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

FORM 10-Q

Quarterly Report Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

For the quarterly period ended September 30, 2018

Commission File Number 000-23186

BIOCRYST PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

DELAWARE	**62-1413174**
(State of other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
4505 Emperor Blvd., Suite 200 **Durham, North Carolina**	
(Address of principal executive offices)	**27703** **(Zip Code)**

(919) 859-1302
(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 every Interactive Data File required to be submitted 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 such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non- accelerated filer, 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	☐	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 shares of Common Stock, par value $0.01, of the Registrant outstanding as of October 31, 2018 was 109,641,044.

BIOCRYST PHARMACEUTICALS, INC.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

BIOCRYST PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
September 30, 2018 and December 31, 2017
(In thousands, except per share data)

	2018 (Unaudited)	2017 (Note 1)
Assets		
Cash and cash equivalents	$ 52,584	$ 50,282
Restricted cash	1,506	3,286
Investments	67,737	64,115
Receivables from collaborations	3,394	6,117
Inventory	821	—
Prepaid expenses and other current assets	2,445	1,381
Deferred collaboration expense	8	210
Total current assets	128,495	125,391
Investments	29,157	41,295
Property and equipment, net	9,236	9,546
Other assets	1,420	2,027
Total assets	$ 168,308	$ 178,259
Liabilities and Stockholders' Equity		
Accounts payable	$ 7,911	$ 6,337
Accrued expenses	15,120	12,699
Interest payable	10,427	12,095
Deferred collaboration revenue	200	8,484
Lease financing obligation	66	75
Senior credit facility	1,621	6,464
Non-recourse notes payable	29,012	28,682
Total current liabilities	64,357	74,836
Deferred rent	81	155
Lease financing obligation	2,704	2,751
Senior credit facility	28,293	16,750
Stockholders' equity:		
Preferred stock, $0.001 par value; shares authorized — 5,000; no shares issued and outstanding	—	—
Common stock, $0.01 par value: shares authorized — 200,000; shares issued and outstanding — 109,625 in 2018 and 98,411 in 2017	1,096	984
Additional paid-in capital	776,724	714,869
Accumulated other comprehensive loss	(410)	(243)
Accumulated deficit	(704,537)	(631,843)
Total stockholders' equity	72,873	83,767
Total liabilities and stockholders' equity	$ 168,308	$ 178,259

See accompanying notes to consolidated financial statements.

BIOCRYST PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
Three and Nine Months Ended September 30, 2018 and 2017
(In thousands, except per share data-Unaudited)

	Three Months		Nine Months	
	2018	**2017**	**2018**	**2017**
Revenues				
Product sales	$ —	$ 1,501	$ —	$ 1,501
Royalty revenue	523	442	4,326	7,252
Collaborative and other research and development	931	6,817	13,598	12,543
Total revenues	1,454	8,760	17,924	21,296
Expenses				
Cost of products sold	—	1,142	—	1,142
Research and development	22,006	17,509	61,457	50,038
General and administrative	7,923	3,343	25,024	9,235
Royalty	18	115	401	431
Total operating expenses	29,947	22,109	86,882	60,846
Loss from operations	(28,493)	(13,349)	(68,958)	(39,550)
Interest and other income	611	225	1,566	537
Interest expense	(2,346)	(2,140)	(6,762)	(6,334)
Gain (loss) on foreign currency derivative	631	130	334	(892)
Net loss	$ (29,597)	$ (15,134)	$ (73,820)	$ (46,239)
Basic and diluted net loss per common share	**$ (0.28)**	**$ (0.18)**	**$ (0.73)**	**$ (0.58)**
Weighted average shares outstanding	**105,410**	**83,570**	**100,955**	**79,749**
Unrealized gain (loss) on available for sale investments	42	(2)	(167)	(5)
Comprehensive loss	$ (29,555)	$ (15,136)	$ (73,987)	$ (46,244)

See accompanying notes to consolidated financial statements.

BIOCRYST PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
Nine Months Ended September 30, 2018 and 2017
(In thousands-Unaudited)

	2018	2017
Operating activities		
Net loss	$ (73,820)	$ (46,239)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	572	522
Stock-based compensation expense	7,072	10,307
Amortization of debt issuance costs	676	658
Amortization of premium/discount on investments	152	125
Change in fair value of foreign currency derivative	606	1,858
Changes in operating assets and liabilities:		
Receivables	2,723	(217)
Inventory	(821)	500
Prepaid expenses and other assets	(1,063)	17
Deferred collaboration expense	144	51
Accounts payable and accrued expenses	3,947	1,303
Interest payable	(1,668)	1,715
Deferred revenue	(7,100)	(1,224)
Net cash used in operating activities	**(68,580)**	**(30,624)**
Investing activities		
Acquisitions of property and equipment	(262)	(213)
Purchases of investments	(43,158)	(39,572)
Sales and maturities of investments	51,355	32,527
Net cash provided by (used in) investing activities	**7,935**	**(7,258)**
Financing activities		
Sale of common stock, net	53,400	133,500
Proceeds from senior credit facility	10,353	—
Payment of senior credit facility	(4,025)	—
Net proceeds from common stock issued under stock-based compensation plans	1,495	1,491
(Decrease) increase in lease financing obligation	(56)	139
Net cash provided by financing activities	**61,167**	**135,130**
Increase in cash, cash equivalents and restricted cash	**522**	**97,248**
Cash, cash equivalents and restricted cash at beginning of period	53,568	23,650
Cash, cash equivalents and restricted cash at end of period	**$ 54,090**	**$ 120,898**

See accompanying notes to consolidated financial statements.

Note 1 — Significant Accounting Policies

Agreement and Plan of Merger Termination

On January 21, 2018, BioCryst Pharmaceuticals, Inc. (the "Company" or "BioCryst"), Idera Pharmaceuticals, Inc. ("Idera"), a Delaware corporation, Nautilus Holdco, Inc., a Delaware corporation and a direct, wholly owned subsidiary of BioCryst ("Holdco"), Island Merger Sub, Inc., a Delaware corporation and a direct, wholly owned subsidiary of Holdco, and Boat Merger Sub, Inc., a Delaware corporation and a direct, wholly owned subsidiary of Holdco, entered into an Agreement and Plan of Merger (the "Merger Agreement").

Following the BioCryst stockholders' failure to approve the adoption of the Merger Agreement at the BioCryst special meeting of stockholders held on July 10, 2018, the Merger Agreement was terminated. Pursuant to the terms of the Merger Agreement, BioCryst reimbursed Idera for transaction-related expenses of $6,000 in July 2018.

The Company

BioCryst is a biotechnology company that discovers novel small molecule drugs that block key enzymes involved in the pathogenesis of diseases. The Company focuses on oral treatments for rare diseases in which significant unmet medical needs exist and an enzyme plays the key role in the biological pathway of the disease. The Company was incorporated in Delaware in 1986 and its headquarters is located in Durham, North Carolina. The Company integrates the disciplines of biology, crystallography, medicinal chemistry and computer modeling to discover and develop small molecule pharmaceuticals through the process known as structure-guided drug design. BioCryst has incurred losses and negative cash flows from operations since inception.

With the funds available at September 30, 2018, the Company believes its resources will be sufficient to fund its operations into 2020. The Company has sustained operating losses for the majority of its corporate history and expects that its 2018 expenses will exceed its 2018 revenues. The Company expects to continue to incur operating losses and negative cash flows until revenues reach a level sufficient to support ongoing operations. Accordingly, its planned operations raise doubt about its ability to continue as a going concern through 2020. The Company's liquidity needs will be largely determined by the success of operations in regards to the progression of its product candidates in the future. The Company also may consider other plans to fund operations through 2020 including: (1) securing or increasing U.S. Government funding of its programs, including obtaining procurement contracts; (2) out-licensing rights to certain of its products or product candidates, pursuant to which the Company would receive cash milestones; (3) raising additional capital through equity or debt financings or from other sources; (4) obtaining additional product candidate regulatory approvals, which would generate revenue, milestones and cash flow; (5) reducing spending on one or more research and development programs, including by discontinuing development; and/or (6) restructuring operations to change its overhead structure. The Company may issue securities, including common stock, preferred stock, depositary shares, stock purchase contracts, warrants and units, through private placement transactions or registered public offerings in the future. The Company's future liquidity needs, and ability to address those needs, will largely be determined by the success of its product candidates and key development and regulatory events and its decisions in the future.

Basis of Presentation

The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, JPR Royalty Sub LLC ("Royalty Sub") and MDCP, LLC ("MDCP"). All subsidiaries were formed to facilitate financing transactions for the Company.

Royalty Sub was formed in connection with a $30,000 financing transaction the Company completed on March 9, 2011. See Note 4, Royalty Monetization, for a further description of this transaction. MDCP was formed in connection with a $23,000 Senior Credit Facility that the Company closed on September 23, 2016. See Note 5, Senior Credit Facility, for a further description of this transaction. All intercompany transactions and balances have been eliminated.

The Company's consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") for interim financial reporting and the instructions to Form 10-Q and do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. Such financial statements reflect all adjustments that are, in management's opinion, necessary to present fairly, in all material respects, the Company's consolidated financial position, results of operations, and cash flows. There were no adjustments other than normal recurring adjustments.

These financial statements should be read in conjunction with the financial statements for the year ended December 31, 2017 and the notes thereto included in the Company's 2017 Annual Report on Form 10-K. Interim operating results are not necessarily indicative of operating results for the full year. The balance sheet as of December 31, 2017 has been derived from the audited consolidated financial statements included in the Company's most recent Annual Report on Form 10-K.

Cash and Cash Equivalents

The Company generally considers cash equivalents to be all cash held in commercial checking accounts, certificates of deposit, money market accounts or investments in debt instruments with maturities of three months or less at the time of purchase. The carrying value of cash and cash equivalents approximates fair value due to the short-term nature of these items.

Restricted Cash

Restricted cash as of September 30, 2018 reflects $93 in royalty revenue paid by Shionogi & Co., Ltd. ("Shionogi") designated for interest on the PhaRMA Notes (defined in Note 4) and $1,413 the Company is required to maintain as collateral for a letter of credit associated with the lease execution and build-out of its Birmingham research facilities.

Investments

The Company invests in high credit quality investments in accordance with its investment policy, which is designed to minimize the possibility of loss. The objective of the Company's investment policy is to ensure the safety and preservation of invested funds, as well as maintaining liquidity sufficient to meet cash flow requirements. The Company places its excess cash with high credit quality financial institutions, commercial companies, and government agencies in order to limit the amount of its credit exposure. In accordance with its policy, the Company is able to invest in marketable debt securities that may consist of U.S. Government and government agency securities, money market and mutual fund investments, municipal and corporate notes and bonds, commercial paper and asset or mortgage-backed securities, among others. The Company's investment policy requires it to purchase high-quality marketable securities with a maximum individual maturity of three years and requires an average portfolio maturity of no more than 18 months. Some of the securities the Company invests in may have market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. To minimize this risk, the Company schedules its investments with maturities that coincide with expected cash flow needs, thus avoiding the need to redeem an investment prior to its maturity date. Accordingly, the Company does not believe it has a material exposure to interest rate risk arising from its investments. Generally, the Company's investments are not collateralized. The Company has not realized any significant losses from its investments.

The Company classifies all of its investments as available-for-sale. Unrealized gains and losses on investments are recognized in comprehensive loss, unless an unrealized loss is considered to be other than temporary, in which case the unrealized loss is charged to operations. The Company periodically reviews its investments for other than temporary declines in fair value below cost basis and whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The Company believes the individual unrealized losses represent temporary declines primarily resulting from interest rate changes. Realized gains and losses are reflected in interest and other income in the Consolidated Statements of Comprehensive Loss and are determined using the specific identification method with transactions recorded on a settlement date basis. Investments with original maturities at date of purchase beyond three months and which mature at or less than 12 months from the balance sheet date are classified as current. Investments with a maturity beyond 12 months from the balance sheet date are classified as long-term. At September 30, 2018, the Company believes that the cost of its investments is recoverable in all material respects.

The following tables summarize the fair value of the Company's investments by type. The estimated fair values of the Company's fixed income investments are classified as Level 2 in the fair value hierarchy as defined in U.S. GAAP. These valuations are based on observable direct and indirect inputs, primarily quoted prices of similar, but not identical, instruments in active markets or quoted prices for identical or similar instruments in markets that are not active. These fair values are obtained from independent pricing services which utilize Level 2 inputs.

	September 30, 2018				
	Amortized Cost	Accrued Interest	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Obligations of the U.S. Government and its agencies	$ 51,436	$ 170	$ —	$ (188)	$ 51,418
Corporate debt securities	40,893	244	—	(207)	40,930
Certificates of deposit	4,543	18	—	(15)	4,546
Total investments	$ 96,872	$ 432	$ —	$ (410)	$ 96,894

	December 31, 2017				
	Amortized Cost	Accrued Interest	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Obligations of the U.S. Government and its agencies	$ 60,121	$ 177	$ —	$ (122)	$ 60,176
Corporate debt securities	34,021	203	—	(108)	34,116
Certificates of deposit	11,099	32	1	(14)	11,118
Total investments	$ 105,241	$ 412	$ 1	$ (244)	$ 105,410

The following table summarizes the scheduled maturity for the Company's investments at September 30, 2018 and December 31, 2017.

	2018	2017
Maturing in one year or less	$ 67,737	$ 64,115
Maturing after one year through two years	29,157	34,257
Maturing after two years	—	7,038
Total investments	$ 96,894	$ 105,410

Receivables from Collaborations

Receivables from collaborations are recorded for amounts due to the Company related to reimbursable research and development costs from the U.S. Department of Health and Human Services, royalty receivables from Shionogi, Green Cross Corporation ("Green Cross"), Mundipharma International Holdings Limited ("Mundipharma") and Seqirus UK Limited ("SUL"), and product sales to SUL. These receivables are evaluated to determine if any reserve or allowance should be established at each reporting date. At September 30, 2018 and December 31, 2017, the Company had the following receivables.

	September 30, 2018		
	Billed	Unbilled	Total
U.S. Department of Health and Human Services	$ 403	$ 1,289	$ 1,692
Shionogi & Co. Ltd.	35	—	35
Green Cross Corporation	313	27	340
Mundipharma International Holdings Limited	75	—	75
Seqirus UK Limited	1,252	—	1,252
Total receivables	$ 2,078	$ 1,316	$ 3,394

	December 31, 2017		
	Billed	Unbilled	Total
U.S. Department of Health and Human Services	$ 42	$ 2,020	$ 2,062
Shionogi & Co. Ltd.	1,600	—	1,600
Green Cross Corporation	1,388	28	1,416
Mundipharma International Holdings Limited	47	—	47
Seqirus UK Limited	825	167	992
Total receivables	$ 3,902	$ 2,215	$ 6,117

Monthly invoices are submitted to the U.S. Department of Health and Human Services related to reimbursable research and development costs. The Company is also entitled to monthly reimbursement of indirect costs based on rates stipulated in the underlying contract. The Company's calculations of its indirect cost rates are subject to audit by the U.S. Government.

Receivables from Product Sales

Receivables from product sales are recorded for amounts due to the Company related to sales of RAPIVAB®. These receivables are evaluated to determine if any reserve or allowance should be established at each reporting date.

Inventory

At September 30, 2018, the Company's inventory consisted primarily of peramivir work in process and is being manufactured for the Company's partners. Inventory is stated at the lower of cost and net realizable value, determined under the first-in, first-out ("FIFO") method, or market. The Company expenses costs related to the production of inventories as research and development expenses in the period incurred until such time it is believed that future economic benefit is expected to be recognized, which generally is reliant upon receipt of regulatory approval. Upon regulatory approval, the Company will capitalize subsequent costs related to the production of inventories.

Property and Equipment

Property and equipment are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. Computer equipment is depreciated over a life of three years. Laboratory equipment, office equipment, and software are depreciated over a life of five years. Furniture and fixtures are depreciated over a life of seven years. Leasehold improvements are amortized over their estimated useful lives or the expected lease term, whichever is less. Property consists of a leased building which did not meet the sale-leaseback criteria and is recorded at its fair value, less depreciation. The building is being depreciated over a period equal to the expected term of the related lease.

In accordance with U.S. GAAP, the Company periodically reviews its property and equipment for impairment when events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability is based on an estimate of undiscounted future cash flows resulting from the use of the asset and its eventual disposition. In the event that such cash flows are not expected to be sufficient to recover the carrying amount of the assets, the assets are written down to their estimated fair values. Property and equipment to be disposed of are reported at the lower of carrying amount or fair value less cost to sell.

Patents and Licenses

The Company seeks patent protection on all internally developed processes and products. All patent related costs are expensed to selling, general and administrative expenses when incurred as recoverability of such expenditures is uncertain.

Accrued Expenses

The Company generally enters into contractual agreements with third-party vendors who provide research and development, manufacturing, and other services in the ordinary course of business. Some of these contracts are subject to milestone-based invoicing and services are completed over an extended period of time. The Company records liabilities under these contractual commitments when it determines an obligation has been incurred, regardless of the timing of the invoice. This process involves reviewing open contracts and purchase orders, communicating with applicable Company 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 actual cost. The majority of service providers invoice the Company monthly in arrears for services performed. The Company makes estimates of accrued expenses as of each balance sheet date in its financial statements based on the facts and circumstances. The Company periodically confirms the accuracy of its estimates with the service providers and makes adjustments if necessary. Examples of estimated accrued expenses include:

- fees paid to Clinical Research Organizations ("CROs") in connection with preclinical and toxicology studies and clinical trials;
- fees paid to investigative sites in connection with clinical trials;
- fees paid to contract manufacturers in connection with the production of the Company's raw materials, drug substance and drug products; and
- professional fees.

The Company bases its expenses related to clinical trials on its estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and CROs that conduct and manage clinical trials on the Company's behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing service fees, the Company estimates the time period over which services will be performed and the level of effort expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, the Company will adjust the accrual accordingly. As of September 30, 2018 and December 31, 2017, the carrying value of accrued expenses approximates their fair value due to their short-term settlement.

Income Taxes

The liability method is used in the Company's accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. Although no changes were made to provisional amounts during the nine months ended September 30, 2018, we will continue to evaluate our estimates related to the new legislation as clarifying guidance and interpretations are issued.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118"), which provides guidance on accounting for the tax effects of the Tax Cuts and Jobs Act ("TCJA"). SAB 118 provides a measurement period that should not extend beyond one year from the TCJA enactment date for companies to complete the accounting under ASC 740, Income Taxes.

Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss is comprised of unrealized gains and losses on available-for-sale investments and is disclosed as a separate component of stockholders' equity. Amounts reclassified from accumulated other comprehensive loss are recorded as interest and other income on the Consolidated Statements of Comprehensive Loss. Realized losses of $1 were reclassified out of accumulated other comprehensive loss during the nine months ended September 30, 2018. No reclassifications out of accumulated other comprehensive loss were recorded during the nine months ended September 30, 2017.

Revenue Recognition

Transition Considerations

In May 2014, the Financial Accounting Standards Board issued Standards Update No. 2014-09: *Revenue from Contracts with Customers (Topic 606)* ("ASC 606"), which provides a single, comprehensive revenue recognition model for all contracts with customers. The core principle of ASC 606 is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASC 606 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract.

The Company adopted the provisions of ASC 606 as of January 1, 2018 using the modified retrospective method as applied to contracts that were not completed as of that date. The modified retrospective method requires the recognition of the cumulative effect of initially applying the standard (if any) as an adjustment to opening retained earnings for the fiscal year beginning January 1, 2018. As a result, financial information for reporting periods beginning after January 1, 2018 are presented under ASC 606, while comparative financial information has not been adjusted and continues to be reported in accordance with the Company's historical accounting policy for revenue recognition prior to the adoption of ASC 606.

Adoption of ASC 606 resulted in a change in the Company's method of accounting for fees received under licensing agreements. Prior to adopting ASC 606, fees received under licensing agreements that were related to future performance were deferred and recognized over an estimated period based on the terms of the agreement and the products licensed. Under ASC 606, licenses of drug products and formulations are forms of functional intellectual property. Licenses of functional intellectual property grant a right to use the intellectual property and the related revenue will generally be recognized at a point in time rather than over time. As a result, certain license fees that were previously deferred and recognized over time were eliminated through a cumulative effect adjustment as of January 1, 2018.

The following table summarizes the cumulative effect of the changes to the Company's unaudited Consolidated Balance Sheet as of January 1, 2018 from the adoption of ASC 606:

	Balance at December 31, 2017	Adjustments due to ASC 606	Balance at January 1, 2018
Assets			
Deferred collaboration expense	$ 210	$ (58)	$ 152
Liabilities			
Deferred revenue	$ 8,484	$ (1,184)	$ 7,300
Equity			
Accumulated deficit	$ (631,843)	$ 1,126	$ (630,717)

The following tables summarize the current period impacts of adopting ASC 606 on the Company's unaudited Consolidated Balance Sheet and Consolidated Statement of Comprehensive Loss:

	September 30, 2018		
	As Reported	Adjustments due to ASC 606	Balances without adoption of ASC 606
Assets			
Deferred collaboration expense	$ 8	$ 19	$ 27
Liabilities			
Deferred revenue	$ 200	$ 396	$ 596
Equity			
Accumulated deficit	$ (704,537)	$ 378	$ (704,159)

	For the Three Months Ended September 30, 2018		
	As Reported	Adjustments due to ASC 606	Balances without adoption of ASC 606
Collaborative and other research and development revenue	$ 931	$ 296	$ 1,227
Research and development expenses	22,006	14	22,021
Net loss	(29,597)	282	(29,315)
Basic and diluted net loss per share	$ (0.28)	$ 0.00	$ (0.28)

	For the Nine Months Ended September 30, 2018		
	As Reported	Adjustments due to ASC 606	Balances without adoption of ASC 606
Collaborative and other research and development revenue	$ 13,598	$ 888	$ 14,486
Research and development expenses	61,457	44	61,501
Net loss	(73,820)	846	(72,974)
Basic and diluted net loss per share	$ (0.73)	$ 0.01	$ (0.72)

Adoption of the standard had no impact on total net cash within the Consolidated Statements of Cash Flows.

Collaborative and Other Research and Development Arrangements and Royalties

The Company recognizes revenue when it satisfies a performance obligation by transferring promised goods or services to a customer. Revenue is measured at the transaction price that is based on the amount of consideration that the Company expects to receive in exchange for transferring the promised goods or services to the customer. The transaction price includes estimates of variable consideration to the extent it is probable that a significant reversal of revenue recognized will not occur.

The Company has collaboration and license agreements with a number of third parties as well as research and development agreements with certain government entities. The Company's primary sources of revenue are license, service, royalty and product sale revenues from these collaborative and other research and development arrangements.

Revenue from license fees, royalty payments, milestone payments, and research and development fees are recognized as revenue when the earnings process is complete and the Company has no further continuing performance obligations or the Company has completed the performance obligations under the terms of the agreement.

