceding sentence, if an Event of Default exists for longer than five (5) days and the Required Lenders cannot agree whether and/or what remedies to exercise, or whether or what actions, if any, to take under any Loan Document, the Lender (which must be an Original Lender or an Affiliate thereof) wishing to take the stronger Enforcement Action (the "**Enforcing Lender**") shall have the right to give notice to the other Lenders and, eighty-five (85) days after receipt of such notice, shall be entitled to determine and shall control the timing, order and type of Enforcement Actions which will be taken and all other matters in connection with any such Enforcement Actions; provided, however, if during such eighty-five (85) day period, the Required Lenders and the Enforcing Lender agree on timing, order and type of Enforcement Action, the notice shall be deemed rescinded. To facilitate these rights to control Enforcement Actions, upon either Original Lender (or Affilate thereof) becoming the Enforcing Lender, if the Enforcing Lender is not already the Collateral Agent, then automatically and without the necessity of any further action being taken by any party, solely with respect to taking Enforcement Actions, (x) the original Collateral Agent shall be deemed to have resigned as Collateral Agent and (y) the Lenders shall be deemed to have unanimously appointed the Enforcing Lender as successor Collateral Agent under this Agreement and the other Loan Documents (and the Enforcing Lender shall be deemed to have accepted such appointment). As used herein, "**Enforcement Action**" means any action, whether judicial or nonjudicial, to repossess, collect, accelerate, offset, recoup, give notification to third parties with respect to, sell, dispose of, foreclose upon, give notice of sale, disposition, or foreclosure with respect to, or obtain equitable or injunctive relief with respect to the Collateral or the satisfaction of the Obligations.

11. Priority of Encumbrances; Cash Collateral. The parties acknowledge that Borrower may in the future desire to pledge cash and/or securities in connection with the provision by Bridge Bank to Borrower of certain products and/or credit services facilities, including, without limitation, any letters of credit, cash management services (including, without limitation, merchant services, direct deposit of payroll, business credit cards, and check cashing services), interest rate swap arrangements, and foreign exchange services (such products and/or services, collectively, the "**Bank Services**") as any such products or services may be identified in Bridge Bank's various agreements related thereto. The parties agree that notwithstanding anything to the contrary contained in the Loan Documents, Borrower may pledge cash and/or Cash Equivalents in the aggregate principal amount of up to Five Hundred Thousand Dollars ($500,000) to Bridge Bank as collateral to secure its actual outstanding obligations to Bridge Bank relating to Bank Services (such cash and/or Cash Equivalents and the proceeds thereof (but expressly excluding any other Collateral) being hereinafter referred to as the "**Cash Collateral**"). The parties further agree that notwithstanding anything to the contrary contained in this Agreement, Bridge Bank's lien on the Cash Collateral shall be senior in priority to the liens of the Collateral Agent and the Lenders under the Loan Documents to the extent of Borrower's actual reimbursement obligations in respect of Bank Services up to Two Hundred Fifty Thousand Dollars ($500,000) (collectively, the "**Reimbursement Obligations**"), and Bridge Bank may take such action as Bridge Bank deems necessary in respect of the Cash Collateral only to enforce its rights and remedies to satisfy the Reimbursement Obligations, all without prior notice to or the consent of Collateral Agent or the other Lenders. Bridge Bank agrees to use its best efforts to give immediate notice to Collateral Agent of such action being taken, and Collateral Agent may not foreclose upon, or force Bridge Bank to take any actions with respect to, the Cash Collateral notwithstanding anything in the Loan Documents to the contrary. Bridge Bank may extend credit to Borrower in connection with the provision of Bank Services (not to exceed the aggregate amount of Two Hundred Fifty Thousand Dollars ($250,000), inclusive of the Reimbursement Obligations (collectively, the "**Aggregate Bank Services Amount**")). Western Alliance Bank (on behalf of Bridge Bank) consents to Borrower's grant to Collateral Agent and/or the Lenders of liens and security interests against the Cash Collateral (and agrees that Bridge Bank shall hold such Cash Collateral both to perfect Bridge Bank's own security interests therein as provided for in this paragraph and also as bailee and agent for Collateral Agent and Lenders to perfect their security interests therein granted under the Loan Documents; however, Bridge Bank may release the Cash Collateral without the consent of Collateral Agent or the other Lenders), and the parties agree that (i) the Cash Collateral and proceeds thereof shall be distributed to Bridge Bank and the other Lenders, after satisfaction of the Reimbursement Obligations to Bridge Bank, in the manner and order set forth in this Agreement and the Loan Documents, as applicable, and (ii) to the extent that the Cash Collateral is insufficient to satisfy the Aggregate Bank Services Amount to Bridge Bank in full (a "**Deficiency**"), any such Deficiency cannot be repaid by Borrower (and Bridge Bank shall not accept or receive any payments as to such Deficiency), if at all, until all of the Borrower's other indebtedness to Collateral Agent and the Lenders under the Loan Documents have first been fully repaid. In addition to and without limiting the foregoing, Bridge Bank will not, without the prior written consent of Collateral Agent, which may be granted or withheld in Collateral Agent's sole discretion, declare an Event of Default, accelerate the Indebtedness or exercise any remedies under the Loan Documents based upon the occurrence of any arrearages, the existence of any Deficiency, or otherwise with respect to Bank Services.

EXHIBIT C

Loan Payment Request Form

Fax To: (212) 993-1698 Date: _____

LOAN PAYMENT:

[_____]

From Account # _____ To Account # _____
(Deposit Account #) (Loan Account #)

Principal $ _____ and/or Interest $ _____

Authorized Signature: _____ Phone Number: _____

Print Name/Title: _____

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 # _____ To Account # _____
(Loan Account #) (Deposit Account #)

Amount of Advance $ _____

All Borrower's representations and warranties in the Loan 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 Bank: _____ Account Number: _____

City and State: _____

Beneficiary Bank Transit (ABA) #: _____ Beneficiary Bank Code (Swift, Sort, Chip, etc.): _____

(For International Wire Only)

Intermediary Bank: _____ 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 (us).

Authorized Signature: _____ 2nd Signature (if required): _____

Print Name/Title: _____ Print Name/Title: _____

Telephone #: _____ Telephone #: _____]

Compliance Certificate

TO: SOLAR CAPITAL LTD., as Collateral Agent and Lender
WESTERN ALLIANCE BANK, as Lender

FROM: ARDELYX, INC.

The undersigned authorized officer ("**Officer**") of Ardelyx, Inc. ("**Borrower**"), hereby certifies solely in his/her capacity as an officer of Borrower and not in his/her individual capacity, that in accordance with the terms and conditions of the Loan and Security Agreement dated as of May 16, 2018, by and among Borrower, Collateral Agent, and the Lenders from time to time party thereto (the "**Loan Agreement**;" capitalized terms used but not otherwise defined herein shall have the meanings given them in the Loan Agreement),

(a) Borrower is in complete compliance for the period ending _____ with all required covenants except as noted below;

(b) There are no Defaults or Events of Default, except as noted below;

(c) Except as noted below, all representations and warranties of Borrower stated in the Loan Documents are true and correct in all material respects on this date and for the period described in (a), above; 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) Borrower, and each of Borrower's Subsidiaries, has timely filed all required tax returns and reports, Borrower, and each of Borrower's Subsidiaries, has timely paid all foreign, federal, state, and local taxes, assessments, deposits and contributions owed by Borrower, or Subsidiary, except as otherwise permitted pursuant to the terms of Section 5.8 of the Loan Agreement;

(e) 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 Collateral Agent and the Lenders.

Attached are the required documents, if any, supporting our certification(s). The Officer, on behalf of Borrower, further certifies that the attached financial statements are prepared in accordance with Generally Accepted Accounting Principles (GAAP) and are consistently applied from one period to the next except as explained in an accompanying letter or footnotes and except, in the case of unaudited financial statements, for the absence of footnotes and subject to year-end audit adjustments as to the interim financial statements.

Please indicate compliance status since the last Compliance Certificate by circling Yes, No, or N/A under "Complies" column.

	Reporting Covenant	**Requirement**	**Actual**	**Complies**		
1)	Financial statements	Monthly within 30 days (45 days for the last month of each quarter)		Yes	No	N/A
2)	Annual (CPA Audited) statements	Within 90 days after FYE or 5 days after filing with SEC		Yes	No	N/A
3)	Annual Financial Projections/Budget	Annually (within 60 days after FYE) or 10 days of approval and when received (7 days of approval)		Yes	No	N/A

4)	Account statements for each Collateral Account	Monthly within 30 days		Yes	No	N/A
5)	Compliance Certificate	Monthly within 30 days		Yes	No	N/A
6)	IP notice (events reasonably expected to materially and adversely affect value of IP or result in MAC)	When required		Yes	No	N/A
7)	Total amount of Borrower's cash and Cash Equivalents held at Western Alliance Bank at the last day of the measurement period	At all times, beginning 45 days after Effective Date	$_____	Yes	No	N/A

Deposit and Securities Accounts
(Please list all accounts; attach separate sheet if additional space needed)

	Institution Name	**Account Number**	**New Account?**		**Account Control Agreement in place?**	
1)			Yes	No	Yes	No
2)			Yes	No	Yes	No
3)			Yes	No	Yes	No
4)			Yes	No	Yes	No

Financial Covenants

7.13 – Minimum Liquidity:

1. Unrestricted cash and Cash Equivalents: _____

2. Principal payments due on interest-bearing liabilities for the upcoming seven (7) fiscal months (clause (i)): _____

3. The cash spent in respect of operations and capital expenditures by Borrower per month as determined based on the average taken over the most recently completed seven fiscal months (excluding principal payments made in respect of interest-bearing liabilities made in such period) (clause (ii)): _____

4. 7x Line 3 (clause (ii)) _____

5. Line 2 plus Line 4 _____

6. Is Line 1 greater than or equal to Line 5? Yes No

Other Matters

1) Have there been any changes in Key Persons since the last Compliance Certificate? Yes No

2)	Have there been any transfers/sales/disposals/retirement of Collateral or IP prohibited by the Loan Agreement?	Yes	No
3)	Have there been any new or pending claims or causes of action against Borrower that involve more than Two Hundred Fifty Thousand Dollars ($250,000.00)?	Yes	No
4)	Has Borrower provided the Collateral Agent with all notices required to be delivered under Sections 6.2(a) and 6.2(b) of the Loan Agreement?	Yes	No
5)	With respect to each Foreign Subsidiary, do any hold assets worth One Hundred Thousand Dollars ($100,000) or more in book value?	Yes	No
6)	If the answer to question 5 is Yes, has the Company provided certificates representing a pledge of 65% of the stock, units or other evidence of ownership held by Borrower or Guarantor of such Foreign Subsidiary?	Yes	No
7)	Have you entered into a Material Agreement since the last Compliance Certificate?	Yes	No
	[If yes, provide]		

Exceptions

Please explain any exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions." Attach separate sheet if additional space needed.)

ARDELYX, INC.

By: _____
Name: _____
Title: _____

Date:

COLLATERAL AGENT USE ONLY

Received by: _____ Date: _____

Verified by: _____ Date: _____

Compliance Status: Yes No

EXHIBIT E

CORPORATE BORROWING CERTIFICATE

BORROWER: ARDELYX, INC. **DATE**: May 16, 2018
LENDER: SOLAR CAPITAL LTD., as Collateral Agent and Lender
WESTERN ALLIANCE BANK, as Lender

I hereby certify, solely in my capacity as an officer of Borrower and not in my individual capacity, as follows, as of the date set forth above:

1. I am the Secretary or other officer of Borrower. My title is as set forth below.

2. Borrower's exact legal name is set forth above. Borrower is a corporation existing under the laws of the State of Delaware.

3. Attached hereto as Exhibit A and Exhibit B, respectively, are true, correct and complete copies of (i) Borrower's Certificate of Incorporation (including amendments), as filed with the Secretary of State of the state in which Borrower is incorporated as set forth in paragraph 2 above; and (ii) Borrower's Bylaws. Neither such Certificate of Incorporation nor such Bylaws have been amended, annulled, rescinded, revoked or supplemented, and such Certificate of Incorporation and such Bylaws remain in full force and effect as of the date hereof.

4. The following resolutions were duly and validly adopted by Borrower's board of directors (or a duly authorized committee thereof) at a duly held meeting of such directors (or pursuant to a unanimous written consent or other authorized corporate action). Such resolutions are in full force and effect as of the date hereof and have not been in any way modified, repealed, rescinded, amended or revoked, and the Lenders may rely on them until each Lender receives written notice of revocation from Borrower.

[*Balance of Page Intentionally Left Blank*]

RESOLVED, that **any one** of the following officers or employees of Borrower, whose names, titles and signatures are below, may act on behalf of Borrower:

Name	Title	Signature	Authorized t Add or Remo Signatories
			☐
			☐
			☐
			☐

RESOLVED FURTHER, that **any one** of the persons designated above with a checked box beside his or her name may, from time to time, add or remove any individuals to and from the above list of persons authorized to act on behalf of Borrower.

RESOLVED FURTHER, that such individuals may, on behalf of Borrower:

Borrow Money. Borrow money from the Lenders.

Execute Loan Documents. Execute any loan documents any Lender requires.

Grant Security. Grant Collateral Agent a security interest in any of Borrower's assets (excluding intellectual property).

Negotiate Items. Negotiate or discount all drafts, trade acceptances, promissory notes, or other indebtedness in which Borrower has an interest and receive cash or otherwise use the proceeds.

Further Acts. Designate other individuals to request advances, pay fees and costs and execute other documents or agreements (including documents or agreement that waive Borrower's right to a jury trial) they believe to be necessary to effectuate such resolutions.

RESOLVED FURTHER, that all acts authorized by the above resolutions and any prior acts relating thereto are ratified.