Arrangements that involve the delivery of more than one performance obligation are initially evaluated as to whether the intellectual property licenses granted by the Company represent distinct performance obligations. If they are determined to be distinct, the value of the intellectual property licenses would be recognized up-front while the research and development service fees would be recognized as the performance obligations are satisfied. Variable consideration is assessed at each reporting period as to whether it is not subject to significant future reversal and, therefore, should be included in the transaction price at the inception of the contract. If a contract includes a fixed or minimum amount of research and development support, this also would be included in the transaction price. Changes to collaborations, such as the extensions of the research term or increasing the number of targets or technology covered under an existing agreement, are assessed for whether they represent a modification or should be accounted for as a new contract. For contracts with multiple performance obligations, revenue is allocated to each performance obligation based on its relative standalone selling price. Standalone selling prices are based on observable prices at which the Company separately sells the products or services. If a standalone selling price is not directly observable, then the Company estimates the standalone selling price considering market conditions and entity-specific factors. Analyzing the arrangement to identify performance obligations requires the use of judgment, and each may be an obligation to deliver services, a right or license to use an asset, or another performance obligation.

Milestone payments are recognized as licensing revenue upon the achievement of specified milestones if (i) the milestone is substantive in nature and the achievement of the milestone was not probable at the inception of the agreement; and (ii) the Company has a right to payment. Any milestone payments received prior to satisfying these revenue recognition criteria are recorded as deferred revenue.

Reimbursements received for direct out-of-pocket expenses related to research and development costs are recorded as revenue in the Consolidated Statements of Comprehensive Loss rather than as a reduction in expenses. Under the Company's contracts with the Biomedical Advanced Research and Development Authority within the United States Department of Health and Human Services ("BARDA/HHS") and the National Institute of Allergy and Infectious Diseases ("NIAID/HHS"), revenue is recognized as reimbursable direct and indirect costs are incurred.

Under certain of the Company's license agreements, the Company receives royalty payments based upon its licensees' net sales of covered products. Royalties are recognized at the later of when (i) the subsequent sale or usage occurs, or (ii) the performance obligation to which some or all of the sales-based or usage-based royalty has been satisfied.

Product Sales

The Company recognizes revenue for sales of RAPIVAB when the customer obtains control of the product, which generally occurs on the date of shipment to the Company's specialty distributors, utilizing the Sell-In revenue recognition methodology. Product sales are recognized net of estimated allowances, discounts, sales returns, chargebacks and rebates. In the United States, and prior to the Seqirus UK Limited ("SUL") agreement, the Company sold RAPIVAB to specialty distributors, who in turn, sell to physician offices, hospitals and federal, state and commercial health care organizations. With the completion of the SUL worldwide license of RAPIVAB, SUL will be responsible for sales of RAPIVAB, other than U.S. Government stockpiling sales. With the completion of the SUL collaboration, all peramivir sales (i.e., RAPIVAB, ALPIVAB™, RAPIACTA®, and PERAMIFLU®) should be made by the Company's partners, except for U.S. Government stockpiling sales, and the Company will be reliant on these partners to generate sales.

Sales deductions consist of statutory rebates to state Medicaid, Medicare and other government agencies and sales discounts (including trade discounts and distribution service fees). These deductions are recorded as reductions from revenue from RAPIVAB in the same period as the related sales with estimates of future utilization derived from historical experience adjusted to reflect known changes in the factors that impact such reserves.

The Company recorded the following revenues for the three and nine months ended September 30, 2018 and 2017:

	Three Months		Nine Months	
	2018	2017	2018	2017
Product sales	$ —	$ 1,501	$ —	$ 1,501
Royalty revenue	523	442	4,326	7,252
Collaborative and other research and development revenues:				
U.S. Department of Health and Human Services	931	1,490	1,598	4,305
Shionogi & Co. Ltd.	—	296	—	888
Seqirus UK Limited	—	5,031	12,000	7,350
Total collaborative and other research and development revenues	931	6,817	13,598	12,543
Total revenues	$ 1,454	$ 8,760	$ 17,924	$ 21,296

Contract Balances

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets) and deferred revenue and billings in excess of revenue recognized (contract liabilities) on the Consolidated Balance Sheets.

Contract assets - The Company's long-term contracts, typically the government research and development contracts, are billed as work progresses in accordance with the contract terms and conditions, either at periodic intervals or upon achievement of certain milestones. Often this results in billing occurring subsequent to revenue recognition resulting in contract assets. Contract assets are generally classified as current assets in the Consolidated Balance Sheet.

Contract liabilities - The Company may receive cash payments from customers in advance of the Company's performance resulting in contract liabilities. These contract liabilities are classified as either current or long-term in the Consolidated Balance Sheet based on the timing of when the Company expects to recognize the revenue.

Contract Costs

The Company may incur direct and indirect costs associated with obtaining a contract. Incremental contract costs that the Company expects to recover are capitalized and amortized over the expected term of the contract. Non-incremental contract costs and costs that the Company does expect to recover are expensed as incurred.

Advertising

The Company engages in very limited distribution and direct-response advertising. Advertising and promotional costs are expensed as the costs are incurred.

Research and Development Expenses

The Company's research and development costs are charged to expense when incurred. Research and development expenses include all direct and indirect development costs related to the development of the Company's portfolio of product candidates. Advance payments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized. Such amounts are recognized as expense when the related goods are delivered or the related services are performed. Research and development expenses include, among other items, personnel costs, including salaries and benefits, manufacturing costs, clinical, regulatory, and toxicology services performed by CROs, materials and supplies, and overhead allocations consisting of various administrative and facilities related costs. Most of the Company's manufacturing and clinical and preclinical studies are performed by third-party CROs. Costs for studies performed by CROs are accrued by the Company over the service periods specified in the contracts and estimates are adjusted, if required, based upon the Company's on-going review of the level of services actually performed.

Additionally, the Company has license agreements with third parties, such as Albert Einstein College of Medicine of Yeshiva University ("AECOM"), Industrial Research, Ltd. ("IRL"), and the University of Alabama at Birmingham ("UAB"), which require fees related to sublicense agreements or maintenance fees. The Company expenses sublicense payments as incurred unless they are related to revenues that have been deferred, in which case the expenses are deferred and recognized over the related revenue recognition period. The Company expenses maintenance payments as incurred.

Stock-Based Compensation

All share-based payments, including grants of stock option awards and restricted stock unit awards, are recognized in the Company's Consolidated Statements of Comprehensive Loss based on their fair values. The fair value of stock option awards is estimated using the Black-Scholes option pricing model. The fair value of restricted stock unit awards is based on the grant date closing price of the common stock. Stock-based compensation cost is recognized as expense on a straight-line basis over the requisite service period of the award. In addition, we have outstanding performance-based stock options for which no compensation expense is recognized until "performance" is deemed to have occurred.

Interest Expense and Deferred Financing Costs

Interest expense for the three months ended September 30, 2018 and 2017 was $2,346 and $2,140, respectively, and for the nine months ended September 30, 2018 and 2017 was $6,762 and $6,334, respectively, and primarily relates to the issuance of the PhaRMA Notes (defined in Note 4) and the Amended and Restated Senior Credit Facility (defined in Note 5). Costs directly associated with the issuance of the PhaRMA Notes and the Amended and Restated Senior Credit Facility have been capitalized and are netted against the non-recourse notes payable and Amended and Restated Senior Credit Facility on the Consolidated Balance Sheets. These costs are being amortized to interest expense over the terms of the PhaRMA Notes and the Amended and Restated Senior Credit Facility using the effective interest rate method. Amortization of deferred financing costs and original issue discount included in interest expense was $222 and $219 for each of the three months ended September 30, 2018 and 2017, respectively, and $676 and $658 for each of the nine months ended September 30, 2018 and 2017, respectively.

Lease Financing Obligation

Based on the terms of the lease agreement for the research facility in Birmingham, Alabama, the Company had construction period risks during the construction period and the Company was deemed the owner of the building (for accounting purposes only) during the construction period. Accordingly, the Company recorded an asset of $1,589 at December 31, 2015, representing the Company's leased portion of the building and recorded a corresponding liability. Upon completion of leasehold improvement construction, which ended in 2016, the Company did not meet the sale-leaseback criteria for de-recognition of the building asset and liability. Therefore, the lease is accounted for as a financing obligation. The asset will be depreciated over the expected duration of the lease of 20.5 years, and rental payments will be treated as principal and interest payments on the lease financing obligation liability. The underlying accounting for this transaction has no impact on cash flows associated with the underlying lease or construction in process. Interest expense for the three months ended September 30, 2018 and 2017 includes $85 and $82, respectively, and for the nine months ended September 30, 2018 and September 30, 2017 includes $252 and $217, respectively, related to the lease financing obligation.

At each of September 30, 2018 and December 31, 2017, the lease financing obligation balance was $2,703 and was recorded as a long term liability on the consolidated balance sheets. At September 30, 2018 the remaining future minimum payments under the lease financing obligation are $4,002.

Currency Hedge Agreement

In connection with the issuance by Royalty Sub of the PhaRMA Notes, the Company entered into a Currency Hedge Agreement to hedge certain risks associated with changes in the value of the Japanese yen relative to the U.S. dollar. The Currency Hedge Agreement does not qualify for hedge accounting treatment; therefore mark to market adjustments are recognized in the Company's Consolidated Statements of Comprehensive Loss. Cumulative mark to market adjustments for the nine months ended September 30, 2018 and 2017 resulted in losses of $606 and $1,858, respectively. Mark to market adjustments are determined by a third party pricing model that uses quoted prices in markets that are not actively traded and for which significant inputs are observable directly or indirectly, representing Level 2 in the fair value hierarchy as defined by U.S. GAAP. In addition, the Company realized currency exchange gains of $940 and $966 during the first nine months of 2018 and 2017, respectively, associated with the exercise of a U.S. dollar/Japanese yen currency option under the Currency Hedge Agreement. The Company is also required to post collateral in connection with the mark to market adjustments based on thresholds defined in the Currency Hedge Agreement. As of September 30, 2018 and December 31, 2017, no hedge collateral was posted under the agreement.

Net Loss Per Share

Net loss per share is based upon the weighted average number of common shares outstanding during the period. Diluted loss per share is equivalent to basic net loss per share for all periods presented herein because common equivalent shares from unexercised stock options and common shares expected to be issued under the Company's employee stock purchase plan were anti-dilutive. The calculation of diluted earnings per share for the three months ended September 30, 2018 and 2017 does not include 2,475 and 1,996, respectively, of such potential common shares, as their impact would be anti-dilutive. The calculation of diluted earnings per share for the nine months ended September 30, 2018 and 2017 does not include 2,071 and 2,519, respectively, of such potential common shares, as their impact would be anti-dilutive.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires the Company to make estimates and assumptions that affect the amounts reported in the financial statements. Actual results could differ from those estimates.

Significant Customers and Other Risks

Significant Customers

Prior to the SUL Agreement, the Company relied primarily on three specialty distributors to purchase and supply the majority of RAPIVAB. These three pharmaceutical specialty distributors accounted for greater than 90% of all RAPIVAB product sales and accounted for predominantly all of the Company's outstanding receivables from product sales. The loss of one or more of these specialty distributors as a customer could have negatively impacted the commercialization of RAPIVAB. However, the Company will utilize these specialty distributors on a limited basis subsequent to the SUL collaboration, as SUL and other peramivir collaboration partners will be responsible for commercial sales on a worldwide basis. In addition, in connection with the SUL collaboration, all peramivir sales (i.e., RAPIVAB, ALPIVAB, RAPIACTA, and PERAMIFLU) will be made by the Company's partners and the Company will be reliant on these partners to generate sales and remit cash to satisfy receivables.

Other than peramivir royalty revenues for which SUL has a significant percentage of worldwide geography, the Company's primary source of revenue that has an underlying cash flow stream is the reimbursement of galidesivir (formerly BCX4430) development expenses earned under cost-plus-fixed-fee contracts with BARDA/HHS and NIAID/HHS (each as defined below). The Company relies on BARDA/HHS and NIAID/HHS to reimburse predominantly all of the development costs for its galidesivir program. Accordingly, reimbursement of these expenses represents a significant portion of the Company's collaborative and other research and development revenues. The completion or termination of the NIAID/HHS and BARDA/HHS galidesivir contracts could negatively impact the Company's future Consolidated Statements of Comprehensive Loss and Cash Flows. The Company recognizes royalty revenue from the net sales of RAPIACTA by Shionogi; however, the underlying cash flow from these royalty payments, except for Japanese government stockpiling sales, is used directly to pay the interest, and then the principal, on the Company's non-recourse notes payable. Payment of the interest and the ultimate repayment of principal of these notes will be entirely funded by future royalty payments derived from net sales of RAPIACTA. Further, the Company's drug development activities are performed by a limited group of third party vendors. If any of these vendors were unable to perform their services, this could significantly impact the Company's ability to complete its drug development activities.

Risks from Third Party Manufacturing and Distribution Concentration

The Company primarily relies on single source manufacturers for active pharmaceutical ingredient and finished drug product manufacturing of product candidates in development. Delays in the manufacture or distribution of any product could adversely impact the commercial revenue and future procurement stockpiling of the Company's product candidates in development.

Credit Risk

Cash equivalents and investments are financial instruments which potentially subject the Company to concentration of risk to the extent recorded on the Consolidated Balance Sheets. The Company deposits excess cash with major financial institutions in the United States. Balances may exceed the amount of insurance provided on such deposits. The Company believes it has established guidelines for investment of its excess cash relative to diversification and maturities that maintain safety and liquidity. To minimize the exposure due to adverse shifts in interest rates, the Company maintains a portfolio of investments with an average maturity of approximately 18 months or less. Other than product sale and collaborative partner receivables discussed above, the majority of the Company's receivables from collaborations are due from the U.S. Government, for which there is no assumed credit risk.

Recent Accounting Pronouncements

In June 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update 2018-07: *Compensation – Stock Compensation: Improvements to Nonemployee Share-based Payment Accounting* ("ASU 2018-07"). The amendments in this update expand the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. The amendments specify that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards. Additionally, the amendments clarify that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under Topic 606, Revenue from Contracts with Customers. The standard is effective for annual periods beginning after December 15, 2018, and interim periods within those annual reporting periods. Early adoption is permitted, but no earlier than an entity's adoption date of Topic 606. The Company elected to adopt ASU 2018-07 as of July 1, 2018. Adoption of ASU 2018-07 did not have a material impact on the Company's consolidated financial statements.

On December 22, 2017, the SEC staff issued SAB 118, which provides guidance on accounting for the tax effects of the TCJA. SAB 118 provides a measurement period that should not extend beyond one year from the TCJA enactment date for companies to complete the accounting under ASC 740, Income Taxes.

In November 2016, the FASB issued Accounting Standards Update 2016-18: *Statement of Cash Flows (Topic 230): Restricted Cash* ("ASU 2016-18"). The new standard requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The standard is effective for annual periods beginning after December 15, 2017, and interim periods within those annual reporting periods. The Company adopted ASU 2016-18 as of January 1, 2018 and applied it retrospectively to all periods presented. Adoption of ASU 2016-18 did not have a material impact on the Company's consolidated financial statements.

In August 2016, the FASB issued Accounting Standards Update No. 2016-15: *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"). The amendments in this update clarify how entities should classify certain cash receipts and cash payments on the Consolidated Statements of Cash Flows. The new guidance also clarifies how the predominance principle should be applied when cash receipts and cash payments have aspects of more than one class of cash flows. The standard is effective for annual periods beginning after December 15, 2017, and interim periods within those annual reporting periods. The Company adopted ASU 2016-15 as of January 1, 2018. Adoption of ASU 2016-15 did not have a material impact on the Company's consolidated financial statements.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02: *Leases (Topic 842)* ("ASU 2016-02"). The amendments in this update require lessees, among other things, to recognize lease assets and lease liabilities on the balance sheet for all leases with terms greater than 12 months. This update also introduces new disclosure requirements for leasing arrangements. ASU 2016-02 will be effective for the Company in fiscal year 2019, but early adoption is permitted. The Company is currently evaluating the impact of this update on its consolidated financial statements.

In January 2016, the FASB issued Accounting Standards Update No. 2016-01: *Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities* ("ASU 2016-01"). The amendments in this update address certain aspects of recognition, measurement, presentation and disclosure of financial instruments. In particular, the amendments in this update supersede, for public business entities, the requirement to disclose the methods and significant assumptions used in calculating the fair value of financial instruments required to be disclosed for financial instruments measured at amortized cost on the balance sheet. The standard is effective for annual periods beginning after December 15, 2017, and interim periods within those annual reporting periods. The Company adopted ASU 2016-15 as of January 1, 2018. Adoption of ASU 2016-15 did not have a material impact on the Company's consolidated financial statements.

Note 2 — Stock-Based Compensation

As of September 30, 2018, the Company had two stock-based employee compensation plans, the Stock Incentive Plan ("Incentive Plan") and the Employee Stock Purchase Plan ("ESPP"). The Incentive Plan was amended and restated in April 2017 and approved by the Company's stockholders in May 2017. The ESPP was amended and restated in March 2014 and approved by the Company's stockholders in May 2014. Stock-based compensation expense of $7,072 ($6,899 of expense related to the Incentive Plan and $173 of expense related to the ESPP) was recognized during the first nine months of 2018, while $10,307 ($10,107 of expense related to the Incentive Plan and $200 of expense related to the ESPP) was recognized during the first nine months of 2017.

There was approximately $12,793 of total unrecognized compensation cost related to non-vested stock option awards and restricted stock unit awards granted by the Company as of September 30, 2018. That cost is expected to be recognized as follows: $1,973 during the remainder of 2018, $5,910 in 2019, $3,434 in 2020, $1,451 in 2021 and $25 in 2022. In addition, the Company has outstanding performance-based stock options for which no compensation expense is recognized until "performance" has occurred and the award vests.

Stock Incentive Plan

The Company grants stock option awards and restricted stock unit awards to its employees, directors, and consultants under the Incentive Plan. Under the Incentive Plan, stock option awards are granted with an exercise price equal to the market price of the Company's stock at the date of grant. Stock option awards granted to employees generally vest 25% each year until fully vested after four years. In August 2013 and December 2014, the Company issued 1,032 and 1,250 performance-based stock options, respectively. These awards vest upon successful completion of specific development milestones. As of September 30, 2018, 75% of the August 2013 grants have vested based upon achievement of three milestones: (1) successful completion of the OPuS-1 clinical trial, for which vesting occurred in the second quarter of 2014, (2) FDA approval of RAPIVAB, for which vesting occurred in the fourth quarter of 2014, and (3) initiation of a Phase 1 clinical trial to evaluate the safety, pharmacokinetics and pharmacodynamics of orally-administered BCX7353 in healthy volunteers, for which vesting occurred in the second quarter of 2015. As of September 30, 2018, 30% of the December 2014 grants have vested based upon achievement of successful completion of a hereditary angioedema ("HAE") patient trial with a 2nd generation compound, for which vesting occurred in August 2017. Thus, as of September 30, 2018, 25% of the August 2013 performance-based grants and 70% of the December 2014 performance-based grants remain unvested and no compensation expense has been recognized for these portions of the previously issued performance-based grants. Stock option awards granted to non-employee directors of the Company generally vest monthly over one year. All stock option awards have contractual terms of 5 to 10 years. The vesting exercise provisions of all awards granted under the Incentive Plan are subject to acceleration in the event of certain stockholder-approved transactions, or upon the occurrence of a change in control as defined in the Incentive Plan.

Related activity under the Incentive Plan is as follows:

	Awards Available	Options Outstanding	Weighted Average Exercise Price
Balance December 31, 2017	468	14,452	$ 6.06
Restricted stock unit awards granted	(10)	—	—
Restricted stock unit awards cancelled	—	—	—
Stock option awards granted	(321)	321	6.12
Stock option awards exercised	—	(572)	2.78
Stock option awards cancelled	143	(143)	6.08
Balance September 30, 2018	280	14,058	$ 6.20

As of September 30, 2018, there were 27 restricted stock unit awards outstanding.

For stock option awards granted under the Incentive Plan during the first nine months of 2018 and 2017, the fair value was estimated on the date of grant using a Black-Scholes option pricing model and the assumptions noted in the table below. The weighted average grant date fair value per share of the awards granted during the first nine months of 2018 and 2017 was $4.22 and $3.74, respectively. The fair value of the stock option awards is amortized to expense over the vesting periods using a straight-line expense attribution method. The following table summarizes the key assumptions used by the Company to value the stock option awards granted during the first nine months of 2018 and 2017. The expected life is based on the average of the assumption that all outstanding stock option awards will be exercised at full vesting and the assumption that all outstanding stock option awards will be exercised at the midpoint of the current date (if already vested) or at full vesting (if not yet vested) and the full contractual term. The expected volatility represents the historical volatility on the Company's publicly traded common stock. The Company has assumed no expected dividend yield, as dividends have never been paid to stock or option holders and will not be paid for the foreseeable future. The weighted average risk-free interest rate is the implied yield currently available on zero-coupon government issues with a remaining term equal to the expected term.

Weighted Average Assumptions for Stock Option Awards Granted to Employees and Directors under the Incentive Plan

	2018	2017
Expected Life in Years	5.5	5.5
Expected Volatility	82.0%	82.0%
Expected Dividend Yield	0.0%	0.0%
Risk-Free Interest Rate	2.8%	1.9%

Employee Stock Purchase Plan ("ESPP")

The Company has reserved a total of 1,475 shares of common stock to be purchased under the ESPP, of which 234 shares remain available for purchase at September 30, 2018. Eligible employees may authorize up to 15% of their salary to purchase common stock at the lower of 85% of the beginning or 85% of the ending price during six-month purchase intervals. No more than 3 shares may be purchased by any one employee at the six-month purchase dates and no employee may purchase stock having a fair market value at the commencement date of $25 or more in any one calendar year. The Company issued 92 shares during the first nine months of 2018 under the ESPP. Compensation expense for shares purchased under the ESPP related to the purchase discount and the "look-back" option were determined using a Black-Scholes option pricing model.

Note 3 — Collaborative and Other Research and Development Contracts

U.S. Department of Health and Human Services ("BARDA/HHS"). On March 31, 2015, the Company announced that BARDA/HHS had awarded the Company a contract for the continued development of galidesivir as a potential treatment for diseases caused by RNA pathogens, including filoviruses. This BARDA/HHS contract includes a base contract of $16,265 to support galidesivir drug manufacturing, as well as $22,855 in additional development options that can be exercised by the government, bringing the potential value of the contract to $39,120. As of September 30, 2018, a total of $20,574 has been awarded under exercised options within this contract.

National Institute of Allergy and Infectious Diseases ("NIAID/HHS"). In September 2013, NIAID/HHS contracted with the Company for the development of galidesivir as a treatment for Marburg virus disease. NIAID/HHS, part of the National Institutes of Health, made an initial award of $5,000 to the Company. The goals of this contract, including amendments, are to file IND applications for intravenous and intramuscular galidesivir for the treatment of Marburg virus disease and other hemorrhagic fever virus diseases, including Ebola virus and yellow fever disease, and to conduct Phase 1 human clinical trials. As of September 30, 2018, the total NIAID/HHS contract amount to advance the program through the completion of the Phase 1 clinical program is $43,035. As of September 30, 2018, all options have been exercised under this contract.