[*Balance of Page Intentionally Left Blank*]

5. The persons listed above are Borrower's officers or employees with their titles and signatures shown next to their names.

By: _____
Name:
Title:

**** If the Secretary or other certifying officer executing above is designated by the resolutions set forth in paragraph 4 as one of the authorized signing officers, this Certificate must also be signed by a second authorized officer or director of Borrower.*

I, the [_____] of Borrower, hereby certify as to paragraphs 1 through 5 above, as [_____] on the date set forth above.

By: _____
Name:
Title:

EXHIBIT A

Certificate of Incorporation (including amendments)

[see attached]

EXHIBIT B

Bylaws

[see attached]

Exhibit F

Form of Secured Promissory Note

THIS NOTE WAS ISSUED WITH "ORIGINAL ISSUE DISCOUNT" WITHIN THE MEANING OF SECTION 1272, ET SEQ. OF THE INTERNAL REVENUE CODE OF 1986, AS AMENDED. UPON WRITTEN REQUEST, THE BORROWER WILL PROVIDE TO ANY HOLDER OF THE NOTE (1) THE ISSUE PRICE AND DATE OF THE NOTE, (2) THE AMOUNT OF ORIGINAL ISSUE DISCOUNT ON THE NOTE AND (3) THE ORIGINAL YIELD TO MATURITY OF THE NOTE. SUCH REQUEST SHOULD BE SENT TO THE BORROWER AT ARDELYX, INC., 34175 ARDENWOOD BLVD., SUITE 200, FREMONT, CA 94555, ATTN: MARK KAUFMANN, EMAIL: [_____].

SECURED PROMISSORY NOTE
(Term Loan)

$ _____ Dated: [DATE]

FOR VALUE RECEIVED, the undersigned, ARDELYX, INC., a Delaware corporation with offices located at 34175 Ardenwood Blvd., Suite 200, Fremont, CA 94555 ("**Borrower**") HEREBY PROMISES TO PAY [_____] ("**Lender**") the principal amount of [_____] DOLLARS ($_____) or such lesser amount as shall equal the outstanding principal balance of the Term Loan made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such Term Loan, at the rates and in accordance with the terms of the Loan and Security Agreement dated May 16, 2018 by and among Borrower, Lender, Solar Capital Ltd., as Collateral Agent, and the other Lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the "**Loan Agreement**"). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest and all other amounts due with respect to the Term Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Secured Promissory Note (this "**Note**"). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of a secured Term Loan by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid except as set forth in Section 2.2 (c) and Section 2.2(d) of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Term Loan, interest on the Term Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all fees and expenses, including, without limitation, attorneys' fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower's obligations hereunder not performed when due subject to the terms of the Loan Agreement.

This Note shall be governed by, and construed and interpreted in accordance with, the internal laws of the State of New York.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

[*Balance of Page Intentionally Left Blank*]

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

[_____]

By _____
Name: _____
Title: _____

LOAN AND PAYMENTS OF PRINCIPAL

Date	Interest Rate	Principal Amount	Scheduled Payment Amount	Notation By

EXHIBIT G-1

U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Loan and Security Agreement (as the same may be amended, supplemented or otherwise modified from time to time, the "Loan Agreement"), dated as of May 16, 2018, among Solar Capital Ltd. ("Solar"), as collateral agent, and the lenders listed on Schedule 1.1 thereof or otherwise a party thereto from time to time (together with any other lenders party hereto, the "Lenders" and each a "Lender"), and Ardelyx, Inc. ("Borrower"), and their successors and assigns.

Pursuant to the provisions of Section 2.5(e) of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the Term Loan(s) (as well as any secured promissory notes ("Note(s)") evidencing such Term Loan(s)) in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of Borrower within the meaning of Section 871(h)(3)(B) of the Code and (iv) it is not a controlled foreign corporation related to Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished Borrower with a certificate of its non-U.S. Person status on IRS Form W-8BEN or W-8BEN-E, as applicable. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform Borrower, and (2) the undersigned shall have at all times furnished Borrower with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF LENDER]

By: _____

Name:

Title:

Date: _____ __, 20[ ]

EXHIBIT G-2

U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Loan and Security Agreement (as the same may be amended, supplemented or otherwise modified from time to time, the "Loan Agreement"), dated as of [_____], 2018, among Solar Capital Ltd. ("Solar"), as collateral agent, and the lenders listed on Schedule 1.1 thereof or otherwise a party thereto from time to time (together with any other lenders party hereto, the "Lenders" and each a "Lender"), and Ardelyx, Inc. ("Borrower"), and their successors and assigns.

Pursuant to the provisions of Section 2.5(e) of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of Borrower within the meaning of Section 871(h)(3)(B) of the Code, and (iv) it is not a controlled foreign corporation related to Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or W-8BEN-E, as applicable. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender in writing, and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF PARTICIPANT]

By: _____

Name:

Title:

Date: _____ __, 20[ ]

EXHIBIT G-3

U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Loan and Security Agreement (as the same may be amended, supplemented or otherwise modified from time to time, the "Loan Agreement"), dated as of May 16, 2018, among Solar Capital Ltd. ("Solar"), as collateral agent, and the lenders listed on Schedule 1.1 thereof or otherwise a party thereto from time to time (together with any other lenders party hereto, the "Lenders" and each a "Lender"), and Ardelyx, Inc. ("Borrower"), and their successors and assigns.

Pursuant to the provisions of Section 2.5(e) of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the participation in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such participation, (iii) with respect such participation, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or W-8BEN-E, as applicable, or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-8BEN-E, as applicable, from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF PARTICIPANT]

By: _____

Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT G-4

U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Loan and Security Agreement (as the same may be amended, supplemented or otherwise modified from time to time, the "Loan Agreement"), dated as of May 16, 2018, among Solar Capital Ltd. ("Solar"), as collateral agent, and the lenders listed on Schedule 1.1 thereof or otherwise a party thereto from time to time (together with any other lenders party hereto, the "Lenders" and each a "Lender"), and Ardelyx, Inc. ("Borrower"), and their successors and assigns.

Pursuant to the provisions of Section 2.5(e) of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the Term Loan(s) (as well as any secured promissory notes ("Note(s)") evidencing such Term Loan(s)) in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such Term Loan(s) (as well as any Note(s) evidencing such Term Loan(s)), (iii) with respect to the extension of credit pursuant to this Loan Agreement or any other Loan Document, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished Borrower with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN, or W-8BEN-E, as applicable, or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-8BEN-E, as applicable, from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform Borrower, and (2) the undersigned shall have at all times furnished Borrower with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[NAME OF LENDER]

By: _____

Name:

Title:

Date: _____ __, 20[ ]

Exit Fee Agreement

This agreement (as the same may be amended, restated, modified, or supplemented from time to time, this "**Exit Fee Agreement**"), dated as of May 16, 2018 (the "**Effective Date**"), is by and among Ardelyx, Inc., a Delaware corporation ("**Borrower**"), Solar Capital Ltd., a Maryland corporation ("**Solar**"), and Western Alliance Bank, an Arizona corporation ("**Western Alliance Bank**").

Reference is made to the Loan and Security Agreement, dated as of the date hereof (the "**Loan Agreement**"), by and among Solar, as collateral agent (in such capacity, "**Collateral Agent**"), the lenders party thereto from time to time, including Solar in its capacity as a lender and Western Alliance Bank (each a "**Lender**" and collectively, the "**Lenders**"), and Borrower. As a condition precedent to the Lenders' entry into the Loan Agreement, the Lenders require that Borrower agree to pay to the Lenders a fee upon the occurrence of certain events (as described herein). Capitalized terms used herein and not otherwise defined herein have the meanings assigned to them in the Loan Agreement.

Therefore, in consideration of the Lenders entering into the Loan Agreement, Borrower hereby agrees as follows:

1. **Exit Event.** For purposes hereof, "**Exit Event**" shall mean the first to occur of: (a) any liquidation, dissolution or winding up of Borrower, whether voluntary or involuntary, which results in cash or other non-cash consideration to the stockholders of Borrower; (b) a consolidation, merger or reverse merger of Borrower with or into another corporation or entity or other reorganization or similar transaction or series of related transactions involving Borrower which result in stockholders of Borrower immediately prior to such transaction or series of related transactions owning less than fifty percent (50%) of the outstanding capital stock of the surviving entity (treating all securities convertible or exchangeable into or exercisable for shares of common stock as having been fully converted, exchanged and exercised, and deemed to be outstanding for purposes of this clause, without regard to any exercise, conversion or exchange limitations therein); (c) a sale, lease, transfer, exclusive license, exchange, dividend or other disposition of all or substantially all of the assets of Borrower; (d) the issuance and/or sale by Borrower in one or a series of related transactions of shares of its common stock ("**Common Stock**") (or securities convertible or exchangeable into or exercisable for shares of Common Stock) constituting more than fifty percent (50%) of the shares of Common Stock outstanding immediately following such issuance (treating all securities convertible or exchangeable into or exercisable for shares of Common Stock as having been fully converted, exchanged and exercised, and deemed to be outstanding for purposes of this clause without regard to any exercise, conversion or exchange limitations therein) to parties other than its then existing investors; (e) any other form of acquisition or business combination where Borrower is the target of such acquisition and where a change of control occurs such that the person that acquires Borrower has the power after such transaction to elect a majority of the board of directors of Borrower as a result of such transaction; and (f) FDA marketing approval for a New Drug Application of Tenaphor (i) for the treatment of Hyperphosphatemia in End-Stage Renal Disease Patients on Dialysis (ESRD-HD) and (ii) for the treatment of IBS-C.

2. **Notice of Exit Event.** Borrower agrees to provide the Lenders with (a) to the extent Borrower has such ability, five (5) days' prior written notice of the occurrence of such Exit Event and (b) written notice of the Exit Event as soon as practicable following the occurrence of such Exit Event, but in any event not more than five (5) Business Days after such Exit Event.

3. **Exit Fee.** Borrower agrees to pay to each Lender in accordance with its Pro Rata Share, in immediately available funds, a fee (the "**Exit Fee**") upon the occurrence of an Exit Event in the amount equal to a total for all Lenders of One Million Five Hundred Thousand Dollars ($1,500,000); provided, that notwithstanding the foregoing, the Exit Fee shall be considered fully earned on the date hereof, subject to the terms of this Exit Fee Agreement.

4. **Payment.** The Exit Fee shall be paid to the Lenders no later than five (5) Business Days after the consummation of the Exit Event. Failure to so timely pay the full amount of the Exit Fee to the Lenders shall be an Event of Default under the Loan Agreement, so long as the Loan Agreement is then in effect.

5. **Termination; Assignment.** This Exit Fee Agreement shall be binding on Borrower and its respective successors and assigns and shall terminate upon the earlier to occur of (a) payment in full of the Exit Fee pursuant to the terms herein, or (b) the tenth anniversary of the Effective Date (the "**Termination Date**"). For the avoidance of doubt, the Exit Fee survives the termination of the Loan Agreement or any other Loan Document. Borrower may not assign this Exit Fee Agreement. Each Lender may assign this Exit Fee Agreement solely in connection with, and subject to the terms of, an assignment or transfer made pursuant to the terms of Section 12.1 of the Loan Agreement.

6. **GOVERNING LAW.** THIS EXIT FEE AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAW OF THE STATE OF NEW YORK, WITHOUT REGARD TO CONFLICTS OF LAW PRINCIPLES THAT WOULD REQUIRE THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION (OTHER THAN SECTION 5-1401 OF THE GENERAL OBLIGATIONS LAW).

7. **Indemnification.** Borrower agrees to indemnify, defend and hold Collateral Agent and the Lenders and their respective directors, officers, employees, consultants, agents, attorneys, or any other Person affiliated with or representing Collateral Agent or the Lenders (each, an "**Indemnified Person**") harmless against: (a) all obligations, demands, claims, and liabilities (collectively, "**Claims**") asserted by any other party in connection with; related to; following; or arising from, out of or under, the transactions contemplated by this Exit Fee Agreement; and (b) all losses or Lenders' Expenses incurred, or paid by an Indemnified Person in connection with; related to; following; or arising from, out of or under, the transactions contemplated by this Exit Fee Agreement between Collateral Agent, and/or the Lenders and Borrower (including reasonable attorneys' fees and expenses), except for Claims and/or losses directly caused by such Indemnified Person's gross negligence or willful misconduct. Borrower hereby further indemnifies, defends and holds each Indemnified Person harmless 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 fees and disbursements of counsel for such Indemnified Person) in connection with any investigative, response, remedial, administrative or judicial matter or proceeding, whether or not such Indemnified Person shall be designated a party thereto and including any such proceeding initiated by or on behalf of Borrower, 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 Collateral Agent or Lenders) asserting any right to payment for the transactions contemplated hereby which may be imposed on, incurred by or asserted against such Indemnified Person as a result of or in connection with the transactions contemplated hereby and the use or intended use of the proceeds of the loan proceeds except for liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, expenses and disbursements directly caused by such Indemnified Person's gross negligence or willful misconduct.

8. **Amendment.** No amendment, modification, termination or waiver of any provision of this Exit Fee Agreement shall in any event be effective unless the same shall be in writing and signed by Borrower, Collateral Agent and each Lender (including any permitted assigns of such parties).

9. **Severability of Provisions.** Each provision of this Exit Fee Agreement is severable from every other provision in determining the enforceability of any provision.

10. **Counterparts.** This Exit Fee 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 Exit Fee Agreement. Delivery of an executed counterpart of a signature page of this Exit Fee Agreement by facsimile, portable document format (.pdf) or other electronic transmission will be as effective as delivery of a manually executed counterpart hereof.