The contracts with NIAID/HHS and BARDA/HHS are cost-plus-fixed-fee contracts. That is, the Company is entitled to receive reimbursement for all costs incurred in accordance with the contract provisions that are related to the development of galidesivir plus a fixed fee, or profit. NIAID/HHS and BARDA/HHS will make periodic assessments of progress and the continuation of the contract is based on the Company's performance, the timeliness and quality of deliverables, and other factors. The government has rights under certain contract clauses to terminate these contracts. These contracts are terminable by the government at any time for breach or without cause.

Centers for Disease Control and Prevention ("CDC"). On September 6, 2018, the Company announced that the CDC had awarded the Company a $34,660 contract for the procurement of up to 50,000 doses of RAPIVAB (peramivir injection) over a five-year period. The CDC's purchase of RAPIVAB will supply the Strategic National Stockpile, the nation's largest supply of potentially life-saving pharmaceuticals and medical supplies for use in a public health emergency.

Seqirus UK Limited ("SUL"). On June 16, 2015, the Company and SUL, a limited company organized under the laws of the United Kingdom and a subsidiary of CSL Limited, a company organized under the laws of Australia, entered into a License Agreement (the "SUL Agreement") granting SUL and its affiliates worldwide rights to develop, manufacture and commercialize RAPIVAB and ALPIVAB (peramivir injection) for the treatment of influenza except for the rights to conduct such activities in Israel, Japan, Korea and Taiwan (the permitted geographies together constituting the "Territory"). Peramivir is an intravenous treatment for acute uncomplicated influenza and is currently approved for use in the United States, European Union, Canada, Australia, Japan, Taiwan and Korea. Peramivir is the first and only intravenous influenza treatment in the world and was approved by the U.S. Food and Drug Administration in December 2014 for the treatment of acute uncomplicated influenza in patients 18 years and older who have been symptomatic for no more than two days. The Company retains all rights and associated economics to procure pandemic stockpiling orders for RAPIVAB from the U.S. Government, while SUL has the right to pursue government stockpiling outside the U.S.

Pursuant to the SUL Agreement, RAPIVAB and ALPIVAB are licensed to and expected to be commercialized by CSL's subsidiary, SUL, which specializes in influenza prevention through the supply of seasonal and pandemic vaccine to global markets. SUL will manufacture, commercialize and exercise decision-making authority with respect to the development and commercialization of RAPIVAB and ALPIVAB within the Territory and be responsible for all related costs, including sales and promotion.

Under the terms of the SUL Agreement, the Company is responsible for fulfilling all post-marketing approval commitments in connection with the FDA's approval of the new drug application ("NDA"), and upon fulfillment will transfer ownership of and financial responsibility for the NDA to SUL.

Under the terms of the SUL Agreement, the Company received an upfront payment of $33,740, has received $7,000 of milestone payments and should receive an additional $5,000 milestone payment related to the successful marketing approval by the EMA for an adult indication in the EU that was received in April 2018. $7,000 of the upfront payment was determined to be contingent upon EU marketing approval and was deferred until it was recognized in the second quarter of 2018. BioCryst and SUL are engaged in a formal dispute resolution process, which has now entered arbitration proceedings. The dispute involves many items under the contract including, but not limited to, the EMA approval milestone, which BioCryst maintains is now due under the SUL Agreement. The Company is also entitled under the SUL Agreement to receive tiered royalties at a percentage rate beginning in the mid-teens contingent upon meeting minimum thresholds of net sales, as well as a low-thirties percentage of the gross profit from government stockpiling purchases made outside the U.S. Specifically, the Company receives tiered royalties at a percentage rate in the mid-teens to low-forties on net sales in the U.S. during a Contract Year (defined as July 1 - June 30) and tiered royalties at a percentage rate in the mid-teens to mid-twenties on net sales in the Territory, other than in the U.S., during a Calendar Year, each subject to certain downward adjustments for circumstance or events impacting the overall market opportunity. SUL's royalty payment obligations commence on the date of the SUL Agreement and expire, on a country-by-country basis, upon the later of (i) the expiration of legal exclusivity in such country and (ii) ten years from the date of the SUL Agreement. The Company developed peramivir under a license from UAB and will owe sublicense payments to them on any future milestone payments and/or royalties received by the Company from SUL.

Shionogi & Co., Ltd. ("Shionogi"). In February 2007, the Company entered into an exclusive license agreement with Shionogi to develop and commercialize peramivir in Japan for the treatment of seasonal and potentially life-threatening human influenza. Under the terms of the agreement, Shionogi obtained rights to injectable formulations of peramivir in Japan. The Company developed peramivir under a license from UAB and will owe sublicense payments to them on any future milestone payments and/or royalties received by the Company from Shionogi. In October 2008, the Company and Shionogi amended the license agreement to expand the territory covered by the agreement to include Taiwan. Shionogi has commercially launched peramivir under the commercial name RAPIACTA in Japan and Taiwan.

In December 2017, the Company, on behalf of Royalty Sub, instituted arbitration proceedings against Shionogi in order to resolve a dispute with Shionogi under the Shionogi Agreement regarding the achievement of sales milestones and escalating royalties. In the event that the Company prevails in the arbitration, any amounts realized in the arbitration or in respect of the milestone payments and escalating royalties that are the subject of the arbitration would be for the benefit of Royalty Sub and be used by Royalty Sub to service its obligations under the non-recourse PhaRMA Notes (except for any amounts realized by the Company in respect of royalties relating to sales to Japanese governmental entities, which amounts would be retained by the Company). The costs associated with the arbitration proceedings are expected to be paid out of the assets of Royalty Sub in accordance with the terms of the indenture and servicing agreement relating to the PhaRMA Notes, except to the extent such costs are recovered in connection with any arbitration award in favor of the Company and Royalty Sub if they prevail in the arbitration proceedings. Arbitration proceedings, like other legal proceedings, are inherently uncertain. As a result, the Company cannot assure you that the Company will prevail in the arbitration. As any arbitration award in favor of the Company would accrue primarily to the benefit of Royalty Sub and the holders of the PhaRMA Notes, and because the costs associated with the arbitration proceedings are expected to come out of the assets of Royalty Sub if not recovered as part of any arbitration award in favor of the Company and Royalty Sub, the Company does not currently anticipate that these arbitration proceedings will have a material adverse impact on the Company.

Green Cross Corporation ("Green Cross"). In June 2006, the Company entered into an agreement with Green Cross to develop and commercialize peramivir in Korea. Under the terms of the agreement, Green Cross will be responsible for all development, regulatory, and commercialization costs in Korea. The Company received a one-time license fee of $250. The license also provides that the Company will share in profits resulting from the sale of peramivir in Korea, including the sale of peramivir to the Korean government for stockpiling purposes. Furthermore, Green Cross will pay the Company a premium over its cost to supply peramivir for development and any future marketing of peramivir products in Korea. Green Cross has commercially launched peramivir under the commercial name PeramiFlu in Korea.

Mundipharma International Holdings Limited ("Mundipharma"). In February 2006, the Company entered into an exclusive, royalty bearing right and license agreement with Mundipharma for the development and commercialization of forodesine, a Purine Nucleoside Phosphorylase ("PNP") inhibitor, for use in oncology. Under the terms of the license agreement, as amended, Mundipharma obtained rights to forodesine in markets across Europe, Asia, and Australasia in exchange for a $10,000 up-front payment. In April 2017, Mundipharma obtained regulatory approval of Mundesine ® (forodesine hydrochloride) for the treatment of relapsed/refractory PTCL (Peripheral T-Cell Lymphoma) by the Ministry of Health, Labor and Welfare in Japan and is responsible for all commercialization costs in Japan. With Mundesine's approval, we began receiving royalties on product sales in Japan as per the amended license agreement.

Albert Einstein College of Medicine of Yeshiva University and Industrial Research, Ltd. ("AECOM" and "IRL" respectively). In June 2000, the Company licensed a series of potent inhibitors of PNP from AECOM and IRL, (collectively, the "Licensors"). The lead product candidate from this collaboration is forodesine. The Company has obtained worldwide exclusive rights to develop and ultimately distribute these, or any other, product candidates that might arise from research on these inhibitors. The Company has the option to expand the agreement to include other inventions in the field made by the investigators or employees of the Licensors. The Company agreed to use commercially reasonable efforts to develop these drugs. In addition, the Company has agreed to pay certain milestone payments for each licensed product (which range in the aggregate from $1,400 to almost $4,000 per indication) for future development of these inhibitors, single digit royalties on net sales of any resulting product made by the Company, and to share approximately one quarter of future payments received from other third-party partners, if any. In addition, the Company has agreed to pay annual license fees, which can range from $150 to $500, that are creditable against actual royalties and other payments due to the Licensors. This agreement may be terminated by the Company at any time by giving 60 days advance notice or in the event of material uncured breach by the Licensors.

In May 2010, the Company amended the licensee agreement through which the Company obtained worldwide exclusive rights to develop and ultimately distribute any product candidates that might arise from research on a series of PNP inhibitors, including forodesine and ulodesine. Under the terms of the amendment, the Licensors agreed to accept a reduction of one-half in the percentage of future payments received from third-party sub licensees of the licensed PNP inhibitors that must be paid to the Licensors. This reduction does not apply to (i) any milestone payments the Company may receive in the future under its license agreement dated February 1, 2006 with Mundipharma and (ii) royalties received from its sub licensees in connection with the sale of licensed products, for which the original payment rate will remain in effect. The rate of royalty payments to the Licensors based on net sales of any resulting product made by the Company remains unchanged.

On June 19, 2012, the Company further amended its agreements with AECOM/IRL whereby the parties clarified the definition of the field with respect to PNP inhibition and AECOM/IRL agreed to exclusive worldwide license of galidesivir to BioCryst for any antiviral use.

On January 6, 2014, the Carbohydrate Chemistry Research Team from Callaghan Innovation Research Limited, formerly Industrial Research Limited, transferred to Victoria University of Wellington ("VUW") to establish the Ferrier Research Institute. The intellectual property rights relating to this research team, and the contracts relating to that intellectual property were transferred to a wholly owned subsidiary of VUW, including the contracts to which BioCryst is a party. The parties executed novation agreements in order to effectuate the transfer. Except for a substitution of parties, the terms and conditions of the contracts are substantially the same.

The University of Alabama at Birmingham ("UAB"). The Company currently has agreements with UAB for influenza neuraminidase and complement inhibitors. Under the terms of these agreements, UAB performed specific research for the Company in return for research payments and license fees. UAB has granted the Company certain rights to any discoveries in these areas resulting from research developed by UAB or jointly developed with the Company. The Company has agreed to pay single digit royalties on sales of any resulting product and to share in future payments received from other third-party partners. The Company has completed the research under the UAB agreements. These two agreements have initial 25-year terms, are automatically renewable for five-year terms throughout the life of the last patent and are terminable by the Company upon three months' notice and by UAB under certain circumstances. Upon termination both parties shall cease using the other parties' proprietary and confidential information and materials, the parties shall jointly own joint inventions and UAB shall resume full ownership of all UAB licensed products. There is currently no activity between the Company and UAB on these agreements, but when the Company licenses this technology, such as in the case of the Shionogi, Green Cross and SUL agreements, or commercializes products related to these programs, the Company will owe sublicense fees or royalties on amounts it receives.

Note 4 — Royalty Monetization

Overview

On March 9, 2011, the Company completed a $30,000 financing transaction to monetize certain future royalty and milestone payments under the Shionogi Agreement, pursuant to which Shionogi licensed from the Company the rights to market RAPIACTA in Japan and Taiwan. The Company received net proceeds of $22,691 from the transaction after transaction costs of $4,309 and the establishment of a $3,000 interest reserve account by Royalty Sub, available to help cover interest shortfalls in the future. All of the interest reserve account has been fully utilized with the September 2012 interest payment.

As part of the transaction, the Company entered into a purchase and sale agreement dated as of March 9, 2011 with Royalty Sub, whereby the Company transferred to Royalty Sub, among other things, (i) its rights to receive certain royalty and milestone payments from Shionogi arising under the Shionogi Agreement, and (ii) the right to receive payments under a Japanese yen/US dollar foreign currency hedge arrangement (as further described below, the "Currency Hedge Agreement") put into place by the Company in connection with the transaction. Royalty payments will be paid by Shionogi in Japanese yen and milestone payments will paid in U.S. dollars. The Company's collaboration with Shionogi was not impacted as a result of this transaction.

Non-Recourse Notes Payable

On March 9, 2011, Royalty Sub completed a private placement to institutional investors of $30,000 in aggregate principal amount of its PhaRMA Senior Secured 14.0% Notes due 2020 (the "PhaRMA Notes"). The PhaRMA Notes were issued by Royalty Sub under an Indenture, dated as of March 9, 2011 (the "Indenture"), by and between Royalty Sub and U.S. Bank National Association, as Trustee. Principal and interest on the PhaRMA Notes issued are payable from, and are secured by, the rights to royalty and milestone payments under the Shionogi Agreement transferred by the Company to Royalty Sub and payments, if any, made to Royalty Sub under the Currency Hedge Agreement. The PhaRMA Notes bear interest at 14% per annum, payable annually in arrears on September 1st of each year. The Company remains entitled to receive any royalties and milestone payments related to sales of peramivir by Shionogi following repayment of the PhaRMA Notes.

Royalty Sub's obligations to pay principal and interest on the PhaRMA Notes are obligations solely of Royalty Sub and are without recourse to any other person, including the Company, except to the extent of the Company's pledge of its equity interests in Royalty Sub in support of the PhaRMA Notes. The Company may, but is not obligated to, make capital contributions to a capital account that may be used to redeem, or on up to one occasion pay any interest shortfall on, the PhaRMA Notes.

In September 2014, Royalty Sub was unable to pay the accrued interest obligation due September 3, 2013. Under the terms of the Indenture, Royalty Sub's inability to pay the full amount of interest payable in September 2013 by the next succeeding Payment Date for the PhaRMA Notes, which was September 1, 2014, constituted an event of default. Accordingly, the PhaRMA Notes and related accrued interest have been classified as current liabilities on the December 31, 2014 balance sheet and thereafter. As a result of the event of default under the PhaRMA Notes, the holders of the PhaRMA Notes may pursue acceleration of the PhaRMA Notes, may foreclose on the collateral securing the PhaRMA Notes and the equity interest in Royalty Sub and exercise other remedies available to them under the Indenture in respect of the PhaRMA Notes. In such event, the Company may not realize the benefit of future royalty payments that might otherwise accrue to it following repayment of the PhaRMA Notes and it might otherwise be adversely affected. Due to the non-recourse nature of the PhaRMA Notes, in the event of any potential acceleration or foreclosure, the primary impact to the Company would be the loss of future royalty payments from Shionogi and legal costs associated with retiring the PhaRMA Notes. In addition, the Company may incur costs associated with liquidating the related Currency Hedge Agreement, which would no longer be required in the event of foreclosure, or if the PhaRMA Notes cease to be outstanding. As the PhaRMA Notes are the obligation of Royalty Sub and are non-recourse to the Company, the event of default with respect to the PhaRMA Notes is not expected to have a significant impact on the Company's future results of operations or cash flows. As of September 30, 2018, the PhaRMA Notes remain in default.

The Indenture does not contain any financial covenants. The Indenture includes customary representations and warranties of Royalty Sub, affirmative and negative covenants of Royalty Sub, Events of Default and related remedies, and provisions regarding the duties of the Trustee, indemnification of the Trustee, and other matters typical for indentures used in structured financings of this type.

As of September 30, 2018, the aggregate fair value of the PhaRMA Notes was estimated to be approximately 50% of its carrying value of $30,000. The estimated fair value of the PhaRMA Notes is classified as Level 2 in the fair value hierarchy as defined in U.S. GAAP.

The PhaRMA Notes are redeemable at the option of Royalty Sub at any time at a redemption price equal to the outstanding principal balance of the PhaRMA Notes being redeemed plus accrued and unpaid interest through the redemption date on the PhaRMA Notes being redeemed.

Currency Hedge Agreement

In connection with the issuance by Royalty Sub of the PhaRMA Notes, the Company entered into a Currency Hedge Agreement to hedge certain risks associated with changes in the value of the Japanese yen relative to the U.S. dollar. Under the Currency Hedge Agreement, the Company has the right to purchase dollars and sell yen at a rate of 100 yen per dollar for which the Company may be required to pay a premium in each year from 2019 through 2020, provided the Currency Hedge Agreement remains in effect. A payment of $1,950 will be required if, on May 18 of the relevant year, the U.S. dollar is worth 100 yen or less as determined in accordance with the Currency Hedge Agreement.

The Currency Hedge Agreement does not qualify for hedge accounting treatment; therefore, mark to market adjustments are recognized in the Company's Consolidated Statement of Comprehensive Loss. Cumulative mark to market adjustments for the nine months ended September 30, 2018 and 2017 resulted in losses of $606 and $1,858 respectively. The Company is also required to post collateral in connection with the mark to market adjustments based on defined thresholds. As of September 30, 2018 and December 31, 2017, no collateral was posted under the Currency Hedge Agreement. The Company will not be required to post collateral exceeding the maximum premium payments remaining payable under the Currency Hedge Agreement. As of September 30, 2018, the maximum amount of hedge collateral the Company may be required to post is $3,900.

Note 5 — Senior Credit Facility

On July 20, 2018, the Company, together with its consolidated subsidiary, MDCP, LLC (collectively, the "Borrowers"), entered into a $30,000 secured loan facility with MidCap Financial, a Delaware statutory trust, as administrative agent and lender ("MidCap"), pursuant to the terms and conditions of that certain Amended and Restated Credit and Security Agreement, dated as of July 20, 2018 (the "Amended and Restated Senior Credit Facility"), among the Borrowers, MidCap, and the lenders party thereto from time to time. The Amended and Restated Senior Credit Facility refinances and replaces the Senior Credit Facility dated as of September 23, 2016 among the Borrowers, MidCap and the lenders party thereto from time to time (the "Prior Credit Facility"). The Amended and Restated Senior Credit Facility was fully funded at closing and bears a variable interest rate of LIBOR (which shall not be less than 0.5%) plus 8%. The Amended and Restated Senior Credit Facility includes an interest-only payment period through July 2019 and scheduled monthly principal and interest payments for the subsequent 30 months. The Company used a portion of the proceeds of the Amended and Restated Senior Credit Facility to pay off outstanding amounts under the Prior Credit Facility and the remainder will be used for general corporate purposes.

As of September 30, 2018, the Company had borrowings of $30,000 under the Amended and Restated Senior Credit Facility bearing an interest rate of 10.1%. The carrying amount of the debt approximates its fair value based on prevailing interest rates as of the balance sheet date. The remaining scheduled principal repayments of the Amended and Restated Senior Credit Facility are as follows:

Principal Payments	
2018	$ —
2019	5,000
2020	12,000
2021	12,000
2022	1,000
Total	$ 30,000

The debt agreement contains two provisions that if deemed probable would create the recognition of an embedded feature; however, we do not believe either provision is probable.

Note 6 — Stockholders' Equity

On November 8, 2017, the Company filed a $200,000 shelf registration statement on Form S-3 with the SEC. This shelf registration statement became effective on December 12, 2017 and allows the Company to sell securities, including common stock, preferred stock, depository shares, stock purchase contracts, warrants and units, from time to time at prices and on terms to be determined at the time of sale.

On August 6, 2018, the Company completed an underwritten public offering of 10,454,546 shares of its common stock, offered at a price to the public of $5.50 per share, including shares issued pursuant to the underwriters' 30-day option to purchase additional shares, which was exercised in full. The net proceeds from this offering to the Company were approximately $53,400 after deducting underwriting discounts and commissions and estimated offering expenses.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This Quarterly Report on Form 10-Q contains statements of a forward-looking nature relating to future events or the future financial performance of BioCryst. Such statements are only predictions and the actual events or results may differ materially from the results discussed in the forward-looking statements. Factors that could cause or contribute to such differences include those discussed below and elsewhere in this report, as well as those discussed in other filings made by the Company with the Securities and Exchange Commission, including the Company's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. See "Information Regarding Forward-Looking Statements."

Cautionary Statement

The discussion herein contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which are subject to the "safe harbor" created in Section 21E. Forward looking statements regarding our financial condition and our results of operations that are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted within the United States ("U.S. GAAP"), as well as projections for the future. The preparation of these financial statements requires our management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We evaluate our estimates on an ongoing basis. Our estimates are based on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. The results of our estimates form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources.

We operate in a highly competitive environment that involves a number of risks, some of which are beyond our control. We are subject to risks common to biotechnology and biopharmaceutical companies, including risks inherent in our drug discovery, drug development and commercialization efforts, clinical trials, uncertainty of regulatory actions and marketing approvals, reliance on collaborative partners, enforcement of patent and proprietary rights, the need for future capital, competition associated with products, potential competition associated with our product candidates and retention of key employees. In order for any of our product candidates to be commercialized, it will be necessary for us, or our collaborative partners, to conduct clinical trials, demonstrate efficacy and safety of the product candidate to the satisfaction of regulatory authorities, obtain marketing approval, enter into manufacturing, distribution and marketing arrangements, and obtain market acceptance and adequate reimbursement from government and private insurers. We cannot provide assurance that we will generate significant revenues or achieve and sustain profitability in the future. In addition, we can provide no assurance that we will have sufficient funding to meet our future capital requirements. Statements contained in Management's Discussion and Analysis of Financial Condition and Results of Operations and elsewhere in this report which are not historical facts are, or may constitute, forward-looking statements. Forward-looking statements involve known and unknown risks that could cause our actual results to differ materially from expected results. The most significant known risks are discussed in the section entitled "Risk Factors." Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We caution you not to place undue reliance on any forward-looking statements.

Our revenues are difficult to predict and depend on numerous factors, including the prevalence and severity of influenza in regions for which peramivir has received regulatory approval, seasonality of influenza, commercialization efforts and resources dedicated to our products by our collaborative partners, ongoing discussions with government agencies regarding future peramivir and/or galidesivir development and stockpiling procurement, as well as entering into, or modifying, licensing agreements for our product candidates. Furthermore, revenues related to our collaborative development activities are dependent upon the progress toward and the achievement of developmental milestones by us or our collaborative partners.

Our operating expenses are also difficult to predict and depend on several factors, including research and development expenses (and whether these expenses are reimbursable under government contracts), drug manufacturing, and clinical research activities, the ongoing requirements of our development programs, and the availability of capital and direction from regulatory agencies, which are difficult to predict. Management may be able to control the timing and level of research and development and general and administrative expenses, but many of these expenditures will occur irrespective of our actions due to contractually committed activities and/or payments.

As a result of these factors, we believe that period to period comparisons are not necessarily meaningful and you should not rely on them as an indication of future performance. Due to all of the foregoing factors, it is possible that our operating results will be below the expectations of market analysts and investors. In such event, the prevailing market price of our common stock could be materially adversely affected.