[Balance of Page Intentionally Left Blank]

AGREED:

ARDELYX, INC.
as Borrower

By: _____
Name: Mark Kaufmann
Title: Chief Financial Officer

AGREED:

SOLAR CAPITAL LTD.,
as Collateral Agent and a Lender

By: _____
Name: Anthony J. Storino
Title: Authorized Signatory

AGREED:

WESTERN ALLIANCE BANK,
as a Lender

By: _____
Name: Bill Wickline
Title: Director of Portfolio Management

TRANSITION AND SEPARATION AGREEMENT

This Transition and Separation Agreement (the "Agreement") by and between Reginald Seeto, MBBS ("Executive") and Ardelyx, Inc. (the "Company"), is made effective as of the date Executive signs this Agreement (the "Effective Date") with reference to the following facts:

A. Executive currently serves as the Company's Chief Operating Officer.

B. Executive and the Company entered into a Change in Control Severance Agreement effective as of October 22, 2016 (the "Pre-Existing Agreement").

C. Executive's employment with the Company and status as an officer and employee of the Company, will end effective upon the Resignation Date (as defined below).

D. Executive and the Company want to end their relationship amicably and also to establish the obligations of the parties including, without limitation, all amounts due and owing to Executive.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties agree as follows:

1. Resignation Date. Executive acknowledges and agrees that his status as an officer and employee of the Company will end effective as of the earliest of (a) August 3, 2018 (the "Planned Resignation Date"), (b) the date Executive takes any action that constitutes "Cause" under the Pre-Existing Agreement and (c) the date Executive voluntarily resigns from the Company (such earliest date, the "Resignation Date"). Executive hereby agrees to execute such further document(s) as shall be determined by the Company as necessary or desirable to give effect to the end of Executive's status as an officer of the Company; *provided* that such documents shall not be inconsistent with any of the terms of this Agreement. From the Effective Date through the Resignation Date, Executive's employment with the Company shall continue in effect, and Executive shall enjoy the same salary, benefits and other compensation terms as in effect on the Effective Date.

2. Severance Payments and Benefits. The Company hereby agrees, subject to the Resignation Date occurring on the Planned Resignation Date, Executive delivering to the Company a General Release of Claims substantially in the form attached hereto as Exhibit A (the "Release of Claims") on or within twenty-one (21) days following the Resignation Date, Executive not revoking the Release of Claims within the seven (7)-day period following his execution of the Release of Claims (the "Revocation Period"), and Executive's performance of his continuing obligations under Section 8 below and otherwise pursuant to this Agreement and the Proprietary Information and Inventions Assignment Agreement entered into between Executive and the Company, effective as of October 22, 2016 (the "Confidential Information Agreement"), to provide the payments and benefits set forth in this Section 2.

(a) *Severance Payments*. Within five (5) business day following the end of the Revocation Period, the Company shall make a lump sum cash payment to Executive in an amount equal to $417,000 (the "Severance Payment"). The Severance Payment shall be subject to authorized payroll deductions and required tax withholding.

(b) COBRA Reimbursement. Provided that Executive timely elects to receive continued healthcare coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended, or applicable state law (collectively referred to as "COBRA"), the Company will reimburse COBRA premiums paid by Executive through the earlier of (i) the first anniversary of the Resignation Date, or (ii) the date upon which Executive and Executive's covered dependents, if any, become eligible for healthcare coverage under another employer's plan(s). Notwithstanding the foregoing, (x) if any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the period of continuation coverage to be, exempt from the application of Section 409A of the Code under Treasury Regulation Section 1.409A-1(a)(5), or (y) the Company is otherwise unable to continue to cover Executive under its group health plans without penalty under applicable law (including without limitation, Section

2716 of the Public Health Service Act), then, in either case, an amount equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments. After the Company ceases to pay premiums pursuant to this Section 2(b), Executive may, if eligible, elect to continue healthcare coverage at Executive's expense in accordance the provisions of COBRA.

3. Final Paycheck; Payment of Accrued Wages and Expenses.

(a) *Final Paycheck*. On, or as soon as administratively practicable following, the Resignation Date, the Company will pay Executive all accrued but unpaid base salary and all accrued and unused vacation or other paid time off earned through the Resignation Date, subject to standard payroll deductions and withholding. Executive is entitled to these payments regardless of whether Executive executes this Agreement or a Release of Claims.

(b) *Business Expenses*. The Company shall reimburse Executive for all outstanding expenses incurred prior to the Resignation Date which are consistent with the Company's policies in effect from time to time with respect to travel and other business expenses, subject to the Company's requirements with respect to reporting and documenting such expenses, including, without limitation, expenses incurred pursuant to Executive's services as a director of any of the Company's subsidiaries. Executive is entitled to these payments regardless of whether Executive executes this Agreement or a Release of Claims.

4. Transition Consulting Services.

(a) Consulting Services. In the event the Resignation Date occurs on the Planned Resignation Date, then during the period commencing on the Resignation Date and ending on December 15, 2018 or such earlier date set forth in a written notice provided by the Company or Executive to the other party (the "Consulting Period"), Executive shall provide consulting services to the Company when and as requested by the Company. Such consulting services shall include, without limitation, efforts aimed at concluding and transitioning projects commenced by Executive prior to the Resignation Date, and such other services as may be reasonably requested by the Company. The Company shall reimburse Executive for all expenses incurred during the Consulting Period which are consistent with the Company's policies in effect from time to time with respect to travel and other business expenses, subject to the Company's requirements with respect to reporting and documenting such expenses.

(b) *Equity Awards.* As consideration for the transition consulting services to be provided to the Company under this Section 4, the stock option grants and restricted stock unit awards granted to Executive by the Company prior to the Resignation Date (collectively, the "Equity Awards"), shall continue to vest in accordance with their existing vesting schedules throughout the Consulting Period, subject to Executive's continued service to the Company on each applicable vesting date. Executive shall not be entitled to receive any additional consideration for the transition consulting services. The Equity Awards shall at all times remain subject in all respects to the terms and conditions of the applicable Equity Award agreements between Executive and the Company (the "Award Agreements") and the Company's applicable equity incentive plan. All unvested shares subject to Equity Awards held by Executive at the end of the Consulting Period shall terminate and be forfeited as of the last day of the Consulting Period. If Executive desires to exercise any vested options, Executive must follow the procedures set forth in applicable Award Agreement, including payment of the exercise price and any withholding obligations. If by the expiration dates set forth in the applicable Award Agreements, the Company has not received a duly executed notice of exercise and remuneration in accordance with Executive's Award Agreements, Executive's vested options shall automatically terminate for no consideration and be of no further effect.

(*c*) *Benefits*. Executive understands and agrees that during the Consulting Period Executive shall not be eligible to participate in or accrue benefits under any Company benefit plan for which status as an employee of the Company is a condition of such participation or accrual. To the extent that Executive was deemed eligible to participate, as an employee, in any Company benefit plan, he hereby waives his participation.