Overview

We are a biotechnology company that discovers novel small molecule drugs that block key enzymes involved in the pathogenesis of diseases. We focus on oral treatments for rare diseases in which significant unmet medical needs exist and an enzyme plays the key role in the biological pathway of the disease. We integrate the disciplines of biology, crystallography, medicinal chemistry and computer modeling to discover and develop small molecule pharmaceuticals through the process known as structure-guided drug design.

Critical Accounting Policies and Estimates

The accompanying discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements and the related disclosures, which have been prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosure of contingent assets and liabilities. We evaluate our estimates, judgments and the policies underlying these estimates on a periodic basis, as situations change, and regularly discuss financial events, policies, and issues with members of our audit committee and our independent registered public accounting firm. We routinely evaluate our estimates and policies regarding revenue recognition, administration, inventory and manufacturing, taxes, stock-based compensation, research and development, consulting and other expenses and any associated liabilities.

Recent Corporate Highlights

On July 10, 2018, we terminated our Agreement and Plan of Merger dated as of January 21, 2018 (the “Merger Agreement”) with Idera Pharmaceuticals, Inc. (“Idera”). The Merger Agreement was terminated following the July 10, 2018 special meeting of our stockholders at which time the proposal to adopt the Merger Agreement was not approved by the holders of a majority of our issued and outstanding shares of common stock. Pursuant to the terms of the Merger Agreement, we paid a fixed amount expense reimbursement of $6.0 million to Idera in July 2018.

Early in the third quarter of 2018 and shortly after the termination of our planned merger, we entered into two financial transactions designed to enhance our financial position and provide additional liquidity beyond the expected reporting of efficacy and safety results of our APeX-2 clinical trial. On July 20, 2018, we, together with our consolidated subsidiary, MDCP, LLC (collectively, the “Borrowers”), entered into a $30.0 million secured loan facility with MidCap Financial, a Delaware statutory trust, as administrative agent and lender (“MidCap”), pursuant to the terms and conditions of that certain Amended and Restated Credit and Security Agreement, dated as of July 20, 2018 (the “Amended and Restated Senior Credit Facility”), among the Borrowers, MidCap, and the lenders party thereto from time to time. The Amended and Restated Senior Credit Facility refinances and replaces the Senior Credit Facility dated as of September 23, 2016. The Amended and Restated Senior Credit Facility was fully funded at closing and bears a variable interest rate of LIBOR (which shall not be less than 0.5%) plus 8%. The Amended and Restated Senior Credit Facility includes an interest-only payment period through July 2019 and scheduled monthly principal and interest payments for the subsequent 30 months. We used a portion of the proceeds of the Amended and Restated Senior Credit Facility to pay off outstanding amounts under the Senior Credit Facility and the remainder will be used for general corporate purposes. In addition, on August 6, 2018, we completed an underwritten public offering of approximately 10.5 million shares of our common stock, offered at a price to the public of $5.50 per share, including the full-exercise of shares issued pursuant to the underwriters’ 30-day option to purchase additional shares. The net proceeds from this offering were approximately $53.4 million after deducting underwriting discounts and commissions and estimated offering expenses.

RAPIVAB®/ALPIVAB™/RAPIACTA®/PERAMIFLU® (peramivir injection)

In September 2018, the Centers for Disease Control and Prevention awarded us a $34.7 million contract for the procurement of up to 50,000 doses of RAPIVAB over a five year period to supply the Strategic National Stockpile for use in a public health emergency.

BCX7353

BCX7353 is a second generation HAE compound and our lead molecule that is being developed as a once-daily ("QD") oral therapy for the prevention of HAE attacks (prophylaxis), as well as an acute therapy for HAE attacks. We have recently completed our Phase 2 prophylaxis program (with the completion of APeX-1 and subsequent FDA and EMA regulatory interactions) and have initiated APeX-2 and APeX-S, a Phase 3 and a long-term safety clinical trial, respectively, required for marketing authorization in the United States and the European Union. In addition, an adaptive dose-ranging proof-of-concept clinical trial evaluating efficacy, safety and tolerability for the oral treatment of acute HAE attacks, ZENITH-1, is ongoing. On July 25, 2018, we announced that results from the APeX-1 trial were published online in the July 26, 2018 issue of the New England Journal of Medicine. On August 6, 2018 we announced that Fast Track Designation was granted by the FDA for the prevention of angioedema attacks in patients with HAE. In addition, in May 2018, we announced that the EMA Committee for Orphan Medicinal Products issued a positive opinion on our application for orphan designation of BCX7353 for the treatment of HAE, and the United Kingdom's Medicines and Healthcare products Regulatory Agency had granted a Promising Innovative Medicine designation to BCX7353.

APeX-2 Trial: On March 15, 2018, we announced the dosing of the first patient into APeX-2, a Phase 3 clinical trial evaluating two dose levels of BCX7353 administered orally once-daily as a preventive treatment to reduce the frequency of attacks in patients with HAE. APeX-2 is a randomized, double-blind, placebo-controlled, three-arm trial testing once-daily BCX7353 at 110 mg and 150 mg for prevention of angioedema attacks. The trial enrolled patients with Type I and II HAE in the United States, Canada and Europe. The primary efficacy endpoint of APeX-2 is the rate of angioedema attacks over 24 weeks of study drug administration. On November 6, 2018, we announced we had completed enrollment in APeX-2 and had enrolled approximately 120 patients.

APeX-S Trial: On February 28, 2018, BioCryst announced the dosing of the first patient in APeX-S, a long-term safety trial evaluating two dose levels of BCX7353 administered orally once-daily as a preventive treatment in patients with HAE. APeX-S is an open label two-arm trial to evaluate the safety of once-daily BCX7353 at 110 mg and 150 mg over 48 weeks in patients with Type I and II HAE. The trial will enroll at least 160 patients. On November 6, 2018, we announced we have met the 100 subjects needed at each dose level (between APeX-2 and APeX-S) for regulatory requirements and expect to file a NDA in the fourth quarter of 2019.

ZENITH-1 Trial: On August 2, 2017, we announced the dosing of the first subject into ZENITH-1, a clinical trial studying up to three dose levels of a liquid formulation of BCX7353 given as a single oral dose for the acute treatment of angioedema attacks in patients with HAE. ZENITH-1 is a randomized, double-blind, placebo-controlled, adaptive dose-ranging trial of the efficacy, safety and tolerability of BCX7353 for treatment of acute angioedema attacks, and will enroll up to 60 subjects with Type I and II HAE. Blinded study drug is being dosed as an oral liquid after onset of symptoms, for up to 3 attacks in each subject, with each subject receiving both BCX7353 (for 2 attacks) and placebo (for one attack) in a randomized sequence. The trial is structured with up to 3 consecutive cohorts testing single doses of 750 mg, 500 mg (up to 12 subjects) and 250 mg (up to 12 subjects), starting with 750 mg. Efficacy assessments include patient-reported composite visual analogue scale ("VAS") scores, patient global assessments, change in symptoms, and use of rescue medication. We have completed enrollment in all 3 cohorts. On September 2, 2018, we reported positive results from the 750 mg cohort. In this cohort, BCX7353 was generally safe and well tolerated and demonstrated superior efficacy to placebo ($p<0.05$) in the majority of efficacy endpoints evaluated in the trial.

Galidesivir

On September 17, 2018, we announced that NIAID/HHS had awarded us an additional $3.5 million under our existing contract to support and conduct clinical trials of galidesivir in patients with yellow fever. As of September 30, 2018, the total NIAID/HHS contract amount is $43.0 million.

Results of Operations (three months ended September 30, 2018 compared to the three months ended September 30, 2017)

For the three months ended September 30, 2018, total revenues were $1.5 million as compared to $8.8 million for the three months ended September 30, 2017. The decrease in revenue in the third quarter of 2018, as compared to 2017, was primarily associated with two infrequent 2017 events that did not recur in 2018. Those events were a $5.0 million milestone payment associated with the FDA approval of a supplemental New Drug Application ("sNDA") for RAPIVAB, and the recognition of $1.5 million of peramivir product sales to our commercial partner, Green Cross. Revenues in the third quarter of 2018 included $0.5 million of royalty revenue from SUL, Shionogi and Green Cross associated with sales of peramivir in the United States, Japan and Korea and $1.0 million of reimbursement of collaborative expenses from NIAID/HHS and BARDA/HHS under U.S. Government development contracts. Revenues in the third quarter of 2017 included $1.5 million of peramivir product sales to Green Cross, $0.4 million of royalty revenue from SUL, Shionogi and Green Cross associated with sales of peramivir in the United States, Japan and Korea, $1.5 million of reimbursement of collaborative expenses from NIAID/HHS and BARDA/HHS under U.S. Government development contracts and $5.3 million associated with milestone revenue and collaborative revenue amortization from other corporate partnerships.

Research and development ("R&D") expenses increased to $22.0 million for the third quarter of 2018 from $17.5 million in 2017. The increase in 2018 R&D expenses, as compared to 2017, was primarily due to increased spending on our hereditary angioedema and preclinical programs.

General and administrative ("G&A") expenses for the third quarter of 2018 were $7.9 million compared to $3.3 million in the third quarter of 2017. The increase was primarily due to merger-related costs associated with the Company's terminated merger with Idera.

Interest and other income was $0.6 million in the third quarter of 2018, compared to $0.2 million in the third quarter of 2017.

Interest expense, which is primarily related to the non-recourse notes issued in conjunction with the non-dilutive RAPIACTA royalty monetization transaction in March 2011 and borrowings under the Amended and Restated Senior Credit Facility, was $2.3 million in the third quarter of 2018, compared to $2.1 million in the third quarter of 2017.

A mark-to-market gain of $0.6 million was also recognized in the third quarter of 2018 related to our foreign currency hedge, compared to a mark-to-market gain of $0.1 million in the same quarter in the prior year, both resulting from changes in the U.S. dollar/Japanese yen exchange rate in the related time periods.

Results of Operations (nine months ended September 30, 2018 compared to the nine months ended September 30, 2017)

For the nine months ended September 30, 2018, total revenues were $17.9 million as compared to $21.3 million for the nine months ended September 30, 2017. The decrease in 2018 revenue was primarily associated with infrequent revenue events that occurred in 2017 that did not recur in 2018, as well as a decrease of revenue from galidesivir development under U.S. Government contracts. Those 2017 events were the recognition of $4.1 million of royalty revenue from Japanese government stockpiling of RAPIACTA and the recognition of $1.5 million of peramivir product sales to Green Cross. Future government stockpiling orders are difficult to predict, as they are subject to the relevant appropriation and stockpiling processes. We expect revenue in future quarters to be lower, especially in quarters outside the normal influenza season, because our U.S. Government development contracts have had lower activity in 2018 and we expect that trend to continue, as well as there are no remaining milestones under our SUL agreement.

Revenues in the first nine months of 2018 included $4.3 million of royalty revenue from SUL, Shionogi and Green Cross associated with sales of peramivir in the United States, Japan and Korea, $1.6 million of reimbursement of collaborative expenses from NIAID/HHS and BARDA/HHS under U.S. Government development contracts and $12.0 million associated with milestone revenue and collaborative revenue from corporate partnerships. Revenues in the first nine months of 2017 included $1.5 million of peramivir product sales to Green Cross, $7.3 million of royalty revenue from SUL, Shionogi and Green Cross associated with sales of peramivir in the United States, Japan and Korea, $4.3 million of reimbursement of collaborative expenses from NIAID/HHS and BARDA/HHS under U.S. Government development contracts and $8.2 million associated with milestone revenue and collaborative revenue amortization from other corporate partnerships. Based upon reduced development activity with galidesivir under our U.S. Government contracts recently and that there are no future remaining milestones under the Seqirus collaboration, we expect future collaborative and other research and development revenue to be recognized at lower levels than in prior years and more in-line with quarterly levels in 2018.

R&D expenses increased to $61.5 million for the first nine months of 2017 from $50.0 million in 2017. The increase in 2018 R&D expenses, as compared to 2017, was primarily due to increased spending on our HAE and preclinical programs. These increases were partially offset by a decrease in the Company's peramivir and galidesivir development spending in 2018. As we continue the ongoing APeX-2 and APeX-S clinical trials, continue the BCX7353 acute program and progress our programs into the clinic and later-stage efficacy trials, we expect our future R&D expenses to be at least equal to our current run-rate and that these expenses will likely increase as we continue to advance our programs into later-stage development.

The following table summarizes our R&D expenses for the periods indicated (amounts are in thousands).

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
R&D expenses by program:				
BCX7353	$ 12,729	$ 10,173	$ 39,053	$ 29,913
2nd generation kallikrein inhibitors	41	121	318	996
Galidesivir	822	1,173	1,577	3,466
Peramivir	320	1,005	1,534	3,911
Fibrodysplasia Ossificans Progressiva (“FOP”)	3,550	636	6,812	2,926
BCX9930	2,971	2,512	7,389	4,246
Other research, preclinical and development costs	1,573	1,889	4,774	4,580
Total R&D expenses	$ 22,006	$ 17,509	$ 61,457	$ 50,038

G&A expenses for the first nine months of 2018 were $25.0 million compared to $9.2 million in the first nine months of 2017. The increase was primarily due to approximately $10.7 million of merger-related costs associated with the Company’s terminated merger with Idera and a $4.9 million reserve for collectability of the EMA approval milestone of peramivir. We do not expect to incur any future merger-related expenses; however, we do anticipate our G&A expenses to increase as we near the commercial launch of BCX7353.

Interest and other income was $1.6 million in the first nine months of 2018, compared to $0.5 million in the first nine months of 2017.

Interest expense was $6.8 million in the first nine months of 2018, compared to $6.3 million in the first nine months of 2017.

A mark-to-market loss of $0.6 million was recognized in the first nine months of 2018 related to our foreign currency hedge, compared to a mark-to-market loss of $1.9 million in the same period in the prior year, both resulting from changes in the U.S. dollar/Japanese yen exchange rate in the related time periods. In addition, we realized currency exchange gains of $0.9 million and $1.0 million in the first nine months of 2018 and 2017, respectively, related to the exercise of a U.S. dollar/Japanese yen currency option under our foreign currency hedge.

Liquidity and Capital Resources

Cash expenditures have exceeded revenues since our inception and we expect our 2018 operating expenses to exceed our 2018 revenues. Our operations have principally been funded through public offerings and private placements of equity securities; cash from collaborative and other research and development agreements, including U.S. Government contracts for RAPIVAB and galidesivir; and to a lesser extent, the PhaRMA Notes financing and our Amended and Restated Senior Credit Facility. To date, we have been awarded a BARDA/HHS RAPIVAB development contract totaling $234.8 million, which expired on June 30, 2014, a NIAID/HHS galidesivir development contract totaling $43.0 million, which is ongoing, and a BARDA/HHS galidesivir development contract totaling $39.1 million, which is also ongoing. The total amount of NIAID/HHS and BARDA/HHS galidesivir funding obligated under awarded options is $43.0 million and $20.6 million, respectively. We may issue securities through private placement transactions or registered public offerings pursuant to a registration statement filed with the SEC. In addition to the above, we have received funding from other sources, including other collaborative and other research and development agreements; government grants; equipment lease financing; facility leases; research grants; and interest income on our investments.

As of September 30, 2018, we had net working capital of $64.1 million, an increase of approximately $13.5 million from $50.6 million at December 31, 2017. The increase in working capital was principally due to proceeds from the Amended and Restated Senior Credit Facility and the August 2018 public offering of our common stock, partially offset by our normal operating expenses associated with the development of our product candidates and costs incurred for the terminated merger with Idera. Our principal sources of liquidity at September 30, 2018 were approximately $52.6 million in cash and cash equivalents, approximately $96.9 million in investments considered available-for-sale, and approximately $1.7 million in U.S. Government receivables. With the two financial transactions completed in the third quarter of 2018, we anticipate our cash and investments will fund our operations into 2020.

We intend to contain costs and cash flow requirements by closely managing our third party costs and headcount, leasing scientific equipment and facilities, contracting with other parties to conduct certain research and development projects and using consultants. We expect to incur additional expenses, potentially resulting in significant losses, as we continue to pursue our research and development activities and begin to build a commercial infrastructure. We may incur additional expenses related to the filing, prosecution, maintenance, defense and enforcement of patent and other intellectual property claims and additional regulatory costs as our clinical programs advance through later stages of development. The objective of our investment policy is to ensure the safety and preservation of invested funds, as well as maintaining liquidity sufficient to meet cash flow requirements. We place our excess cash with high credit quality financial institutions, commercial companies, and government agencies in order to limit the amount of our credit exposure. We have not realized any significant losses on our investments.

We plan to finance our needs principally from the following:

- lease or loan financing and future public or private equity financing;
- our existing capital resources and interest earned on that capital;
- payments under existing and executing new contracts with the U.S. Government; and
- payments under collaborative and licensing agreements with corporate partners.

As our programs continue to advance, our costs will increase. Our current and planned clinical trials, plus the related development, manufacturing, regulatory approval process requirements and additional personnel resources and testing required for the continuing development of our product candidates will consume significant capital resources and will increase our expenses. Our expenses, revenues and cash utilization rate could vary significantly depending on many factors, including our ability to raise additional capital, the development progress of our collaborative agreements for our product candidates, the amount and timing of funding we receive from existing U.S. Government contracts for galidesivir, the amount of funding or assistance, if any, we receive from new U.S. Government contracts or other new partnerships with third parties for the development and or commercialization of our product candidates, the progress and results of our current and proposed clinical trials for our most advanced product candidates, the progress made in the manufacturing of our lead product candidates and the progression of our other programs.

With the funds available at September 30, 2018, we believe our resources will be sufficient to fund our operations into 2020. We have sustained operating losses for the majority of our corporate history and expect that our 2018 expenses will exceed our 2018 revenues. We expect to continue to incur operating losses and negative cash flows until revenues reach a level sufficient to support ongoing operations. Accordingly, our planned operations raise doubt about our ability to continue as a going concern through 2020. Our liquidity needs will be largely determined by the success of operations in regards to the progression of our product candidates in the future. We also may consider other plans to fund operations through 2020 including: (1) securing or increasing U.S. Government funding of our programs, including obtaining procurement contracts; (2) out-licensing rights to certain of our products or product candidates, pursuant to which we would receive cash milestones; (3) raising additional capital through equity or debt financings or from other sources; (4) obtaining additional product candidate regulatory approvals, which would generate revenue, milestones and cash flow; (5) reducing spending on one or more research and development programs, including by discontinuing development; and/or (6) restructuring operations to change our overhead structure. We may issue securities, including common stock, preferred stock, depositary shares, stock purchase contracts, warrants and units, through private placement transactions or registered public offerings. Our future liquidity needs, and ability to address those needs, will largely be determined by the success of our product candidates and key development and regulatory events and our decisions in the future.

Our long-term capital requirements and the adequacy of our available funds will depend upon many factors, including:

- our ability to perform under our government contracts and receive reimbursement and to receive stockpiling procurement contracts;
- the magnitude of work under our government contracts;
- the progress and magnitude of our research, drug discovery and development programs;
- changes in existing collaborative relationships or government contracts;
- our ability to establish additional collaborative relationships with academic institutions, biotechnology or pharmaceutical companies and governmental agencies or other third parties;
- the extent to which our partners, including governmental agencies, will share in the costs associated with the development of our programs or run the development programs themselves;
- the outcome, cost and timing of any resolution of disputes and legal proceedings, including but not limited to disputes with our partners;

- our ability to negotiate favorable development and marketing strategic alliances for certain product candidates or a decision to build or expand internal development and commercial capabilities;
- successful commercialization of marketed products by either us or a partner;
- the scope and results of preclinical studies and clinical trials to identify and develop product candidates;
- our ability to engage sites and enroll subjects in our clinical trials;
- the scope of manufacturing of our product candidates to support our preclinical research and clinical trials;
- increases in personnel and related costs to support the development and commercialization of our product candidates;
- the scope of manufacturing of our drug substance and product candidates required for future new drug application ("NDA") filings;
- competitive and technological advances;
- our ability to service our debt obligations or enter into new debt facilities;
- the time and costs involved in obtaining regulatory approvals;
- post-approval commitments for RAPIVAB/ALPIVAB and other products that receive regulatory approval; and
- the costs involved in all aspects of intellectual property strategy and protection including the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims.

We expect that we will be required to raise additional capital to complete the development and commercialization of our current product candidates and we may seek to raise capital in the future. Additional funding, whether through additional sales of equity or debt securities, collaborative or other arrangements with corporate partners or from other sources, including governmental agencies in general and existing government contracts specifically, may not be available when needed or on terms acceptable to us. The issuance of preferred or common stock or convertible securities, with terms and prices significantly more favorable than those of the currently outstanding common stock, could have the effect of diluting or adversely affecting the holdings or rights of our existing stockholders. In addition, collaborative arrangements may require us to transfer certain material rights to such corporate partners. Insufficient funds may require us to delay, scale back or eliminate certain of our research and development programs. Our future working capital requirements, including the need for additional working capital, will be largely determined by the advancement of our portfolio of product candidates as well as rate of reimbursement by U.S. Government agencies of our galidesivir expenses and any future decisions regarding the future of the RAPIVAB and galidesivir programs, including those relating to stockpiling procurement. More specifically, our working capital requirements will be dependent on the number, magnitude, scope and timing of our development programs; regulatory approval of our product candidates; obtaining funding from collaborative partners; the cost, timing and outcome of regulatory reviews, regulatory investigations, and changes in regulatory requirements; the costs of obtaining patent protection for our product candidates; the timing and terms of business development activities; the rate of technological advances relevant to our operations; the efficiency of manufacturing processes developed on our behalf by third parties; and the level of required administrative support for our daily operations.

The restrictive covenants contained in the Amended and Restated Senior Credit Facility could cause us to be unable to pursue business opportunities that we or our stockholders may consider beneficial without the lender's permission or without repaying all Amended and Restated Senior Credit Facility obligations. These covenants limit our ability to, among other things, convey, sell, lease, license, transfer or otherwise dispose of certain parts of our business or property; change the nature of our business; liquidate or dissolve; enter into certain change in control or acquisition transactions; incur or assume certain debt; grant certain types of liens on our assets; modify, liquidate or transfer assets in certain collateral accounts; pay dividends or make certain distributions to our stockholders; make certain investments; enter into material transactions with affiliates; and modify existing debt or collaboration arrangements. A breach of any of these covenants could result in an event of default under the Amended and Restated Senior Credit Facility.

Financial Outlook for 2018

Based upon our development plans, merger-related incurred costs from the recently terminated merger agreement with Idera and our awarded government contracts, on a stand-alone basis, we continue to expect 2018 operating cash usage to be in the range of $85 to $105 million, and expect our total 2018 operating expenses to be in the range of $90 to $110 million. Our operating expense range excludes equity-based compensation expense due to the difficulty in accurately projecting this expense as it is significantly impacted by the volatility and price of the Company's stock, as well as vesting of the Company's outstanding performance-based stock options. Our operating cash forecast excludes any impact of our royalty monetization, hedge collateral posted or returned, and any other non-routine cash outflows or inflows. Our ability to remain within our operating expense and operating cash target ranges is subject to multiple factors, including unanticipated or additional general development and administrative costs and other factors described under the Risk Factors located elsewhere in this report.

Off-Balance Sheet Arrangements

As of September 30, 2018, we do not have any unconsolidated entities or off–balance sheet arrangements.

Critical Accounting Policies

We have established various accounting policies that govern the application of U.S. GAAP, which were utilized in the preparation of our consolidated financial statements. Certain accounting policies involve significant judgments and assumptions by management that have a material impact on the carrying value of certain assets and liabilities. Management considers such accounting policies to be critical accounting policies. The judgments and assumptions used by management are based on historical experience and other factors, which are believed to be reasonable under the circumstances. Because of the nature of the judgments and assumptions made by management, actual results could differ from these judgments and estimates, which could have a material impact on the carrying values of assets and liabilities and the results of operations.

While our significant accounting policies are more fully described in Note 1 to our consolidated financial statements included in our 2017 Annual Report on Form 10-K for the year ended December 31, 2017, we believe that the following accounting policies are the most critical to aid you in fully understanding and evaluating our reported financial results and affect the more significant judgments and estimates that we use in the preparation of our financial statements.

Inventory

Our inventories consist of peramivir finished goods and work in process, which are valued at the lower of cost or net realizable value using the first-in, first-out (i.e., FIFO) method. Cost includes materials, labor, overhead, shipping and handling costs. Our inventories are subject to expiration dating. We regularly evaluate the carrying value of our inventories and provide valuation reserves for any estimated obsolete, short-dated or unmarketable inventories. In addition, we may experience spoilage of our raw materials and supplies. Our determination that a valuation reserve might be required, in addition to the quantification of such reserve, requires us to utilize significant judgment. In connection with the FDA approval of RAPIVAB and other regulatory approvals, we began capitalizing costs associated with the production of peramivir inventories.

Accrued Expenses

We enter into contractual agreements with third-party vendors who provide research and development, manufacturing, and other services in the ordinary course of business. Some of these contracts are subject to milestone-based invoicing and services are completed over an extended period of time. We record liabilities under these contractual commitments when an obligation has been incurred. This accrual process involves reviewing open contracts and purchase orders, communicating with our applicable personnel to identify services that have been performed and estimating the level of service performed and the associated cost when we have not yet been invoiced or otherwise notified of actual cost. The majority of our service providers invoice us monthly in arrears for services performed. We make estimates of our accrued expenses as of each balance sheet date based on the facts and circumstances known to us. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. Examples of estimated accrued expenses include:

- fees paid to Clinical Research Organizations (“CROs”) in connection with preclinical and toxicology studies and clinical trials;
- fees paid to investigative sites in connection with clinical trials;
- fees paid to contract manufacturers in connection with the production of our raw materials, drug substance and product candidates; and
- professional fees.

We base our expenses related to clinical trials on our estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and CROs that conduct and manage clinical trials on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing service fees, we estimate the time period over which services will be performed and the level of effort expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we will adjust the accrual accordingly. If we do not identify costs that we have begun to incur or if we underestimate or overestimate the level of these costs, our actual expenses could differ from our estimates.

Revenue Recognition

We adopted the provisions of ASC 606 as of January 1, 2018 using the modified retrospective method as applied to contracts that were not completed as of that date. As a result, financial information for reporting periods beginning after January 1, 2018 are presented under ASC 606, while comparative financial information has not been adjusted and continues to be reported in accordance with our historical accounting policy for revenue recognition prior to the adoption of ASC 606.

Collaborative and Other Research and Development Arrangements and Royalties

We recognize revenue when we satisfy a performance obligation by transferring promised goods or services to a customer. Revenue is measured at the transaction price that is based on the amount of consideration that we expect to receive in exchange for transferring the promised goods or services to the customer. The transaction price includes estimates of variable consideration to the extent it is probable that a significant reversal of revenue recognized will not occur.

We have collaboration and license agreements with a number of third parties as well as research and development agreements with certain government entities. Our primary sources of revenue are license, service, royalty and product sale revenues from these collaborative and other research and development arrangements.

Revenue from license fees, royalty payments, milestone payments, and research and development fees are recognized as revenue when the earnings process is complete and we have no further continuing performance obligations or we have completed the performance obligations under the terms of the agreement.

Arrangements that involve the delivery of more than one performance obligation are initially evaluated as to whether the intellectual property licenses granted by us represent distinct performance obligations. If they are determined to be distinct, the value of the intellectual property licenses would be recognized up-front while the research and development service fees would be recognized as the performance obligations are satisfied. Variable consideration is assessed at each reporting period as to whether it is not subject to significant future reversal and, therefore, should be included in the transaction price at the inception of the contract. If a contract includes a fixed or minimum amount of research and development support, this also would be included in the transaction price. Changes to collaborations, such as the extensions of the research term or increasing the number of targets or technology covered under an existing agreement, are assessed for whether they represent a modification or should be accounted for as a new contract. For contracts with multiple performance obligations, revenue is allocated to each performance obligation based on its relative standalone selling price. Standalone selling prices are based on observable prices at which we separately sell the products or services. If a standalone selling price is not directly observable, then we estimate the standalone selling price considering market conditions and entity-specific factors. Analyzing the arrangement to identify performance obligations requires the use of judgment, and each may be an obligation to deliver services, a right or license to use an asset, or another performance obligation.

Milestone payments are recognized as licensing revenue upon the achievement of specified milestones if (i) the milestone is substantive in nature and the achievement of the milestone was not probable at the inception of the agreement; and (ii) we have a right to payment. Any milestone payments received prior to satisfying these revenue recognition criteria are recorded as deferred revenue.

Reimbursements received for direct out-of-pocket expenses related to research and development costs are recorded as revenue in the Consolidated Statements of Comprehensive Loss rather than as a reduction in expenses. Under our contracts with the Biomedical Advanced Research and Development Authority within the United States Department of Health and Human Services (”BARDA/HHS”) and the National Institute of Allergy and Infectious Diseases (“NIAID/HHS”), revenue is recognized as reimbursable direct and indirect costs are incurred.

Under certain of our license agreements, we receive royalty payments based upon our licensees’ net sales of covered products. Royalties are recognized at the later of when (i) the subsequent sale or usage occurs, or (ii) the performance obligation to which some or all of the sales-based or usage-based royalty has been satisfied.

Product Sales

We recognize revenue for sales of RAPIVAB when the customer obtains control of the product, which generally occurs on the date of shipment to our specialty distributors, utilizing the Sell-In revenue recognition methodology. Product sales are recognized net of estimated allowances, discounts, sales returns, chargebacks and rebates. In the United States, and prior to the SUL Agreement, we sold RAPIVAB to specialty distributors, who in turn, sell to physician offices, hospitals and federal, state and commercial health care organizations. With the completion of the SUL worldwide license of RAPIVAB, SUL will be responsible for sales of RAPIVAB, other than U.S. Government stockpiling sales. With the completion of the SUL collaboration, all peramivir sales (i.e., RAPIVAB, ALPIVAB, RAPIACTA, and PERAMIFLU) will be made by our partners, except for U.S. Government stockpiling sales, and we will be reliant on these partners to generate sales.

Sales deductions consist of statutory rebates to state Medicaid, Medicare and other government agencies and sales discounts (including trade discounts and distribution service fees). These deductions are recorded as reductions from revenue from RAPIVAB in the same period as the related sales with estimates of future utilization derived from historical experience adjusted to reflect known changes in the factors that impact such reserves.

Contract Balances

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets) and deferred revenue and billings in excess of revenue recognized (contract liabilities) on the Consolidated Balance Sheets.

Contract assets - Our long-term contracts are billed as work progresses in accordance with the contract terms and conditions, either at periodic intervals or upon achievement of certain milestones. Often this results in billing occurring subsequent to revenue recognition resulting in contract assets. Contract assets are generally classified as current assets in the Consolidated Balance Sheet.

Contract liabilities - We often receive cash payments from customers in advance of our performance resulting in contract liabilities. These contract liabilities are classified as either current or long-term in the Consolidated Balance Sheet based on the timing of when we expect to recognize the revenue.

Contract Costs

We may incur direct and indirect costs associated with obtaining a contract. Incremental contract costs that we expect to recover are capitalized and amortized over the expected term of the contract. Non-incremental contract costs and costs that we expect to recover are expensed as incurred.

Research and Development Expenses

Our research and development costs are charged to expense when incurred. Advance payments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized. Such amounts are recognized as expense when the related goods are delivered or the related services are performed. Research and development expenses include, among other items, personnel costs, including salaries and benefits, manufacturing costs, clinical, regulatory, and toxicology services performed by CROs, materials and supplies, and overhead allocations consisting of various administrative and facilities related costs. Most of our manufacturing and clinical and preclinical studies are performed by third-party CROs. Costs for studies performed by CROs are accrued by us over the service periods specified in the contracts and estimates are adjusted, if required, based upon our on-going review of the level of services actually performed.

Additionally, we have license agreements with third parties, such as the Albert Einstein College of Medicine of Yeshiva University, Industrial Research, Ltd. and the University of Alabama at Birmingham (“UAB”), which require fees related to sublicense agreements or maintenance fees. We expense sublicense payments as incurred unless they are related to revenues that have been deferred, in which case the expenses are deferred and recognized over the related revenue recognition period. We expense maintenance payments as incurred.

Deferred collaboration expenses represent sub-license payments paid to our academic partners upon receipt of consideration from various commercial partners, and other consideration to our academic partners for modification to existing license agreements. These deferred expenses would not have been incurred without receipt of such payments or modifications from our commercial partners and are being expensed in proportion to the related revenue being recognized. We believe that this accounting treatment appropriately matches expenses with the associated revenue.

We group our R&D expenses into two major categories: direct external expenses and indirect expenses. Direct expenses consist of compensation for R&D personnel and costs of outside parties to conduct laboratory studies, develop manufacturing processes and manufacture the product candidate, conduct and manage clinical trials, as well as other costs related to our clinical and preclinical studies. These costs are accumulated and tracked by active program. Indirect expenses consist of lab supplies and services, facility expenses, depreciation of development equipment and other overhead of our research and development efforts. These costs apply to work on non-active product candidates and our discovery research efforts.

Stock-Based Compensation

All share-based payments, including grants of stock option awards and restricted stock unit awards, are recognized in our Consolidated Statements of Comprehensive Loss based on their fair values. Stock-based compensation cost is estimated at the grant date based on the fair value of the award and is recognized as expense on a straight-line basis over the requisite service period of the award. Determining the appropriate fair value model and the related assumptions for the model requires judgment, including estimating the life of an award, the stock price volatility, and the expected term. We utilize the Black-Scholes option-pricing model to value our awards and recognize compensation expense on a straight-line basis over the vesting periods. The estimation of share-based payment awards that will ultimately vest requires judgment, and to the extent actual results or updated estimates differ from our current estimates, such amounts will be recorded as a cumulative adjustment in the period estimates are revised. In addition, we have outstanding performance-based stock options for which no compensation expense is recognized until "performance" has occurred. Significant management judgment is also required in determining estimates of future stock price volatility and forfeitures to be used in the valuation of the options. Actual results, and future changes in estimates, may differ substantially from our current estimates.

Currency Hedge Agreement

In connection with our issuance of the PhaRMA Notes, we entered into a foreign Currency Hedge Agreement to hedge certain risks associated with changes in the value of the Japanese yen relative to the U.S. dollar. Under the Currency Hedge Agreement, we have the right to purchase dollars and sell yen at a rate of 100 yen per dollar for which we may be required to pay a premium in each year from 2019 through 2020, provided the Currency Hedge Agreement remains in effect. A payment of $2.0 million will be required if, on May 18 of the relevant year, the U.S. dollar is worth 100 yen or less as determined in accordance with the Currency Hedge Agreement. In conjunction with establishing the Currency Hedge Agreement, we will be required to post collateral to the counterparty, which may cause us to experience additional quarterly volatility in our financial results. We will not be required at any time to post collateral exceeding the maximum premium payments remaining payable under the Currency Hedge Agreement. As of September 30, 2018, the maximum amount of hedge collateral we may be required to post is $3.9 million.

The Currency Hedge Agreement does not qualify for hedge accounting treatment and therefore mark to market adjustments will be recognized in our Consolidated Statements of Comprehensive Loss. Mark to market adjustments are determined by quoted prices in markets that are not actively traded and for which significant inputs are observable directly or indirectly, representing the Level 2 in the fair value hierarchy as defined by generally accepted accounting principles ("U.S. GAAP"). We are also required to post collateral in connection with the mark to market adjustments based on defined thresholds. As of September 30, 2018, no collateral was posted under the agreement.

Tax

We account for uncertain tax positions in accordance with U.S. GAAP. Significant management judgment is required in determining our provision for income taxes, deferred tax assets and liabilities and any valuation allowance recorded against net deferred tax assets. We have recorded a valuation allowance against all potential tax assets, due to uncertainties in our ability to utilize deferred tax assets, primarily consisting of certain net operating losses carried forward, before they expire. The valuation allowance is based on estimates of taxable income in each of the jurisdictions in which we operate and the period over which our deferred tax assets will be recoverable.

Information Regarding Forward-Looking Statements

This filing contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, which are subject to the "safe harbor" created in Section 21E. All statements other than statements of historical facts contained in this filing are forward-looking statements. These forward-looking statements can generally be identified by the use of words such as "may," "will," "intends," "plans," "believes," "anticipates," "expects," "estimates," "predicts," "potential," the negative of these words or similar expressions. Statements that describe our future plans, strategies, intentions, expectations, objectives, goals or prospects are also forward-looking statements. Discussions containing these forward-looking statements are principally contained in "Business," "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," as well as any amendments we make to those sections in filings with the SEC. These forward-looking statements include, but are not limited to, statements about:

- the preclinical development, clinical development, commercialization, or post-marketing studies of our product candidates and products, including our HAE program, peramivir, galidesivir, and early stage discovery programs;

- the potential funding from our contracts with NIAID/HHS and BARDA/HHS for the development of galidesivir;

- the potential for government stockpiling orders of peramivir, additional regulatory approvals of peramivir or milestones, royalties or profit from sales of peramivir by us or our partners;
- the potential use of peramivir as a treatment for H1N1, H5N1, and H7N9 or other strains of influenza;
- the implementation of our business model, strategic plans for our business, products, product candidates and technology;
- our ability to establish and maintain collaborations or out-license rights to our product candidates;
- the outcome, cost and timing of any resolution of disputes and legal proceedings, including but not limited to disputes with our partners SUL and Shionogi;
- plans, programs, progress and potential success of our collaborations, including SUL for peramivir, Mundipharma for Mundesine and Shionogi and Green Cross for peramivir in their territories;
- our and MDCP's ability to satisfy obligations under our Amended and Restated Senior Credit Facility;
- Royalty Sub's ability to service its payment obligations in respect of the PhaRMA Notes;
- the Currency Hedge Agreement entered into by us in connection with the issuance by Royalty Sub of the PhaRMA Notes;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- our ability to operate our business without infringing the intellectual property rights of others;
- estimates of our expenses, revenues, capital requirements, annual cash utilization, and our needs for additional financing;
- our ability to continue as a going concern;
- the timing or likelihood of regulatory filings or regulatory agreements, deferrals, and approvals;
- our ability to raise additional capital to fund our operations or repay our recourse debt obligations;
- the timing or likelihood of entering into a U.S. government stockpile order and our ability to execute any such order;
- our ability to comply with the covenants as set forth in the agreements governing our debt obligations;
- our financial performance; and
- competitive companies, technologies and our industry.

These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under "Risk Factors." Any forward-looking statement reflects our current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, industry and future growth. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

We are subject to interest rate risk on our investment portfolio and borrowings under our fixed-interest rate PhaRMA Notes and our variable-interest rate Amended and Restated Senior Credit Facility. The interest rate applicable to our borrowings under the PhaRMA Notes is fixed at 14% and the Amended and Restated Senior Credit Facility bears a floating interest rate based on LIBOR. Increases in interest rates could therefore increase the associated interest payments that we are required to make on the Amended and Restated Senior Credit Facility. As of September 30, 2018, our Amended and Restated Senior Credit Facility had an interest rate of 10.1%.

We invest in marketable securities in accordance with our investment policy. The primary objectives of our investment policy are to preserve capital, maintain proper liquidity to meet operating needs and maximize yields. Our investment policy specifies credit quality standards for our investments and limits the amount of credit exposure to any single issue, issuer or type of investment. We place our excess cash with high credit quality financial institutions, commercial companies, and government agencies in order to limit the amount of credit exposure. Some of the securities we invest in may have market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate.

Our investment exposure to market risk for changes in interest rates relates to the increase or decrease in the amount of interest income we can earn on our portfolio, changes in the market value due to changes in interest rates and other market factors as well as the increase or decrease in any realized gains and losses. Our investment portfolio includes only marketable securities and instruments with active secondary or resale markets to help ensure portfolio liquidity. A hypothetical 100 basis point increase or decrease in interest rates along the entire interest rate yield curve would not significantly affect the fair value of our interest sensitive financial instruments, including our borrowings, but may affect our future earnings and cash flows. We generally have the ability to hold our fixed-income investments to maturity and therefore do not expect that our operating results, financial position or cash flows will be materially impacted due to a sudden change in interest rates. However, our future investment income may fall short of expectations due to changes in interest rates, or we may suffer losses in principal if forced to sell securities which have declined in market value due to changes in interest rates or other factors, such as changes in credit risk related to the securities' issuers. To minimize this risk, we schedule our investments to have maturities that coincide with our expected cash flow needs, thus avoiding the need to redeem an investment prior to its maturity date. Accordingly, we do not believe that we have material exposure to interest rate risk arising from our investments. Generally, our investments are not collateralized. We have not realized any significant losses from our investments.

We do not use interest rate derivative instruments to manage exposure to interest rate changes. We ensure the safety and preservation of invested principal funds by limiting default risk, market risk and reinvestment risk. We reduce default risk by investing in investment grade securities.

Foreign Currency Risk

The majority of our transactions occur in U.S. dollars and we do not have significant operating subsidiaries or significant investments in foreign countries. Therefore, we are not subject to significant foreign currency exchange risk in our normal operations.

In connection with the issuance by Royalty Sub of the PhaRMA Notes, we entered into a Currency Hedge Agreement to hedge certain risks associated with changes in the value of the Japanese yen relative to the U.S. dollar. Under the Currency Hedge Agreement, we are required to post collateral based on our potential obligations under the Currency Hedge Agreement as determined by periodic mark to market adjustments. Provided the Currency Hedge Agreement remains in effect, we may be required to pay an annual premium in the amount of $2.0 million from May 2019 through May 2020. Such payment will be required if, in May of the relevant year, the spot rate of exchange for Japanese yen-U.S. dollars (determined in accordance with the Currency Hedge Agreement) is such that the U.S. dollar is worth 100 yen or less. As of September 30, 2018, the maximum amount of hedge collateral we may be required to post is $3.9 million.

Item 4. Controls and Procedures

We maintain a set of disclosure controls and procedures that are designed to ensure that information relating to BioCryst Pharmaceuticals, Inc. required to be disclosed in our periodic filings under the Exchange Act is recorded, processed, summarized and reported in a timely manner under the Exchange Act. We carried out an evaluation, under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of September 30, 2018, the Company's disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in the reports filed or submitted by it under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and include controls and procedures designed to ensure that information required to be disclosed by the Company in such reports is accumulated and communicated to the Company's management, including the Chief Executive Officer and Chief Financial Officer of the Company, as appropriate to allow timely decisions regarding required disclosure.

There have been no changes in our internal control over financial reporting that occurred during the quarter ended September 30, 2018 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1A. *RISK FACTORS*

An investment in our stock involves risks. You should carefully read this entire report and consider the following uncertainties and risks, which may adversely affect our business, financial condition or results of operations, along with all of the other information included in our other filings with the Securities and Exchange Commission, before deciding to buy our common stock.

Risks Relating to Our Business

We have incurred losses since our inception, expect to continue to incur such losses, and may never be profitable.

Since our inception, we have not achieved sustained profitability. We expect to incur additional losses for the foreseeable future, and our losses could increase as our research and development efforts progress. We expect that such losses will fluctuate from quarter to quarter and losses and fluctuations may be substantial.

To become profitable, we, or our collaborative partners, must successfully manufacture and develop product candidates, receive regulatory approval, and successfully commercialize and/or enter into profitable agreements with other parties. It could be several years, if ever, before we receive significant revenue from any current or future license agreements or revenues directly from product sales.

Because of the numerous risks and uncertainties associated with developing our product candidates and their potential for commercialization, we are unable to predict the extent of any future losses. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. If we are unable to achieve and sustain profitability, the market value of our common stock will likely decline.

Our success depends upon our ability to advance our products through the various stages of development, especially through the clinical trial process.

To receive the regulatory approvals necessary for the sale of our product candidates, we or our partners must demonstrate through preclinical studies and clinical trials that each product candidate is safe and effective. The development process and related regulatory process are complex and uncertain. Because of the cost and duration of clinical trials, we may decide to discontinue development of product candidates that are unlikely to show good results in the clinical trials, unlikely to help advance a product to the point of a meaningful collaboration, or unlikely to have reasonable commercial potential. We may suffer significant setbacks in pivotal pre-clinical studies and clinical trials (e.g. galidesivir, BCX7353, other kallikrein inhibitors, our activin receptor-like kinase-2 (“ALK2”) inhibitors and our other rare disease product candidates), even after earlier clinical trials show promising results. The development of our product candidates, including our clinical trials, may not be adequately designed or executed, which could affect the potential outcome and analysis of study results. Any of our product candidates may produce undesirable side effects in humans. The pre-clinical and clinical data from our product candidates could cause us or regulatory authorities to interrupt, delay, modify or halt preclinical or clinical trials of a product candidate. Undesirable or inconclusive data or side effects in humans could also result in the U.S. Food and Drug Administration (the “FDA”) or foreign regulatory authorities refusing to approve the product candidate for any targeted indications. In addition, the FDA or other regulatory agencies may determine that study data from our product candidates necessitates additional studies or study designs which differ from our planned development strategy, and regulatory agencies may also require patient monitoring and testing or may implement restrictions or other conditions on our development activities, any of which could materially impact the cost and timing of our planned development strategy. We, our partners, the FDA or foreign regulatory authorities may suspend or terminate clinical trials at any time if we or they believe the trial participants face unacceptable health risks. Clinical trials may fail to demonstrate that our product candidates are safe or effective and have acceptable commercial viability. Regulatory authorities may interrupt, delay or halt clinical trials for a product candidate for any number of reasons.

Our ability to successfully complete clinical trials is dependent upon many factors, including but not limited to:

- our ability to find suitable clinical sites and investigators to enroll patients;
- the ability to maintain contact with patients to provide complete data after treatment;
- our product candidates may not prove to be either safe or effective;
- clinical protocols or study procedures may not be adequately designed or followed by the investigators;

- formulation improvements may not work as expected, which could negatively impact commercial demand for our product candidates;
- manufacturing or quality control problems could affect the supply of product candidates for our trials; and
- delays or changes in our planned development strategy, the regulations or guidelines, or other unexpected conditions or requirements of government agencies.