(d) *Independent Contractor Status*. Executive and the Company acknowledge and agree that, during the Consulting Period, Executive shall be an independent contractor. During the Consulting Period and thereafter, Executive shall not be an agent or employee of the Company and shall not be authorized to act on behalf of the

Company. Personal income and self-employment taxes for Equity Awards that vest during the Consulting Period shall be the sole responsibility of Executive. Executive agrees to indemnify and hold the Company and the other entities released herein harmless for any tax claims or penalties resulting from any failure by Executive to make required personal income and self-employment tax payments with respect to such Equity Awards.

5. Full Payment. Executive acknowledges that the payment and arrangements herein shall constitute full and complete satisfaction of any and all amounts properly due and owing to Executive as a result of his employment with the Company and the end of such employment relationship, and as a result of Executive's transition consulting services to the Company hereunder. Executive further acknowledges that, other than the Confidential Information Agreement and the Award Agreements, this Agreement shall supersede each agreement entered into between Executive and the Company regarding Executive's employment, including, without limitation, the Pre-Existing Agreement and any offer letter, or employment agreement, and each such agreement other than the Award Agreements and the Confidential Information Agreement shall be deemed terminated and of no further effect as of the Resignation Date.

6. Executive's Release of the Company. Executive agrees that the consideration set forth in this Agreement represents settlement in full of all outstanding obligations owed to Executive by the Company and its current and former officers, directors, employees, agents, investors, attorneys, affiliates, divisions, and subsidiaries, and predecessor and successor corporations and assigns (collectively, the "Releasees").

(a) Executive, on his own behalf and on behalf of his family members, heirs, executors, administrators, agents, and assigns, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Executive may possess against any of the Releasees arising from any omissions, acts, facts, or damages that have occurred up until and including the Effective Date of this Agreement, including, without limitation:

(i) any and all claims relating to or arising from Executive's employment relationship with Company and the end of such employment relationship;

(ii) any and all claims for wrongful discharge of employment; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of covenant of good faith and fair dealing, both express and implied; promissory estoppel; negligent or intentional infliction of emotional distress; fraud; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury; assault; battery; invasion of privacy; false imprisonment; conversion; and disability benefits;

(iii) any and all claims for violation of any federal, state, or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Equal Pay Act; the Fair Labor Standards Act, except as prohibited by law; the Fair Credit Reporting Act; the Employee Retirement Income Security Act of 1974; the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act, except as prohibited by law; the Sarbanes-Oxley Act of 2002, except as prohibited by law; the Uniformed Services Employment and Reemployment Rights Act; the California Family Rights Act; the California Labor Code, except as prohibited by law; the California Workers' Compensation Act, except as prohibited by law; and the California Fair Employment and Housing Act;

(iv) any and all claims for violation of the federal or any state constitution;

(v) any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

(vi) any claim for any loss, cost, damage, or expense arising out of any dispute over the non-withholding or other tax treatment of any of the proceeds received by Executive as a result of this Agreement;

(vii) any and all claims for attorneys' fees and costs.

(b) Executive agrees that the release set forth in this section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not extend to any obligations incurred under

this Agreement or the Award Agreements. This release does not release claims or rights that cannot be released as a matter of law, including, but not limited to, claims under Division 3, Article 2 of the California Labor Code (which includes California Labor Code Section 2802 regarding indemnity for necessary expenditures or losses by Executive) any other indemnification, defense, or hold-harmless rights Executive may have, and Executive's right to bring to the attention of the Equal Employment Opportunity Commission or California Department of Fair Employment and Housing claims of discrimination, harassment or retaliation; provided, however, that Executive does release his right to obtain damages for any such claims. This release does not release claims or rights that Executive may have as a shareholder of the Company or for benefits under any benefit plan or to participation in any such plan pursuant to the terms thereof or applicable law.

(c) Executive acknowledges that he has been advised to consult with legal counsel and is familiar with the provisions of California Civil Code Section 1542, a statute that otherwise prohibits unknown claims, which provides as follows:

A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

Executive, being aware of said code section, agrees to expressly waive any rights he may have thereunder, as well as under any other statute or common law principles of similar effect.

7. Non-Disparagement; Transfer of Company Property.

(a) *Non-Disparagement*. Executive agrees that he shall not disparage, criticize or defame the Company, its affiliates and their respective affiliates, directors, officers, agents, partners, stockholders, employees, products, services, technology or business, either publicly or privately. The Company agrees that it shall not, and it shall instruct its officers and members of the Board of Directors to not, disparage, criticize or defame Executive either publicly or privately. Nothing in this Section 7(a) shall have application to any evidence or testimony required by any court, arbitrator or government agency.

(b) *Transfer of Company Property*. On or before the last day of the Consulting Period, Executive shall turn over to the Company all files, memoranda, records, and other documents, and any other physical or personal property which are the property of the Company and which he has in his possession, custody or control at such date.

8. Confidentiality; Non-Solicitation.

(a) *Confidentiality*.

(i) While Executive is employed by the Company, during the Consulting Period and thereafter, Executive shall not directly or indirectly disclose or make available to any person, firm, corporation, association or other entity for any reason or purpose whatsoever, any Confidential Information (as defined below). On or before the last day of the Consulting Period, all Confidential Information in Executive's possession that is in written or other tangible form (together with all copies or duplicates thereof, including computer files) shall be returned to the Company and shall not be retained by Executive or furnished to any third party, in any form except as provided herein; *provided, however,* that Executive shall not be obligated to treat as confidential, or return to the Company copies of any Confidential Information that (A) was publicly known at the time of disclosure to Executive, or (B) becomes publicly known or available thereafter other than by any means in violation of this Agreement, the Confidential Information Agreement or any other duty owed to the Company by any person or entity. For purposes of this Agreement, the term "Confidential Information" shall mean information, technical data, know-how or trade secrets disclosed to Executive or known by Executive as a consequence of or through his or her relationship with the Company, relating to research, products, developments, inventions, processes, techniques, chemical structures, finances, business plans or regulatory strategies of the Company and its affiliates. In addition, for the avoidance of doubt, Executive shall continue to be subject to the Confidential Information Agreement.

(ii) For the avoidance of doubt, nothing in this Agreement will be construed to prohibit Executive from filing a charge with, reporting possible violations to, or participating or cooperating with any

governmental agency or entity, including but not limited to the EEOC, the Department of Justice, the Securities and Exchange Commission, Congress, or any agency Inspector General, or making other disclosures that are protected under the whistleblower, anti-discrimination, or anti-retaliation provisions of federal, state or local law or regulation; provided, however, that Executive may not disclose information of the Company or any of its affiliates that is protected by the attorney-client privilege, except as otherwise required by law. Executive does not need the prior authorization of the Company to make any such reports or disclosures, and Executive is not required to notify the Company that he has made such reports or disclosures. Furthermore, in accordance with 18 U.S.C. § 1833, notwithstanding anything to the contrary in this Agreement: (A) Executive shall not be in breach of this Agreement, and shall not be held criminally or civilly liable under any federal or state trade secret law (x) for the disclosure of a trade secret that is made in confidence to a federal, state, or local government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (y) for the disclosure of a trade secret that is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal; and (B) if Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the trade secret to Executive's attorney, and may use the trade secret information in the court proceeding, if Executive files any document containing the trade secret under seal, and does not disclose the trade secret, except pursuant to court order.