Clinical trials are lengthy and expensive. We or our partners incur substantial expense for, and devote significant time to, preclinical testing and clinical trials, yet we cannot be certain that the tests and trials will ever result in the commercial sale of a product. For example, clinical trials require adequate supplies of drug and sufficient patient enrollment. Lack of adequate drug supply or delays in patient enrollment, including for APeX-2, APeX-S, APeX-J and ZENITH-1, can result in increased costs and longer development times. Even if we or our partners successfully complete clinical trials for our product candidates, we or our partners might not file the required regulatory submissions in a timely manner and may not receive regulatory approval for the product candidates.

We focus on rare diseases, which may create additional risks and challenges.

Because we focus on developing drugs as treatments for rare diseases, we may seek orphan drug, breakthrough therapy or fast track designations for our product candidates in the United States or the equivalent designations elsewhere in the world. Often, regulatory agencies have broad discretion in determining whether or not to grant such designations. We cannot guarantee that we will be able to receive orphan drug status from the FDA or equivalent regulatory designations elsewhere. We also cannot guarantee that we will obtain breakthrough therapy or fast track designation, which may provide certain potential benefits such as more frequent meetings with the FDA to discuss the development plan, intensive guidance on an efficient drug development program, and potential eligibility for rolling review or priority review. Even if we are successful in obtaining any such designation by the FDA or other regulatory agency for our product candidates, such designations may not lead to faster development or regulatory review or approval, and it does not increase the likelihood that our product candidates will receive marketing approval. We may not be able to obtain or maintain such designations for our product candidates, and our competitors may obtain these designations for their product candidates, which could impact our ability to develop and commercialize our product candidates or compete with such competitors, which may adversely impact our business, financial condition or results of operations.

Although we have received Sakigake designation for BCX7353 in Japan, we may not experience a faster development, review or approval process compared to the conventional process.

Our clinical trials may not adequately show that our product candidates are safe or effective.

Progression of our product candidates through the clinical development process is dependent upon our trials indicating our product candidates have adequate safety and efficacy in the patients being treated by achieving pre-determined safety and efficacy endpoints according to the clinical trial protocols. Failure to achieve any of these endpoints in any of our programs, including BCX7353, galidesivir, FOP and our other rare disease product candidates, could result in delays in our trials or require the performance of additional unplanned trials. This could result in delays in the development of our product candidates and could result in significant unexpected costs or the termination of programs.

If our development collaborations with third parties, such as our development partners, contractors and contract research organizations, fail, the development of our product candidates will be delayed or stopped.

We rely heavily upon third parties for many important stages of our product candidate development, including but not limited to:

- discovery of natural proteins that cause or enable biological reactions necessary for the progression of the disease or disorder, called enzyme targets;
- execution of certain pharmacology preclinical studies and late-stage development for our compounds and product candidates;

- management of our Phase 1, 2 and 3 clinical trials, including site monitoring and data management;
- execution of toxicology studies that may be required to obtain approval for our product candidates;
- formulation improvement strategies and methods; and
- manufacturing the starting materials and drug substance required to formulate our products and the product candidates to be used in our clinical trials, toxicology studies and any potential commercial product.

Our failure to engage in successful collaborations at any one of these stages would greatly impact our business. If we do not license enzyme targets or inhibitors from academic institutions or from other biotechnology companies on acceptable terms, our drug development efforts would suffer. Similarly, if the contract research organizations that conduct our initial or late-stage clinical trials, conduct our toxicology studies, manufacture our starting materials, drug substance and product candidates or assist with our regulatory function breached their obligations to us or perform their services inconsistent with industry standards and not in accordance with the required regulations, this would delay or prevent both the development of our product candidates and the availability of any potential commercial product.

If we lose our relationship with any one or more of these parties, we could experience a significant delay in both identifying another comparable provider and then contracting for its services. We may be unable to retain an alternative provider on reasonable terms, if at all. Even if we locate an alternative provider, it is likely that this provider may need additional time to respond to our needs and may not provide the same type or level of service as the original provider. In addition, any provider that we retain will be subject to applicable FDA current Good Laboratory Practices, current Good Manufacturing Practices ("cGMP") and current Good Clinical Practices, and comparable foreign standards. We do not have control over compliance with these regulations by these providers. Consequently, if these practices and standards are not adhered to by these providers, the development and commercialization of our product candidates could be delayed. If any of the foregoing risks are realized, our business, financial condition and results of operations could be materially adversely affected.

Because we have limited manufacturing experience, we depend on third-party manufacturers to manufacture our product, product candidates and the materials for our product candidates. Often, especially early in the development and commercialization process, we have only one source for manufacturing. If we cannot rely on existing third-party manufacturers, we will be required to incur significant costs and potential delays in finding new third-party manufacturers.

We have limited manufacturing experience and only a small scale manufacturing facility. We currently rely upon a very limited number of third-party manufacturers to manufacture the materials required for our product, product candidates and most of the preclinical and clinical quantities of our product candidates. We depend on these third-party manufacturers to perform their obligations in a timely manner and in accordance with applicable governmental regulations. Our third-party manufacturers, which may be the only manufacturer we have engaged for a particular product, may encounter difficulties with meeting our requirements, including but not limited to problems involving:

- inconsistent production yields;
- product liability claims or recalls of commercial product;
- difficulties in scaling production to commercial and validation sizes;
- interruption of the delivery of materials required for the manufacturing process;
- scheduling of plant time with other vendors or unexpected equipment failure;
- potential catastrophes that could strike their facilities or have an effect on infrastructure;
- potential impurities in our drug substance or products that could affect availability of product for our clinical trials or future commercialization;
- poor quality control and assurance or inadequate process controls; and
- lack of compliance or cooperation with regulations and specifications or requests set forth by the FDA or other foreign regulatory agencies, particularly associated with peramivir, BCX7353, galidesivir and our early stage compounds.

These contract manufacturers may not be able to manufacture the materials required for our product candidates at a cost or in quantities necessary to make them commercially viable. We also have no control over whether third-party manufacturers breach their agreements with us or whether they may terminate or decline to renew agreements with us. To date, our third-party manufacturers have met our manufacturing requirements, but they may not continue to do so. Furthermore, changes in the manufacturing process or procedure, including a change in the location where the drug is manufactured or a change of a third-party manufacturer, may require prior review and approval in accordance with the FDA's cGMP and comparable foreign requirements. This review may be costly and time-consuming and could delay or prevent the launch of a product. The FDA or similar foreign regulatory agencies may at any time implement new standards, or change their interpretation and enforcement of existing standards for manufacture, packaging or testing of products. If we or our contract manufacturers are unable to comply, we or they may be subject to regulatory action, civil actions or penalties any of which could be costly to us and could result in a delay or shortage of product.

If we are unable to maintain current manufacturing or other contract relationships, or enter into new agreements with additional manufacturers on commercially reasonable terms, or if there is poor manufacturing performance or failure to comply with any regulatory agency on the part of any of our third-party manufacturers, we may not be able to complete development of, seek timely approval of, or market, our product candidates.

Our raw materials, drug substances, and product candidates are manufactured by a limited group of suppliers, including some at a single facility. If any of these suppliers were unable to produce these items, this could significantly impact our supply of product candidate material for further preclinical testing and clinical trials.

We face intense competition, and if we are unable to compete effectively, the demand for our products, if any, may be reduced.

The biotechnology and pharmaceutical industries are highly competitive and subject to rapid and substantial technological change. There are many companies seeking to develop products for the same indications that we currently target. Our competitors in the United States and elsewhere are numerous and include, among others, major multinational pharmaceutical and chemical companies and specialized biotechnology firms. Most of these competitors have greater resources than we do, including greater financial resources, larger research and development staffs and more experienced marketing and manufacturing organizations. In addition, most of our competitors have greater experience than we do in conducting clinical trials and obtaining FDA and other regulatory approvals. Accordingly, our competitors may succeed in obtaining FDA or other regulatory approvals of product candidates more rapidly than we do. Companies that complete clinical trials, obtain required regulatory approvals, and commence commercial sale of their drugs before we do may achieve a significant competitive advantage, including patent and FDA exclusivity rights that would delay our ability to market products. We face, and will continue to face, competition in the licensing of potential product candidates for desirable disease targets, licensing of desirable product candidates, and development and marketing of our product candidates from academic institutions, government agencies, research institutions and biotechnology and pharmaceutical companies. Competition may also arise from, among other things:

- other drug development technologies;
- methods of preventing or reducing the incidence of disease, including vaccines; and
- new small molecule or other classes of therapeutic agents.

Developments by others may render our product candidates or technologies obsolete or noncompetitive.

We are performing research on or developing products for the treatment of several rare disorders, including HAE and FOP, as well as developing broad spectrum antivirals for use as medical countermeasures. We expect to encounter significant competition for any of the pharmaceutical products we are developing and plan to develop. Companies that complete clinical trials, obtain required funding or government support, obtain required regulatory approvals and commence commercial sales or stockpiling orders of their products before their competitors may achieve a significant competitive advantage. Such is the case with the current neuraminidase inhibitors marketed by GlaxoSmithKline plc and F. Hoffmann-La Roche Ltd. for influenza; CINRYZE®, KALBITOR®,FIRAZYR®, and most recently, TAKHZYRO™, marketed by Shire Pharmaceuticals, Inc. (“Shire”) for HAE; BERINERT® and HAEGARDA® marketed by CSL Limited (“CSL”) for HAE; and RUCONEST® marketed by Pharming Healthcare, Inc. (“Pharming”) for HAE.

Further, several pharmaceutical and biotechnology firms have announced efforts in HAE and in other therapeutic areas where we have discovery and development efforts ongoing. Kalvista Pharmaceuticals, Inc. has announced plans to advance its oral compound, KVD900, to a Phase 2 clinical trial to treat acute HAE attacks. Attune Pharmaceuticals, Inc. (ATN-249) also has an oral candidate for HAE in Phase 1 development. Currently, there are five investigational therapeutics under a compassionate use/expanded access framework that can be available in an outbreak setting to treat Ebola virus disease. In early 2018, Shionogi announced the approval in Japan of Xofluza, an oral treatment for influenza, which has also received Priority Review designation from the FDA. For FOP, Clementia Pharmaceuticals, Inc.’s oral therapy, palovarotene, is in Phase 3; Regeneron Pharmaceuticals, Inc.’s injectable REGN2477 is in Phase 2; and Blueprint Medicines Corporation’s BLU-782 is in preclinical development. If one or more of our competitors’ products or programs are successful, the market for our products may be reduced or eliminated.

Compared to us, many of our competitors and potential competitors have substantially greater:

- capital resources;
- research and development resources, including personnel and technology;
- regulatory experience;
- preclinical study and clinical testing experience;
- manufacturing and marketing experience; and
- production facilities.

Any of these competitive factors could impede our funding efforts, render technology and product candidates noncompetitive or eliminate or reduce demand for our product candidates.

We face risks related to our government-funded programs; if BARDA/HHS or NIAID/HHS were to eliminate, reduce or delay funding from our contracts, this would have a significant negative impact on the programs associated with such funding and could have a significant negative impact on our revenues and cash flows.

Our projections of revenues and incoming cash flows are substantially dependent upon BARDA/HHS and NIAID/HHS reimbursement for the costs related to our galidesivir program. If BARDA/HHS or NIAID/HHS were to eliminate, reduce or delay the funding for these programs or disallow some of our incurred costs, we would have to obtain additional funding for continued development or regulatory registration for these product candidates or significantly reduce or stop the development effort.

In contracting with BARDA/HHS and NIAID/HHS, we are subject to various U.S. Government contract requirements, including general clauses for a cost-reimbursement research and development contract, which may limit our reimbursement or if we are found to be in violation could result in contract termination. If the U.S. Government terminates any of its contracts with us for its convenience, or if we default by failing to perform in accordance with the contract schedule and terms, significant negative impact on our cash flows and operations could result.

Our government contracts with BARDA/HHS and NIAID/HHS have special contracting requirements, which create additional risks of reduction or loss of funding.

We have completed work under a contract with BARDA/HHS for the development of our neuraminidase inhibitor, RAPIVAB. We also have entered into contracts with BARDA/HHS and NIAID/HHS for the development of galidesivir as a treatment for diseases caused by RNA pathogens, including Marburg virus disease and Ebola virus disease. In contracting with these government agencies, we are subject to various U.S. Government contract requirements, including general clauses for a cost-reimbursement research and development contract, which may limit our reimbursement or, if we are found to be in violation, could result in contract termination.

U.S. Government contracts typically contain a number of extraordinary provisions that would not typically be found in commercial contracts and which may create a disadvantage and additional risks to us as compared to competitors that do not rely on U.S. Government contracts. These risks include the ability of the U.S. Government to unilaterally:

- terminate or reduce the scope of our contract with or without cause;
- interpret relevant regulations (federal acquisition regulation clauses);
- require performance under circumstances which may not be favorable to us;
- require an in process review where the U.S. Government will review the project and its options under the contract;
- control the timing and amount of funding, which impacts the development progress of our programs; and
- audit and object to our contract-related costs and fees, including allocated indirect costs.

Our government contracts with BARDA/HHS and NIAID/HHS have termination and audit provisions which create additional risks to us.

The U.S. Government may terminate its contracts with us either for its convenience or if we default by failing to perform in accordance with the contract schedule and terms. Termination for convenience provisions generally enable us to recover only our costs incurred or committed, and settlement expenses and profit on the work completed prior to termination. Termination does not permit these recoveries under default provisions. In the event of termination or upon expiration of a contract, the U.S. Government may dispute wind-down and termination costs and may question prior expenses under the contract and deny payment of those expenses. Should we choose to challenge the U.S. Government for denying certain payments under a contract, such a challenge could subject us to substantial additional expenses which we may or may not recover. Further, if the U.S. Government terminates its contracts with us for its convenience, or if we default by failing to perform in accordance with the contract schedule and terms, significant negative impact on our cash flows and operations could result.

As a U.S. Government contractor, we are required to comply with applicable laws, regulations and standards relating to our accounting practices and are subject to periodic audits and reviews. As part of any such audit or review, the U.S. Government may review the adequacy of, and our compliance with, our internal control systems and policies, including those relating to our purchasing, property, estimating, compensation and management information systems. Audits under the active BARDA/HHS and NIAID/HHS galidesivir contracts may occur at the election of the U.S. Government and have been concluded through fiscal 2015; all subsequent fiscal years are still open and auditable. Based on the results of its audits, the U.S. Government may adjust our contract-related costs and fees, including allocated indirect costs. This adjustment could impact the amount of revenues reported on a historic basis and could impact our cash flows under the contracts prospectively. In addition, in the event BARDA/HHS or NIAID/HHS determines that certain costs and fees were unallowable or determines that the allocated indirect cost rate was higher than the actual indirect cost rate, BARDA/HHS or NIAID/HHS would be entitled to recoup any overpayment from us as a result. In addition, if an audit or review uncovers any improper or illegal activity, we may be subject to civil and criminal penalties and administrative sanctions, including termination of our contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition from doing business with the U.S. Government. We could also suffer serious harm to our reputation if allegations of impropriety were made against us. In addition, under U.S. Government purchasing regulations, some of our costs may not be reimbursable or allowed under our contracts. Further, as a U.S. Government contractor, we are subject to an increased risk of investigations, criminal prosecution, civil fraud, whistleblower lawsuits and other legal actions and liabilities as compared to private sector commercial companies.

If we fail to reach milestones or to make annual minimum payments or otherwise breach our obligations under our license agreements, our licensors may terminate our agreements with them and seek additional remedies.

If we are unable or fail to meet payment obligations, performance milestones relating to the timing of regulatory filings, product supply obligations, post approval commitments for RAPIVAB, or development and commercial diligence obligations; are unable or fail to make milestone payments or material data use payments in accordance with applicable provisions; or fail to pay the minimum annual payments under our respective licenses, our licensors may terminate the applicable license or seek other available remedies. As a result, our development of the respective product candidate or commercialization of the product would cease.

If we fail to obtain additional financing or acceptable partnership arrangements, we may be unable to complete the development and commercialization of our product candidates or continue operations.

As our programs advance, our costs are likely to increase. Our current and planned discovery activities, pre-clinical and clinical trials, the related development, manufacturing, regulatory approval process requirements, and the additional personnel resources and testing required for supporting the development of our product candidates will consume significant capital resources. Our expenses, revenues and cash utilization rate could vary significantly depending on many factors, including: our ability to raise additional capital; the development progress of our collaborative agreements for our product candidates; the amount of funding we receive from NIAID/HHS and BARDA/HHS for galidesivir or from other new partnerships with third parties for the development of our product candidates, including BCX7353 and our other rare disease product candidates; the commercial success of peramivir achieved by our partners; the amount or profitability of any orders for peramivir or galidesivir by any government agency or other party; the progress and results of our current and proposed clinical trials for our most advanced product candidates, including BCX7353 and our other rare disease product candidates; the progress made in the manufacture of our lead products and the progression of our other programs.

We expect that we will be required to raise additional capital to complete the development and commercialization of our current product candidates and we may seek to raise capital at any time. Additional funding, whether through additional sales of securities, additional borrowings, or collaborative arrangements with partners, including governmental agencies in general and from any BARDA/HHS or NIAID/HHS contract specifically, may not be available when needed or on terms acceptable to us. The issuance of preferred or common stock or convertible securities, with terms and prices significantly more favorable than those of the currently outstanding common stock, could have the effect of diluting or adversely affecting the holdings or rights of our existing stockholders. Additional borrowings may subject us to more restrictive covenants than are currently applicable to us under our Amended and Restated Senior Credit Facility with MidCap. In addition, collaborative arrangements may require us to transfer certain material rights to such corporate partners. Insufficient funds or lack of an acceptable partnership may require us to delay, scale-back or eliminate certain of our research and development programs.

In order to continue future operations and continue our drug development programs, we will be required to raise additional capital. In addition to seeking strategic partnerships, transactions and government funding, we may decide to access the equity or debt markets, incur additional borrowings, or seek other sources to meet liquidity needs. Our ability to raise additional capital may be limited and may greatly depend upon the success of ongoing development related to our current drug development programs, including post approval studies for RAPIVAB, the progress, timeline and ultimate outcome of our kallikrein inhibitors, including the BCX7353 program (including, but not limited to, formulation progress, Phase 2 and 3 trials, long-term human safety studies, and the timing of carcinogenicity or other required studies), the progress of our ALK2 inhibitors for the treatment of FOP and other rare disease product candidates, funding for and continued successful development of galidesivir, and the progress of our early discovery programs. In addition, constriction and volatility in the equity and debt markets may restrict our future flexibility to raise capital when such needs arise. Furthermore, we have exposure to many different industries, financing partners and counterparties, including commercial banks, investment banks and partners (which include investors, licensing partners, and the U.S. Government) which may be unstable or may become unstable in the current economic and political environment. Any such instability may impact these parties' ability to fulfill contractual obligations to us or they might limit or place burdensome conditions upon future transactions with us. Also, it is possible that suppliers may be negatively impacted. Any such unfavorable outcomes in our current programs or unfavorable economic conditions could place severe downward pressure on the price of our common stock and may decrease opportunities to raise capital in the capital or credit markets, and further could reduce the return available on invested corporate cash, which, if severe and sustained, could have a material and adverse impact on our results of operations and cash flows and limit our ability to continue development of our product candidates.

We may not be able to continue as a going concern if we do not obtain additional capital.

We have sustained operating losses for the majority of our corporate history and expect that our 2018 expenses will exceed our 2018 revenues. We expect to continue to incur operating losses and negative cash flows until revenues reach a level sufficient to support ongoing operations.

Our liquidity needs will be largely determined by the success of operations in regards to the progression of our product candidates in the future. Our plans to alleviate the doubt regarding our ability to continue as a going concern primarily include our ability to control the timing and spending on our research and development programs and raising additional funds through equity financings. We also may consider other plans to fund operations including: (1) securing or increasing U.S. Government funding of our programs, including obtaining procurement contracts; (2) out-licensing rights to certain of our products or product candidates, pursuant to which the we would receive cash milestones; (3) raising additional capital through equity or debt financings or from other sources; (4) obtaining additional product candidate regulatory approvals, which would generate revenue, milestones and cash flow; (5) reducing spending on one or more research and development programs, including by discontinuing development; and/or (6) restructuring operations to change our overhead structure.

There can be no assurance that any of our plans will be successful or that additional capital will be available to us on reasonable terms, or at all, when needed. If we are unable to obtain sufficient additional capital, we may be forced to curtail operations, delay or stop ongoing clinical trials, cease operations altogether or file for bankruptcy.

If we fail to successfully commercialize or establish collaborative relationships to commercialize certain of our product candidates, or if any partner terminates or fails to perform its obligations under agreements with us, potential revenues from commercialization of our product candidates could be reduced, delayed or eliminated.

Our business strategy is to increase the asset value of our product candidate portfolio. We believe this is best achieved by retaining full product rights or through collaborative arrangements with third parties as appropriate. As needed, potential third-party relationships could include preclinical development, clinical development, regulatory approval, marketing, sales and distribution of our product candidates.

Currently, we have established collaborative relationships with Mundipharma for the development and commercialization of Mundesine and with each of SUL, Shionogi and Green Cross for the development and commercialization of peramivir on a worldwide basis. The process of establishing and implementing collaborative relationships is difficult, time-consuming and involves significant uncertainty, including:

- our partners may seek to renegotiate or terminate their relationships with us due to unsatisfactory commercial, regulatory or clinical results, including post approval clinical commitments, a change in business strategy, a change of control or other reasons;
- our contracts for collaborative arrangements may expire;
- our partners may choose to pursue alternative technologies, including those of our competitors;

- we may have disputes with a partner that could lead to litigation or arbitration, such as the ongoing arbitration proceedings between us and each of SUL and Shionogi, which could result in substantial costs and divert the attention of our management;
- we do not have day to day control over the activities of our partners and have limited control over their decisions;
- our ability to generate future event payments and royalties from our partners depends upon their abilities to establish the safety and efficacy of our product candidates, obtain regulatory approvals and achieve market acceptance of products developed from our product candidates;
- we or our partners may fail to properly initiate, maintain or defend our intellectual property rights, where applicable, or a party may utilize our proprietary information in such a way as to invite litigation that could jeopardize or potentially invalidate our proprietary information or expose us to potential liability;
- we or our partners may not devote sufficient capital or resources towards our product candidates; and
- we or our partners may not comply with applicable government regulatory requirements.

If we or our partners fail to fulfill our responsibilities in a timely manner, or at all, our commercialization efforts related to that collaboration could be reduced, delayed or terminated, or it may be necessary for us to assume responsibility for activities that would otherwise have been the responsibility of our partner. If we are unable to establish and maintain collaborative relationships on acceptable terms, we may have to delay or discontinue further development of one or more of our product candidates, undertake commercialization activities at our own expense or find alternative sources of funding. Any delay in the development or commercialization of our product candidates would severely affect our business, because if our product candidates do not progress through the development process or reach the market in a timely manner, or at all, we may not receive additional future event payments and may never receive milestone, product sales or royalty payments.

We do not have a great deal of experience in commercializing our products or technologies, and our future revenue generation is uncertain.

We do not have a great deal of experience in commercializing our product candidates or technologies. We currently have limited marketing and commercial capability, no direct or third-party sales force and limited distribution capabilities. We may be unable to establish or sufficiently increase these capabilities for products we currently, or plan to, commercialize. In addition, our revenue from collaborative agreements may be dependent upon the status of our preclinical and clinical programs.

Our ability to receive revenue from products we commercialize presents several risks, including:

- we or our collaborators may fail to successfully complete clinical trials, or satisfy post-marketing commitments, sufficient to obtain and keep FDA marketing approval;
- many competitors are more experienced and have significantly more resources, and their products could reach the market faster, be more cost effective or have a better efficacy or tolerability profile than our product candidates;
- we may fail to employ a comprehensive and effective intellectual property strategy, which could result in decreased commercial value of our Company and our products;
- we may fail to employ a comprehensive and effective regulatory strategy, which could result in a delay or failure in commercialization of our products;
- our ability to successfully commercialize our products is affected by the competitive landscape, which cannot be fully known at this time;
- reimbursement is constantly changing, which could greatly affect usage of our products; and
- future revenue from product sales would depend on our ability to successfully complete clinical studies, obtain regulatory approvals, and manufacture, market and commercialize our approved drugs.

Commercialization of peramivir by our partners is subject to the potential commercialization risks described herein and numerous additional risks. Any potential revenue benefits to us in the form of milestone payments, royalties or other consideration are highly speculative.

Commercialization success of peramivir is uncertain and is subject to all the risks and uncertainties disclosed in our other risk factors relating to drug development and commercialization. In addition, commercialization of peramivir products is subject to further risks and may be negatively impacted by a number of factors, including, but not limited to, the following:

- peramivir may not prove to be adequately safe and effective for market approval in markets other than the United States, Canada, Japan, Korea, Taiwan, Australia and the European Union;
- necessary funding for post-marketing commitments and further development of peramivir may not be available timely, at all, or in sufficient amounts;
- flu prevention or pandemic treatment concerns may not materialize at all, or in the near future;
- advances in flu vaccines or other antivirals, including competitive i.v. antivirals, could substantially replace potential demand for peramivir;
- a limited number of governmental entities are expected to be the primary potential stockpiling customers for peramivir and if we are not successful at marketing peramivir to these entities for any reason, we will not receive substantial revenues from stockpiling orders;
- government and third party payors may not provide sufficient coverage or reimbursement which would negatively impact the demand for peramivir;
- we may not be able to supply commercial material to our partners and our partners may not be able to maintain or establish sufficient and acceptable commercial manufacturing, either directly or through third-party manufacturers;
- the commercial demand and acceptance for peramivir by healthcare providers and by patients may not be sufficient to result in substantial revenues of peramivir to our partners and may result in little to no milestones or royalties to us;
- effectiveness of marketing and commercialization efforts for peramivir by our partners;
- market satisfaction with existing alternative therapies;
- perceived efficacy relative to other available therapies;
- disease prevalence;
- cost of treatment;
- pricing and availability of alternative products;
- marketing and sales activities of competitors;
- shifts in the medical community to new treatment paradigms or standards of care; and
- relative convenience and ease of administration.

We are subject to various federal and state laws related to RAPIVAB and other products under development and, if we or our partners do not comply with these regulations, we could face substantial penalties.

Our or our partners' activities related to RAPIVAB, or any of our other products under development and following their regulatory approval, are subject to regulatory and law enforcement authorities in addition to the FDA, including the Federal Trade Commission, the Department of Justice, and state and local governments. In the case of our collaboration with SUL, although SUL is responsible for RAPIVAB marketing and commercialization efforts, we continue to carry certain risks associated with RAPIVAB because we hold the RAPIVAB NDA. For example, we are responsible for reporting adverse drug experiences, we have responsibility for certain post-approval studies, we may have responsibilities and costs related to a recall or withdrawal of RAPIVAB from sale, we may incur liability associated with RAPIVAB manufacturing contracted by us or in support of any of our partners, we are required to maintain records and provide data and reports to regulatory agencies related to RAPIVAB (e.g. risk evaluation and mitigation strategies, track and trace requirements, adverse events), and we may incur certain promotional regulatory and government pricing risks, all of which could have a material adverse impact on our operations and financial condition.

In addition, we are subject to the federal physician sunshine act and certain similar physician payment and drug pricing transparency legislation in various states. We are also subject to various federal and state laws pertaining to health care "fraud and abuse," including both federal and state anti-kickback and false claims laws. These laws regulate our or our partners' operations, sales and marketing practices, price reporting, and relationships with physicians and other customers and third-party payors. Anti-kickback laws generally prohibit a manufacturer from soliciting, offering, receiving, or paying any remuneration to generate business, including the purchase or prescription of a particular drug. Although the specific provisions of these laws vary, their scope is generally broad and there may be no regulations, guidance or court decisions that clarify how the laws apply to particular industry practices. False claims laws prohibit anyone from knowingly and willingly presenting, or causing to be presented for payment to third party payors (including Medicare and Medicaid) claims for reimbursement or services that are false or fraudulent, claims for items or services not provided as claimed, or claims for medically unnecessary items or services. The sunshine provisions apply to manufacturers with products reimbursed under certain government programs and require those manufacturers to disclose annually to the federal government certain payments made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as, ownership and investment interests held by physicians (as defined above) and their immediate family members. State laws may also require disclosure of pharmaceutical pricing information and marketing expenditures. Although we seek to comply with these statutes, it is possible that our practices, or those of our partners, might be challenged under health care fraud and abuse, anti-kickback, false claims or similar laws. Violations of the physician sunshine act and similar state legislation or the fraud and abuse laws may be punishable by civil or criminal sanctions, including fines and civil monetary penalties, and future exclusion from participation in government healthcare programs.

The principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to certain regulatory authorities, including the FDA. Consequently, the FDA or other regulatory authority may conclude that a financial relationship between us and a principal investigator creates a conflict of interest or otherwise affects interpretation of the study. In the event of a conflict of interest with respect to a study, the integrity of the data generated at the applicable clinical trial site may be questioned or the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA or other regulatory authority, as the case may be, and may ultimately lead to the denial of marketing approval of one or more of our product candidates.

We have a number of outstanding post-approval commitments to the FDA and EMA that we retain, despite our partnership with SUL, which we may not complete successfully or on time for any number of reasons, including but not limited to lack of funds to complete the studies and insufficient interest by appropriate sites, investigators or study subjects. For example, as a condition of the approval of RAPIVAB/ALPIVAB, we were required to complete pediatric patient trials and to submit the final results of these clinical trials to the FDA and EMA. We may be subject to penalties if we fail to comply with post-approval legal and regulatory requirements and our products could be subject to continual recordkeeping and reporting requirements, review and periodic inspections by the FDA and other regulatory bodies. Regulatory approval of a product may be subject to limitations on the indicated uses for which the product may be marketed or to the other restrictive conditions of approval that limit our ability to promote, sell or distribute a product. Furthermore, the approval of RAPIVAB/ALPIVAB and any other future product candidates may be subject to requirements for costly post-approval testing and surveillance to monitor its safety or efficacy.

Advertising and promotion are subject to stringent FDA rules and oversight and as the holder of the NDA we may be held responsible for any advertising and promotion conducted by our partner that is not in compliance with the rules and regulations. In particular, the claims in all promotional materials and activities must be consistent with the FDA approvals for approved products, and must be appropriately substantiated and fairly balanced with information on the safety risks and limitations of the products. Adverse event information concerning approved products must be reviewed and as the NDA holder of RAPIVAB we are required to make expedited and periodic adverse event reports to the FDA and other regulatory authorities.

In addition, the research, manufacturing, distribution, sale and promotion of products are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare and Medicaid Services, other divisions of the U.S. Department of Health and Human Services, the U.S. Department of Justice and individual U.S. Attorney offices within the Department of Justice, and state and local governments. All of these activities are also potentially subject to federal and state healthcare false claims and fraud and abuse laws, as well as consumer protection and unfair competition laws.

If our operations with respect to RAPIVAB or our other products that are subject to healthcare laws and regulations are found to be in violation of any of the healthcare fraud and abuse laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations. Any penalties, damages, fines, curtailment or restructuring of our operations could adversely affect our ability to operate our business and our financial results. Although compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, the risks cannot be entirely eliminated. 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. Moreover, achieving and sustaining compliance with all applicable federal and state fraud and abuse laws may be costly.

We and our partners may be subject to new legislation, regulatory proposals and healthcare payor initiatives that may increase our costs of compliance and adversely affect our or our partners' ability to market our products, including RAPIVAB, obtain collaborators and raise capital.

The Patient Protection and Affordable Care Act, or PPACA, made extensive changes to the delivery of health care in the U.S. The PPACA included numerous provisions that affect pharmaceutical companies, some of which became effective immediately and others of which have taken effect over the past several years. For example, the PPACA expanded health care coverage to the uninsured through private health insurance reforms and an expansion of Medicaid. The PPACA also imposed substantial costs on pharmaceutical manufacturers, such as an increase in liability for rebates paid to Medicaid, new drug discounts that must be offered to certain enrollees in the Medicare prescription drug benefit, an annual fee imposed on all manufacturers of brand prescription drugs in the U.S., and an expansion of an existing program requiring pharmaceutical discounts to certain types of hospitals and federally subsidized clinics. The PPACA also contains cost containment measures that could reduce reimbursement levels for health care items and services generally, including pharmaceuticals. It also required reporting and public disclosure of payments and other transfers of value provided by pharmaceutical companies to physicians and teaching hospitals.

We expect that the current presidential administration and U.S. Congress will likely continue to seek to modify, repeal, or otherwise invalidate all, or certain provisions of, the PPACA. There is still significant uncertainty with respect to the impact that the current presidential administration and the U.S. Congress may have on the PPACA, if any, and any changes will likely take time to unfold. As such, we cannot predict what effect the PPACA or other healthcare reform initiatives that may be adopted in the future will have on our business.

We cannot predict what effect the PPACA or other healthcare reform initiatives that may be adopted in the future will have on our business. The continuing efforts of the government, insurance companies, managed care organizations and other payors of health care services to contain or reduce costs of health care could result in decreased net revenues from our pharmaceutical products and decrease potential returns from our development efforts. In addition, pharmaceutical and device manufacturers are also required to report and disclose certain payments and transfers of value to, and investment interests held by, physicians and their immediate family members during the preceding calendar year. Failure to submit required information may result in civil monetary penalties for payments, transfers of value or ownership or investment interests not reported in an annual submission. Compliance with the PPACA and state laws with similar provisions is difficult and time consuming, and companies that do not comply with these state laws face civil penalties. Because of the breadth of these laws and the narrowness of the safe harbors, it is possible that some of our business activities could be subject to challenge under one or more of such laws. Such a challenge could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

In addition, there have been a number of other legislative and regulatory proposals aimed at changing the pharmaceutical industry. In particular, legislation has been enacted in certain states and at a federal level that requires development of an electronic pedigree to track and trace each prescription drug at the saleable unit level through the distribution system. Compliance with these electronic pedigree requirements may increase our operational expenses and impose significant administrative burdens. In addition, our compliance may be deemed insufficient and we could face a material adverse effect on our business, financial condition, results of operations and growth prospects. As a result of these and other new proposals, we may determine to change our current manner of operation, provide additional benefits or change our contract arrangements, any of which could have a material adverse effect on our business, financial condition and results of operations.

Adequate coverage and reimbursement in the U.S. and other markets is critical to the commercial success of RAPIVAB or any other product that we might bring to market. Recently in the U.S. there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed bills designed to, among other things, reform government program reimbursement methodologies. Individual states in the United States have been 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 marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Regional health care authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other health care programs. Third-party payors are increasingly challenging the prices charged for medical products and services and, in some cases, imposing restrictions on the coverage of particular drugs. Many third-party payors negotiate the price of medical services and products and develop formularies which establish pricing and reimbursement levels. Exclusion of a product from a formulary can lead to its sharply reduced usage in the third-party payor's patient population. The process for obtaining coverage can be lengthy and costly, and we expect that it could take several months before a particular payor initially reviews our product and makes a decision with respect to coverage. For example, third-party payors may require cost-benefit analysis data from us in order to demonstrate the cost-effectiveness of RAPIVAB or any other product we might bring to market. For any individual third-party payor, we may not be able to provide data sufficient to gain reimbursement on a similar or preferred basis to competitive products, or at all which may have a material adverse effect on our business, financial condition and results of operations.

There are risks related to the potential government use or sale of peramivir (RAPIVAB).

United States Government use or sale of RAPIVAB in emergency situations, or otherwise, may result in the use of RAPIVAB outside of its approved use. To the extent that RAPIVAB is used as a treatment for influenza by the U.S. Government or peramivir by any other government entity, there can be no assurance that it will prove to be generally safe, well-tolerated and effective. Such government use of RAPIVAB/peramivir may create certain liabilities for us or our partners in the case of government use outside of the U.S. There is no assurance that we or our manufacturers will be able to fully meet the demand for peramivir in the event of additional orders. Further, we may not achieve a favorable price for additional orders of RAPIVAB in the U.S. or peramivir in any other country. Our competitors may develop products that could compete with or replace peramivir. We may face competition in markets where we have no existing intellectual property protection or are unable to successfully enforce our intellectual property rights.

There is no assurance that the non-U.S. partnerships that we have entered into for peramivir will result in any order for peramivir in those countries. There is no assurance that peramivir will be approved for any use or will achieve market approval in additional countries. In the event that any emergency use or market approval is granted, there is no assurance that any government order or commercialization of peramivir in any countries will be substantial or will be profitable to us. In addition, the sale of peramivir, emergency use or other use of peramivir in any country may create certain liabilities for us and our partners.

If we or our partners do not obtain and maintain governmental approvals for our product candidates under development, we or our partners will not be able to sell these potential products, which would significantly harm our business because we will receive no revenue.

We or our partners must obtain regulatory approval before marketing or selling our future product candidates. If we or our partners are unable to receive regulatory approval and do not market or sell our future product candidates, we will never receive any revenue from such product sales. In the United States, we or our partners must obtain FDA approval for product candidates that we intend to commercialize. The process of preparing for and obtaining FDA approval may be lengthy and expensive, and approval is never certain. Products distributed abroad are also subject to foreign government regulation and export laws of the United States. Because of the risks and uncertainties in biopharmaceutical development, our product candidates could take a significantly longer time to gain regulatory approval than we expect or may never gain approval. If the FDA delays regulatory approval of our product candidates, our management’s credibility, our value and our operating results may suffer. Even if the FDA or foreign regulatory agencies approve a product candidate, the approval may limit the indicated uses for a product candidate and/or may require post-approval studies.

The FDA regulates, among other things, the record keeping and storage of data pertaining to potential pharmaceutical products. We currently store most of our preclinical research data, our clinical data and our manufacturing data at our facility. While we do store duplicate copies of most of our clinical data offsite and a significant portion of our data is included in regular backups of our systems, we could lose important data if our facility incurs damage, or if our vendor data systems fail, suffer damage or are destroyed. If we receive approval to market our potential products, whether in the United States or internationally, we will continue to be subject to extensive regulatory requirements. These requirements are wide ranging and govern, among other things:

- adverse drug experience reporting regulations;
- product promotion;
- product manufacturing, including good manufacturing practice requirements; and
- product changes or modifications.

Our failure to comply with existing or future regulatory requirements, or our loss of, or changes to, previously obtained approvals, could have a material adverse effect on our business because we will not receive product or royalty revenues if we or our partners do not receive approval of our products for marketing.

Royalties and milestone payments from Shionogi under our license agreement with Shionogi (the "Shionogi Agreement") will be required to be used by Royalty Sub to service its obligations under its PhaRMA Notes, and generally will not be available to us for other purposes until Royalty Sub has repaid in full its obligations under the PhaRMA Notes.

In March 2011, our wholly-owned subsidiary Royalty Sub issued $30.0 million in aggregate principal amount of PhaRMA Notes. The PhaRMA Notes are secured principally by (i) certain royalty and milestone payments under the Shionogi Agreement, pursuant to which Shionogi licensed from us the rights to market peramivir in Japan and Taiwan, (ii) rights to certain payments under a Japanese yen/U.S. dollar Currency Hedge Agreement put into place by us in connection with the issuance of the PhaRMA Notes and (iii) the pledge by us of our equity interest in Royalty Sub. Payments from Shionogi to us on non-governmental sales under the Shionogi Agreement will generally not be available to us for other purposes until Royalty Sub has repaid in full its obligations under the PhaRMA Notes. Accordingly, these funds will be required to be dedicated to Royalty Sub’s debt service and not available to us for product development or other purposes. As of September 1, 2014, the payments from Shionogi were insufficient for Royalty Sub to service its obligations under the PhaRMA Notes, resulting in an event of default with respect to the PhaRMA Notes. As a result of this event of default, the holders of the PhaRMA Notes may be able to pursue acceleration of the PhaRMA Notes and foreclose on the collateral securing the PhaRMA Notes and our equity interest in Royalty Sub and may exercise other remedies available to them under the indenture or other documents related to the PhaRMA Notes. In such event, we may not realize the benefit of future royalty payments that might otherwise accrue to us following repayment of the PhaRMA Notes, we may incur legal costs and we might otherwise be adversely affected.

Because an event of default has occurred under the PhaRMA Notes, the holders of the PhaRMA Notes may be able to pursue acceleration of the PhaRMA Notes and foreclose on the collateral securing the PhaRMA Notes and our equity interest in Royalty Sub, in which case we may not realize the benefit of future royalty payments that might otherwise accrue to us following repayment of the PhaRMA Notes and we could otherwise be adversely affected.

Royalty Sub's ability to service its payment obligations in respect of the PhaRMA Notes, and our ability to benefit from our equity interest in Royalty Sub, is subject to numerous risks. Royalty Sub's ability to service the PhaRMA Notes may be adversely affected by, among other things, changes in or any termination of our relationship with Shionogi, reimbursement, regulatory, manufacturing and/or intellectual property issues, product returns, product recalls, product liability claims and allegations of safety issues, as well as other factors. As Royalty Sub has been unable to service its obligations under the PhaRMA Notes and an event of default has occurred under the PhaRMA Notes, the holders of the PhaRMA Notes may be able to pursue acceleration of the PhaRMA Notes and foreclose on the collateral securing the PhaRMA Notes and our equity interest in Royalty Sub and may exercise other remedies available to them under the indenture or other documents related to the PhaRMA Notes. In such event, we may not realize the benefit of future royalty payments that might otherwise accrue to us following repayment of the PhaRMA Notes, we may incur legal costs and we might otherwise be adversely affected.

We may be required to pay significant premiums under the Currency Hedge Agreement entered into by us in connection with the issuance of the PhaRMA Notes. In addition, because our potential obligations under the foreign currency hedge are marked to market, we may experience additional quarterly volatility in our operating results and cash flows attributable to the Currency Hedge Agreement.

In connection with the issuance by Royalty Sub of the PhaRMA Notes, we entered into a Currency Hedge Agreement to hedge certain risks associated with changes in the value of the Japanese yen relative to the U.S. dollar. Under the foreign currency hedge agreement, we may be required to pay an annual premium in the amount of $2.0 million in each May continuing through May 2020. Such payment will be required if, in May of the relevant year, the spot rate of exchange for Japanese yen-U.S. dollars (determined in accordance with the Currency Hedge Agreement) is such that the U.S. dollar is worth 100 yen or less. We will be required to mark to market our potential obligations under the currency hedge and post cash collateral, which may cause us to experience additional quarterly volatility in our operating results and cash flows as a result. Additionally, we may be required to pay significant premiums or a termination fee under the foreign currency hedge agreement entered into by us in connection with the issuance of the PhaRMA Notes. We are required to maintain a foreign currency hedge at 100 yen per dollar under the agreements governing the PhaRMA Notes.

Our Amended and Restated Senior Credit Facility contains restrictions that limit our flexibility in operating our business. We may be required to make a prepayment or repay the outstanding indebtedness earlier than we expect if a prepayment event or an event of default occurs, including a material adverse change with respect to us, which could have a material adverse effect on our business.

The Amended and Restated Senior Credit Facility contains various covenants that limit our ability to engage in specified types of transactions. These covenants limit our ability to, among other things:

- convey, sell, lease, license, transfer or otherwise dispose of certain parts of our business or property;
- change the nature of our business;
- liquidate or dissolve;
- enter into certain change in control or acquisition transactions;
- incur or assume certain debt;
- grant certain types of liens on our assets;

- modify, liquidate or transfer assets in certain collateral accounts;
- pay dividends or make certain distributions to our stockholders;
- make certain investments;
- enter into material transactions with affiliates; and
- modify existing debt or collaboration arrangements.

The restrictive covenants contained in the Amended and Restated Senior Credit Facility could cause us to be unable to pursue business opportunities that we or our stockholders may consider beneficial without the lender's permission or without repaying all Amended and Restated Senior Credit Facility obligations.

A breach of any of these covenants could result in an event of default under the Amended and Restated Senior Credit Facility. An event of default will also occur if, among other things, a material adverse change in our business, operations or condition occurs, which could potentially include negative results in clinical trials, or a material impairment of the prospect of our repayment of any portion of the amounts we owe under the Amended and Restated Senior Credit Facility occurs. In the case of a continuing event of default under the agreement, the lender could elect to declare all amounts outstanding to be immediately due and payable, proceed against the collateral in which we granted to the lender a security interest under the Amended and Restated Senior Credit Facility, or otherwise exercise the rights of a secured creditor. Amounts outstanding under the Amended and Restated Senior Credit Facility are secured by substantially all of our assets and those of our subsidiaries, excluding certain specified assets but including proceeds from those assets.

If we fail to adequately protect or enforce our intellectual property rights or secure rights to patents of others, the value of those rights would diminish.

Our success will depend in part on our ability and the abilities of our partners to obtain, protect and enforce viable intellectual property rights including but not limited to trade name, trademark and patent protection for our Company and its products, methods, processes and other technologies we may license or develop, to preserve our trade secrets, and to operate without infringing the proprietary rights of third parties both domestically and abroad. The patent position of biotechnology and pharmaceutical companies is generally highly uncertain, involves complex legal and factual questions and has recently been the subject of much litigation. Neither the United States Patent and Trademark Office ("USPTO"), the Patent Cooperation Treaty offices, nor the courts of the United States and other jurisdictions have consistent policies nor predictable rulings regarding the breadth of claims allowed or the degree of protection afforded under many biotechnology and pharmaceutical patents. Further, we may not have worldwide patent protection for all of our product candidates and our intellectual property rights may not be legally protected or enforceable in all countries throughout the world. In some jurisdictions, some of our product candidates in certain programs, including our HAE program, may have short or no composition of matter patent life and we may therefore rely on orphan drug exclusivity or data exclusivity. There can be no assurance that we will obtain orphan drug exclusivity or data exclusivity in every jurisdiction. Further, in some jurisdictions, we may rely on formulation patents or method of use patents. Both the ability to achieve issuance and the enforcement of formulation and method of use patents can be highly uncertain and can vary from jurisdiction to jurisdiction, and such patents may therefore not adequately prevent competitors and potential infringers in some jurisdictions. The validity, scope, enforceability and commercial value of the rights protected by such patents, therefore, is highly uncertain.