(b) *Non-Solicitation*. In addition to Executive's obligations under the Confidential Information Agreement, Executive shall not for a period of one (1) years following the Resignation Date, either on Executive's own account or jointly with or as a manager, agent, officer, employee, consultant, partner, joint venturer, owner or stockholder or otherwise on behalf of any other person, firm or corporation, directly or indirectly solicit or attempt to solicit away from the Company any of its officers or employees or offer employment to any person who is an officer or employee of the Company; *provided*, *however*, that a general advertisement to which an employee of the Company responds shall in no event be deemed to result in a breach of this Section 8(b). Executive also agrees not divert or attempt to divert any actual or potential business of the Company. If it is determined by a court of competent jurisdiction in any state that any restriction in this Section 8(b) is excessive in duration or scope or is unreasonable or unenforceable under the laws of that state, it is the intention of the parties that such restriction may be modified or amended by the court to render it enforceable to the maximum extent permitted by the law of that state.

9. Executive Representations. Executive warrants and represents that (a) he has not filed or authorized the filing of any complaints, charges or lawsuits against the Company or any affiliate of the Company with any governmental agency or court, and that if, unbeknownst to Executive, such a complaint, charge or lawsuit has been filed on his behalf, he will use reasonable best efforts to immediately cause it to be withdrawn and dismissed, and (b) he has no known workplace injuries or occupational diseases and has been provided and/or has not been denied any leave requested under the Family and Medical Leave Act or any similar state law, and (c) he has received the Company's Insider Trading Compliance Policy and agrees to continue to abide by all applicable terms therein, including specifically, Section IV (C) which states, "With the exception of the preclearance requirement, the insider trading laws continue to apply to all transactions in the Company's securities even after termination of service of service to the Company. If an individual is in the possession of material non-public information when his or her service terminates, that individual may not trade in the Company's securities until that information has become public or is no longer material."

10. No Assignment by Executive. Executive warrants and represents that no portion of any of the matters released herein, and no portion of any recovery or settlement to which Executive might be entitled, has been assigned or transferred to any other person, firm or corporation not a party to this Agreement, in any manner, including by way of subrogation or operation of law or otherwise. If any claim, action, demand or suit should be made or instituted against the Company or any other Releasee because of any actual assignment, subrogation or transfer by Executive, Executive agrees to indemnify and hold harmless the Company and all other Releasees against such claim, action, suit or demand, including necessary expenses of investigation, attorneys' fees and costs. In the event of Executive's death, this Agreement shall inure to the benefit of Executive and Executive's executors, administrators, heirs, distributees, devisees, and legatees. None of Executive's rights or obligations may be assigned or transferred by Executive, other than Executive's rights to payments hereunder, which may be transferred only upon Executive's death by will or operation of law.

11. Governing Law. This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the State of California or, where applicable, United States federal law, in each case, without regard to any conflicts of laws provisions or those of any state other than California.

12. Miscellaneous. This Agreement, together with the Confidential Information Agreement, the Award Agreements and the form of General Release of Claims attached as Exhibit A hereto comprise the entire agreement between the parties with regard to the subject matter hereof and supersedes, in their entirety, any other agreements between Executive and the Company with regard to the subject matter hereof, including without limitation, the Pre-Existing Agreement. Executive acknowledges that there are no other agreements, written, oral or implied, and that he may not rely on any prior negotiations, discussions, representations or agreements. This Agreement may be modified only in writing, and such writing must be signed by both parties and recited that it is intended to modify this Agreement. This Agreement may be executed in separate counterparts, each of which is deemed to be an original and all of which taken together constitute one and the same agreement.

13. Company Assignment and Successors. The Company shall assign its rights and obligations under this Agreement to any successor to all or substantially all of the business or the assets of the Company (by merger or otherwise). This Agreement shall be binding upon and inure to the benefit of the Company and its successors, assigns, personnel and legal representatives.

14. Maintaining Confidential Information. Executive reaffirms his obligations under the Confidential Information Agreement. Executive acknowledges and agrees that the payments and benefits provided in Sections 2 and 4 above shall be subject to Executive's continued compliance with Executive's obligations under the Confidential Information Agreement.

15. Executive's Cooperation. Executive further agrees that:

(a) *Transition*. From the Effective Date through the Resignation Date, Executive shall continue to provide full-time services to the Company, shall continue to discharge all duties of the position of the Chief Operating Officer, and shall cooperate with the Company in the preparation and presentation of public statements regarding Executive's planned departure from the Company.

(b) *Investigations*. After the Resignation Date, Executive shall use reasonable efforts to cooperate with the Company and its affiliates, upon the Company's reasonable request, with respect to any internal investigation or administrative, regulatory or judicial proceeding involving matters within the scope of Executive's duties and responsibilities to the Company or its affiliates during his employment with the Company (including, without limitation, Executive being available to the Company upon reasonable notice for interviews and factual investigations, appearing at the Company's reasonable request to give testimony without requiring service of a subpoena or other legal process, and turning over to the Company all relevant Company documents which are or may have come into Executive's possession during his employment); *provided, however*, that any such request by the Company shall not be unduly burdensome or interfere with Executive's personal schedule or ability to engage in gainful employment, consulting or other work, and the Company shall pay, upon invoicing by Executive, all reasonably incurred fees for his time in so cooperating (which shall not exceed one thousand dollars ($1,000) per eight hour day), and reimburse Executive for his actual, reasonable, out-of-pocket expenses (including without limitation, any and all reasonable attorney's fees and costs) incurred in connection with providing any such cooperation.

IN WITNESS WHEREOF, the undersigned have caused this Transition and Separation Agreement to be duly executed and delivered as of the date indicated next to their respective signatures below.

DATED:

Reginald Seeto, MBBS

ARDELYX, INC.

DATED:

By: _____
Mike Raab, President & CEO

EXHIBIT A

GENERAL RELEASE OF CLAIMS

This General Release of Claims ("Release") is entered into as of , between Reginald Seeto ("Executive") and Ardelyx, Inc. (the "Company") (collectively referred to herein as the "Parties"), effective eight (8) days after Executive's signature hereto (the "Effective Date"), unless Executive revokes his acceptance of this Release as provided in Paragraph 1(c), below.

1. Executive's Release of the Company.

(a) Executive, on his own behalf and on behalf of his family members, heirs, executors, administrators, agents, and assigns, hereby and forever releases the Company and its current and former officers, directors, employees, agents, investors, attorneys, affiliates, divisions, and subsidiaries, and predecessor and successor corporations and assigns (the "Releasees") from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Executive may possess against any of the Releasees arising from any omissions, acts, facts, or damages that have occurred up until and including the date Executive signs this Release, including, without limitation:

(i) any and all claims relating to or arising from Executive's employment relationship with Company and the end of such employment relationship;

(ii) any and all claims for wrongful discharge of employment; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of covenant of good faith and fair dealing, both express and implied; promissory estoppel; negligent or intentional infliction of emotional distress; fraud; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury; assault; battery; invasion of privacy; false imprisonment; conversion; and disability benefits;

(iii) any and all claims for violation of any federal, state, or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Equal Pay Act; the Fair Labor Standards Act, except as prohibited by law; the Fair Credit Reporting Act; the Age Discrimination in Employment Act of 1967; the Older Workers Benefit Protection Act; the Employee Retirement Income Security Act of 1974; the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act, except as prohibited by law; the Sarbanes-Oxley Act of 2002, except as prohibited by law; the Uniformed Services Employment and Reemployment Rights Act; the California Family Rights Act; the California Labor Code, except as prohibited by law; the California Workers' Compensation Act, except as prohibited by law; and the California Fair Employment and Housing Act;

(iv) any and all claims for violation of the federal or any state constitution;

(v) any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

(vi) any claim for any loss, cost, damage, or expense arising out of any dispute over the non-withholding or other tax treatment of any of the proceeds received by Executive as a result of the Transition and Separation Agreement entered into between the Parties as of [_____], 2018 (the "Transition and Separation Agreement");

(vii) any claim for breach of contract or breach of the implied covenant of good faith and fair dealing;

(viii) any and all claims for attorneys' fees and costs.

(b) Executive agrees that the release set forth in this Section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not extend to any obligations incurred under the Transition and Separation Agreement or the Award Agreements (as defined in the Transition and Separation Agreement). This release does not release claims or rights that cannot be released as a matter of law, including, but not limited to, claims under Division 3, Article 2 of the California Labor Code (which includes California Labor Code Section 2802 regarding indemnity for necessary expenditures or losses by Executive) any other

indemnification, defense, or hold-harmless rights Executive may have, and Executive's right to bring to the attention of the Equal Employment Opportunity Commission or California Department of Fair Employment and Housing claims of discrimination, harassment or retaliation; provided, however, that Executive does release his right to obtain damages for any such claims. This release does not release claims or rights that Executive may have as a shareholder of the Company or for vested benefits under any benefit plan or to continued participation in any such plan pursuant to the terms thereof or applicable law.

(c) Acknowledgment of Waiver of Claims under ADEA. Executive acknowledges that he is waiving and releasing any rights he may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Executive acknowledges that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the Effective Date of this Release. Executive acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Executive was already entitled. Executive further acknowledges that he has been advised by this writing that: (a) he should consult with an attorney prior to executing this Release; (b) he has twenty-one (21) days within which to consider this Release; (c) he has seven (7) days following his execution of this Release to revoke this Release; (d) this Release shall not be effective until after the revocation period has expired and Executive will not receive the severance and other benefits provided by Section 2 of the Transition and Separation Agreement unless and until the revocation period has expired; and (e) nothing in this Release prevents or precludes Executive from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law. In the event Executive signs this Release and returns it to the Company's General Counsel in less than the 21-day period identified above, Executive hereby acknowledges that he has freely and voluntarily chosen to waive the time period allotted for considering this Release. To revoke his acceptance of this Release, Executive must contact the Company's General Counsel by email at egrammer@ardelyx.com no later than 5 p.m. on the 7th day following Executive's signature of this Release.

(d) California Civil Code Section 1542. Executive acknowledges that he has been advised to consult with legal counsel and is familiar with the provisions of California Civil Code Section 1542, a statute that otherwise prohibits unknown claims, which provides as follows:

A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

Executive, being aware of said code section, agrees to expressly waive any rights he may have thereunder, as well as under any other statute or common law principles of similar effect.

2. Executive Representations. Executive represents and warrants that:

(a) To Executive's knowledge, Executive has returned to the Company all Company property in Executive's possession and if he discovers additional Company property in his possession he will promptly return it to the Company;

(b) Except as Executive has informed the Company in writing, Executive is not owed wages, commissions, bonuses or other compensation, other than any payments that become due under Sections 3 and 4(b) of the Transition and Separation Agreement;

(c) During the course of Executive's employment Executive did not sustain any injuries for which Executive might be entitled to compensation pursuant to worker's compensation law or Executive has disclosed any injuries of which he is currently, reasonably aware for which he might be entitled to compensation pursuant to worker's compensation law;

(d) From the date Executive executed the Transition and Separation Agreement through the date Executive executes this Release, Executive has not made any disparaging comments about the Company, nor will Executive do so in the future; and

(e) Executive has not initiated any adversarial proceedings of any kind against the Company or against any other person or entity released herein, nor will Executive do so in the future with respect to any claims released hereby, except as specifically allowed by this Release.

3. Continuing Obligations. Executive reaffirms his obligations under the Transition and Separation Agreement and under the Confidential Information Agreement (as defined in the Transition and Separation Agreement).

4. Cooperation with the Company. Executive reaffirms his obligations to cooperate with the Company pursuant to Section 15 of the Transition and Separation Agreement.

5. Severability. The provisions of this Release are severable. If any provision is held to be invalid or unenforceable, it shall not affect the validity or enforceability of any other provision.

6. Choice of Law. This Release shall in all respects be governed and construed in accordance with the laws of the State of California, including all matters of construction, validity and performance, without regard to conflicts of law principles.

7. Integration Clause. This Release and the Transition and Separation Agreement, the Confidential Information Agreement, and the Award Agreements contain the Parties' entire agreement with regard to the transition and separation of Executive's employment, and supersede and replace any prior agreements as to those matters, whether oral or written, including without limitation, the Pre-Existing Agreement. This Release may not be changed or modified, in whole or in part, except by an instrument in writing signed by Executive and the President & Chief Executive Officer of the Company.

8. Execution in Counterparts. This Release may be executed in counterparts with the same force and effectiveness as though executed in a single document. Facsimile signatures shall have the same force and effectiveness as original signatures.

9. Intent to be Bound. The Parties have carefully read this Release in its entirety; fully understand and agree to its terms and provisions; and intend and agree that it is final and binding on all Parties.

IN WITNESS WHEREOF, and intending to be legally bound, the Parties have executed the foregoing on the dates shown below.

EXECUTIVE	ARDELYX, INC.
Reginald Seeto, MBBS	By: Mike Raab Title: President & CEO
Date:	Date:

Exhibit 31.1

CERTIFICATION

I, Michael Raab, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ardelyx, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 7, 2018

By: /s/ Michael Raab

Michael Raab
President Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Mark Kaufmann, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ardelyx, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 7, 2018

By: /s/ Mark Kaufmann

Mark Kaufmann
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Ardelyx, Inc. (the "Company") on Form 10-Q for the period ending June 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Michael Raab, President and Chief Executive Officer of the Company, and Mark Kaufmann, Chief Financial Officer of the Company, respectively, do each hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: August 7, 2018

By: /s/ Michael Raab
Michael Raab
President Chief Executive Officer and Director
(Principal Executive Officer)

Date: August 7, 2018

By: /s/ Mark Kaufmann
Mark Kaufmann
Chief Financial Officer
(Principal Financial Officer)