We also rely on trade secrets to protect technology in cases when we believe patent protection is not appropriate or obtainable. However, trade secrets are difficult to protect. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborators and advisors, our ability to receive patent protection or protect our proprietary information may be imperiled.

We may be involved in legal proceedings to protect or enforce our patents, the patents of our partners or our other intellectual property rights, which could be expensive, time consuming and unsuccessful.

Competitors may infringe or otherwise violate our patents, the patents of our licensors or our other intellectual property rights. To counter infringement or unauthorized use, we may be required to file legal claims, which can be expensive and time-consuming and unsuccessful. An adverse result in any legal proceeding could put one or more of our patents at risk. Our success depends in part on avoiding the infringement of other parties' patents and other intellectual property rights as well as avoiding the breach of any licenses relating to our technologies and products. In the United States, patent applications filed in recent years are confidential for 18 months, while older applications are not published until the patent issues. As a result, avoiding patent infringement may be difficult and we may inadvertently infringe third-party patents or proprietary rights. These third parties could bring claims against us, our partners or our licensors that even if resolved in our favor, could cause us to incur substantial expenses and, if resolved against us, could additionally cause us to pay substantial damages. Further, if a patent infringement suit were brought against us, our partners or our licensors, we or they could be forced to stop or delay research, development, manufacturing or sales of any infringing product in the country or countries covered by the patent we infringe, unless we can obtain a license from the patent holder. Such a license may not be available on acceptable terms, or at all, particularly if the third party is developing or marketing a product competitive with the infringing product. Even if we, our partners or our licensors were able to obtain a license, the rights may be nonexclusive, which would give our competitors access to the same intellectual property.

If we or our partners are unable or fail to adequately initiate, protect, defend or enforce our intellectual property rights in any area of commercial interest or in any part of the world where we wish to seek regulatory approval for our products, methods, processes and other technologies, the value of the product candidates to produce revenue would diminish. Additionally, if our products, methods, processes, and other technologies or our commercial use of such products, processes, and other technologies, including but not limited to any trade name, trademark or commercial strategy infringe the proprietary rights of other parties, we could incur substantial costs. The USPTO and the patent offices of other jurisdictions have issued to us a number of patents for our various inventions and we have in-licensed several patents from various institutions. We have filed additional patent applications and provisional patent applications with the USPTO. We have filed a number of corresponding foreign patent applications and intend to file additional foreign and U.S. patent applications, as appropriate. We have also filed certain trademark and trade name applications worldwide. We cannot assure you as to:

- the degree and range of protection any patents will afford against competitors with similar products;
- if and when patents will issue;
- if patents do issue we cannot be sure that we will be able to adequately defend such patents and whether or not we will be able to adequately enforce such patents; or
- whether or not others will obtain patents claiming aspects similar to those covered by our patent applications.

If the USPTO or other foreign patent office upholds patents issued to others or if the USPTO grants patent applications filed by others, we may have to:

- obtain licenses or redesign our products or processes to avoid infringement;
- stop using the subject matter claimed in those patents; or
- pay damages.

We may initiate, or others may bring against us, litigation or administrative proceedings related to intellectual property rights, including proceedings before the USPTO or other foreign patent office. Any judgment adverse to us in any litigation or other proceeding arising in connection with a patent or patent application could materially and adversely affect our business, financial condition and results of operations. In addition, the costs of any such proceeding may be substantial whether or not we are successful.

Our success is also dependent upon the skills, knowledge and experience, none of which is patentable, of our scientific and technical personnel. To help protect our rights, we require all employees, consultants, advisors and partners to enter into confidentiality agreements that prohibit the disclosure of confidential information to anyone outside of our company and require disclosure and assignment to us of their ideas, developments, discoveries and inventions. These agreements may not provide adequate protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information, and if any of our proprietary information is disclosed, our business will suffer because our revenues depend upon our ability to license or commercialize our product candidates and any such events would significantly impair the value of such product candidates.

Our actual or perceived failure to comply with European governmental regulations and other legal obligations related to privacy, data protection and information security could harm our business.

European Union (“EU”) member states, Switzerland and other countries have adopted data protection laws and regulations, which impose significant compliance obligations. For example, the General Data Protection Regulation (“GDPR”) imposes strict requirements on controllers and processors of personal data, including special protections for “special category data,” which includes health, biometric and genetic information of data subjects located in the EU. Further, GDPR provides a broad right for EU member states to create supplemental national laws, for example relating to the processing of health, genetic and biometric data, which could further limit our ability to use and share such data or could cause our costs to increase and harm our business and financial condition. GDPR grants individuals the opportunity to object to the processing of their personal information, allows them to request deletion of personal information in certain circumstances, and provides the individual with an express right to seek legal remedies in the event the individual believes his or her rights have been violated. Further, the GDPR imposes strict rules on the transfer of personal data out of the EU to the United States or other regions that have not been deemed to offer “adequate” privacy protections.

Failure to comply with the requirements of the GDPR and the related national data protection laws of the EU member states, which may deviate slightly from the GDPR, may result in significant fines of up to 4% of global revenues, or €20,000,000, whichever is greater, and in addition to such fines, our failure to comply with the requirements of GDPR may subject us to litigation and/or adverse publicity, which could have material adverse effect on our reputation and business. As a result of the implementation of the GDPR, we are required to put in place additional mechanisms to ensure compliance with the new data protection rules. For example, the GDPR requires us to make more detailed disclosures to data subjects, requires disclosure of the legal basis on which we can process personal data, makes it harder for us to obtain valid consent for processing, will require the appointment of a data protection officer where sensitive personal data (i.e., health data) is processed on a large scale, introduces mandatory data breach notification throughout the EU, imposes additional obligations on us when we are contracting with service providers and requires us to adopt appropriate privacy governance including policies, procedures, training and data audit.

We are subject to the supervision of local data protection authorities in those jurisdictions where we undertake clinical trials. We depend on a number of third parties in relation to the provision of our services, a number of which process personal data of EU individuals on our behalf. With each such provider we are required to enter into contractual arrangements under which they are contractually obligated to only process personal data according to our instructions, and conduct diligence to ensure that they have sufficient technical and organizational security measures in place.

We are also subject to evolving European privacy laws on electronic marketing and cookies. The EU is in the process of replacing the e-Privacy Directive (2002/58/EC) with a new set of rules taking the form of a regulation that will be directly implemented in the laws of each European member state. While the e-Privacy Regulation was originally intended to be adopted on May 25, 2018, it is still going through the European legislative process and commentators now expect it to be adopted during the middle or second half of 2020.

We are subject to legal proceedings, which could result in losses or unexpected expenditure of time and resources.

From time to time, we may be involved in disputes, called upon to initiate legal proceedings or to defend ourselves in such legal proceedings relating to our business. Due to the inherent uncertainties in legal proceedings, we cannot accurately predict the ultimate outcome of any such proceedings. An unfavorable outcome in any such proceedings could have an adverse impact on our business, financial condition and results of operations. If our stock price is volatile, we may become involved in securities class action lawsuits in the future. Any current or future dispute resolution or legal proceeding, including without limitation the ongoing arbitration proceedings between us and each of SUL and Shionogi, regardless of the merits of any such proceeding, could result in substantial costs and a diversion of management's attention and resources that are needed to successfully run our business.

We face an inherent risk of liability in the event that the use or misuse of our products results in personal injury or death and our product liability insurance coverage may be insufficient.

If the use or misuse of peramivir, forodesine or any other regulatory body-approved products we or a partner may sell in the future harms people, we may be subject to costly and damaging product liability claims brought against us by consumers, healthcare providers, pharmaceutical companies, third-party payors or others. The use of our product candidates in clinical trials, including post marketing clinical studies, could also expose us to product liability claims. We cannot predict all of the possible harms or side effects that may result from the use of our products or the testing of product candidates and, therefore, the amount of insurance coverage we currently have may not be adequate to cover all liabilities or defense costs we might incur. A product liability claim or series of claims brought against us could give rise to a substantial liability that could exceed our resources. Even if claims are not successful, the costs of defending such claims and potential adverse publicity could be harmful to our business.

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face even greater risks upon any commercialization by us of our product candidates. We have product liability insurance covering our clinical trials. Clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to obtain sufficient insurance or increase our existing coverage at a reasonable cost to protect us against losses that could have a material adverse effect on our business. An individual may bring a product liability claim against us if one of our products or product candidates causes, or is claimed to have caused, an injury or is found to be unsuitable for consumer use. Any product liability claim brought against us, with or without merit, could result in:

- liabilities that substantially exceed our product liability insurance, which we would then be required to pay from other sources, if available;
- an increase of our product liability insurance rates or the inability to maintain insurance coverage in the future on acceptable terms, or at all;

- withdrawal of clinical trial volunteers or patients;
- damage to our reputation and the reputation of our products, resulting in lower sales;
- regulatory investigations that could require costly recalls or product modifications;
- litigation costs; and
- the diversion of management's attention from managing our business.

Insurance coverage is increasingly more costly and difficult to obtain or maintain.

While we currently have insurance for our business, property, directors and officers, and our products, insurance is increasingly more costly and narrower in scope, and we may be required to assume more risk in the future. If we are subject to claims or suffer a loss or damage in excess of our insurance coverage, we will be required to bear any loss in excess of our insurance limits. If we are subject to claims or suffer a loss or damage that is outside of our insurance coverage, we may incur significant uninsured costs associated with loss or damage that could have an adverse effect on our operations and financial position. Furthermore, any claims made on our insurance policies may impact our ability to obtain or maintain insurance coverage at reasonable costs or at all.

If our facility incurs damage or power is lost for a significant length of time, our business will suffer.

We store clinical and stability samples at our facility that could be damaged if our facility incurs physical damage or in the event of an extended power failure. We have backup power systems in addition to backup generators to maintain power to all critical functions, but any loss of these samples could result in significant delays in our drug development process.

In addition, we store most of our preclinical and clinical data at our facilities. Duplicate copies of most critical data are secured off-site. Any significant degradation or failure of our computer systems could cause us to inaccurately calculate or lose our data. Loss of data could result in significant delays in our drug development process and any system failure could harm our business and operations.

A significant disruption in our information technology systems or a cyber-security breach could adversely affect our business.

We are increasingly dependent on information technology systems to operate our business. Like other companies in our industry, our networks and infrastructure may be vulnerable to cyber-attacks or intrusions, including by computer hackers, foreign governments, foreign companies or competitors, or may be breached by employee error, malfeasance or other disruption. A breakdown, invasion, corruption, destruction or interruption of critical information technology systems could negatively impact operations. If our systems are damaged, fail to function properly or otherwise become unavailable, we may incur substantial costs to repair or replace them, and we may experience loss of critical data and interruptions or delays in our ability to perform critical functions, which could adversely affect our business, financial condition or results of operations. Any compromise of our data security could also result in a violation of applicable privacy and other laws, significant legal and financial exposure, damage to our reputation, loss or misuse of the information and a loss of confidence in our data security measures, which could harm our business. There can be no assurance that our efforts to protect our data and information technology systems will prevent breakdowns or breaches in our systems, or those of third parties with which we do business, and any such events could adversely affect our business.

If we fail to retain our existing key personnel or fail to attract and retain additional key personnel, the development of our product candidates and commercialization of our products and the related expansion of our business will be delayed or stopped.

We are highly dependent upon our senior management and scientific team, the unexpected loss of whose services might impede the achievement of our development and commercial objectives. Competition for key personnel with the experience that we require is intense and is expected to continue to increase. Our inability to attract and retain the required number of skilled and experienced management, commercial, operational and scientific personnel will harm our business because we rely upon these personnel for many critical functions of our business.

If because of our use of hazardous materials, we violate any environmental controls or regulations that apply to such materials, we may incur substantial costs and expenses in our remediation efforts.

Our research and development involves the controlled use of hazardous materials, chemicals and various radioactive compounds. We are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and some waste products. Accidental contamination or injury from these materials could occur. In the event of an accident, we could be liable for any damages that result and any liabilities could exceed our resources. Compliance with environmental laws and regulations or a violation of such environmental laws and regulations could require us to incur substantial unexpected costs, which would materially and adversely affect our results of operations.

Risks relating to investing in our common stock

Our existing principal stockholders hold a substantial amount of our common stock and may be able to influence significant corporate decisions, which may conflict with the interest of other stockholders.

Several of our stockholders own greater than 5% of our outstanding common stock. Our top ten stockholders own more than 50% of BioCryst and can individually, and as a group, influence our operations based upon their concentrated ownership. These stockholders, if they act together, may be able to influence the outcome of matters requiring approval of the stockholders, including the election of our directors and other corporate actions.

Our stock price has been, and is likely to continue to be, highly volatile, which could cause the value of an investment in our common stock to decline significantly.

The market prices for securities of biotechnology companies in general have been highly volatile and may continue to be highly volatile in the future. Moreover, our stock price has fluctuated frequently, and these fluctuations are often not related to our financial results. For the twelve months ended September 30, 2018, the 52-week range of the market price of our stock was from $4.12 to $8.13 per share. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

- announcements of technological innovations or new products by us or our competitors;
- developments or disputes concerning patents or proprietary rights;
- additional dilution through sales of our common stock or other derivative securities;
- status of new or existing licensing or collaborative agreements and government contracts;
- announcements relating to the status of our programs;
- developments and announcements regarding new and virulent strains of influenza;
- we or our partners achieving or failing to achieve development milestones;
- publicity regarding actual or potential medical results relating to products under development by us or our competitors;
- publicity regarding certain public health concerns for which we are or may be developing treatments;
- regulatory developments in both the United States and foreign countries;
- public concern as to the safety of pharmaceutical products;
- actual or anticipated fluctuations in our operating results;
- changes in financial estimates or recommendations by securities analysts;
- changes in the structure of healthcare payment systems, including developments in price control legislation;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- additions or departures of key personnel or members of our board of directors;
- purchases or sales of substantial amounts of our stock by existing stockholders, including officers or directors;
- economic and other external factors or other disasters or crises; and
- period-to-period fluctuations in our financial results.

Future sales and issuances of securities may dilute the ownership interests of our current stockholders and cause our stock price to decline.

Future sales of our common stock by current stockholders into the public market could cause the market price of our stock to fall. As of October 31, 2018, there were 109,641,044 shares of our common stock outstanding. We may from time to time issue securities in relation to a license arrangement, collaboration, merger or acquisition. We may also sell, for our own account, shares of common stock or other equity securities, from time to time at prices and on terms to be determined at the time of sale.

As of October 31, 2018, there were 14,104,918 stock options and restricted stock units outstanding, 4,644,724 shares available for issuance under our Amended and Restated Stock Incentive Plan, and 234,425 shares available for issuance under our Employee Stock Purchase Plan. In addition, we could also make equity compensation grants outside of our Stock Incentive Plan. The shares underlying existing stock options, restricted stock units and possible future stock options, stock appreciation rights and stock awards have been registered pursuant to registration statements on Form S-8.

If some or all of such shares are sold or otherwise issued into the public market over a short period of time, our current stockholders' ownership interests may be diluted and the value of all publicly traded shares is likely to decline, as the market may not be able to absorb those shares at then-current market prices. Additionally, such sales and issuances may make it more difficult for us to sell equity securities or equity-related securities in the future at a time and price that our management deems acceptable, or at all.

In March 2017, we entered into a Registration Rights Agreement with entities affiliated with Baker Bros. Advisors LP (the "Baker Entities") to provide that, if requested, we will register the shares of our common stock beneficially owned by the Baker Entities for resale under the Securities Act. Our registration obligations pursuant to the Registration Rights Agreement cover all shares then held or thereafter acquired by the Baker Entities, for up to ten years, and include our obligation to facilitate certain underwritten public offerings of our common stock by the Baker Entities in the future. On May 10, 2017, we filed a registration statement on Form S-3 with respect to 11,710,951 shares of common stock held by the Baker Entities. If the Baker Entities, by exercising their underwriting rights or otherwise, sell a large number of our shares, or the market perceives that the Baker Entities intend to sell a large number of our shares, this could adversely affect the market price of our common stock.

We have anti-takeover provisions in our corporate charter documents that may result in outcomes with which you do not agree.

Our board of directors has the authority to issue up to 4,800,000 shares of undesignated preferred stock and to determine the rights, preferences, privileges and restrictions of those shares without further vote or action by our stockholders. The rights of the holders of any preferred stock that may be issued in the future may adversely affect the rights of the holders of common stock. The issuance of preferred stock could make it more difficult for third parties to acquire a majority of our outstanding voting stock.

In addition, our certificate of incorporation provides for staggered terms for the members of the board of directors and supermajority approval of the removal of any member of the board of directors and prevents our stockholders from acting by written consent. Our certificate also requires supermajority approval of any amendment of these provisions. These provisions and other provisions of our by-laws and of Delaware law applicable to us could delay or make more difficult a merger, tender offer or proxy contest involving us.

We have never paid dividends on our common stock and do not anticipate doing so in the foreseeable future.

We have never paid cash dividends on our stock. We currently intend to retain all future earnings, if any, for use in the operation of our business. Accordingly, we do not anticipate paying cash dividends on our common stock in the foreseeable future.

Item 6. Exhibits

Number	Description
3.1	Third Restated Certificate of Incorporation of Registrant. Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed December 22, 2006.
3.2	Certificate of Amendment to the Third Restated Certificate of Incorporation of Registrant. Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed July 24, 2007.
3.3	Certificate of Increase of Authorized Number of Shares of Series B Junior Participating Preferred Stock. Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed November 4, 2008.
3.4	Certificate of Amendment to the Third Restated Certificate of Incorporation of Registrant. Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed May 7, 2014.
3.5	Certificate of Increase of Authorized Number of Shares of Series B Junior Participating Preferred Stock. Incorporated by reference to Exhibit 3.2 to the Company's Form 8-K filed May 7, 2014.
3.6	Amended and Restated Bylaws of Registrant effective October 29, 2008. Incorporated by reference to Exhibit 3.2 to the Company's Form 8-K filed November 4, 2008.
3.7	Amendment to Amended and Restated By-Laws of BioCryst Pharmaceuticals, Inc., dated January 21, 2018. Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed January 22, 2018.
(10.1)	Amendment #10 to the Agreement between BioCryst Pharmaceuticals, Inc. and the Biomedical Advanced Research and Development Authority within the U.S. Department of Health and Human Services' Office of the Assistant Secretary for Preparedness and Response, dated March 19, 2018.
(10.2) †	Amendment #11 to the Agreement between BioCryst Pharmaceuticals, Inc. and the Biomedical Advanced Research and Development Authority within the U.S. Department of Health and Human Services' Office of the Assistant Secretary for Preparedness and Response, dated September 20, 2018. (Portions omitted pursuant to request for confidential treatment.)
(10.3)	Amendment #22 to the Agreement between BioCryst Pharmaceuticals, Inc. and the National Institute of Allergy and Infectious Diseases, dated September 10, 2018.
10.4	Agreement between BioCryst Pharmaceuticals, Inc. and the Centers for Disease Control and Prevention dated, September 1, 2018. Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed September 6, 2018.
(10.5) †	Amended and Restated Credit and Security Agreement, dated as of July 10, 2018, by and among Midcap Financial Trust, as administrative agent, the Lenders listed on the Credit Facility Schedule attached thereto and otherwise party thereto from time to time, BioCryst Pharmaceuticals, Inc., and MDCP, LLC. (Portions omitted pursuant to request for confidential treatment.)
(31.1)	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
(31.2)	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
(32.1)	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
(32.2)	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
(101)	Financial statements from the Quarterly Report on Form 10-Q of BioCryst Pharmaceuticals, Inc. for the three and nine months ended September 30, 2018, formatted in XBRL: (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Comprehensive Loss, (iii) Consolidated Statements of Cash Flows, and (iv) Notes to Consolidated Financial Statements.

( ) Filed or furnished herewith.

† Confidential treatment requested.

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 on this 8th day of November, 2018.

BIOCRYST PHARMACEUTICALS, INC.

/s/ Jon P. Stonehouse
Jon P. Stonehouse
President and Chief Executive Officer
(Principal Executive Officer)

/s/ Thomas R. Staab, II
Thomas R. Staab, II
Senior Vice President, Chief Financial Officer and Treasurer
(Principal Financial and Principal Accounting Officer)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

CONTRACT ID CODE	PAGE OF PAGES
	1 of 2

2. AMENDMENT/MODIFICATION NO	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ NO	5 PROJECT NO (If applicable)
0010	03/19/2018		

6. ISSUED BY CODE ASPR-BARDA

ASPR-BARDA
200 Independence Ave., S.W.
Room 640 G
Washington DC 20201

7. ADMINISTERED BY (If other than Item 6) CODE ASPR-BARDA01

ASPR-BARDA
330 Independence Ave, SW, 3W G644
Washington DC 20201

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

BIOCRYST PHARMACEUTICALS, INC. 726613
BIOCRYST PHARMACEUTICALS, INC.
4505 EMPEROR BLVD STE 200
DURHAM NC 277039457

CODE 726613 FACILITY CODE

(x) **9A. AMENDMENT OF SOLICITATION NO**

9B. DATED (SEE ITEM 11)

X **10A. MODIFICATION OF CONTRACT/ORDER NO**
HHSO100201500007C

10B. DATED (SEE ITEM 13)
03/27/2015

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

Net Decrease: -$3,600,686.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER *(Specify type of modification and authority)*

X Mutual Agreement of the Parties and FAR 52.217-7

E. IMPORTANT: Contractor X is not, ___ is required to sign this document and return _____ ___ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 62-1413174
DUNS Number: 618194609
Delivery Location Code: HHS/OS/ASPR
HHS/OS/ASPR
200 C St SW
WASHINGTON DC 20201 US

FOB: Destination
Period of Performance: 03/31/2015 to 10/31/2018

Change Item 3 to read as follows(amount shown is the obligated amount):
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
		THOMAS P. HASTINGS	
15B. CONTRACTOR/OFFEROR	**15C. DATE SIGNED**	**16B. UNITED STATES OF AMERICA**	**16C. DATE SIGNED**
(Signature of person authorized to sign)		Thomas P. Hastings (Signature of Contracting Officer)	3/19/2018

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED HHSO100201500007C/0010	PAGE 2 OF 7

NAME OF OFFEROR OR CONTRACTOR
BIOCRYST PHARMACEUTICALS, INC. 726613.

ITEM NO (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
3	Option 2 Non-clinical NDA-enabling Toxicology IM Obligated Amount: -$2,329,617.00 Accounting Info: 2015.1990500.?a103 Appr. Yr.: 2015 CAN: 1990500 Object Class: 25103 Funded: -$2,329,617.00 Cancel Item 6 in its entirety.				-2,329,617.00

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "****" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 | 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
0011	See Block 16C	0S227781	

6. ISSUED BY — CODE ASPR-BARDA

ASPR-BARDA
200 Independence Ave., S.W.
Room 640-G
Washington DC 20201

7. ADMINISTERED BY (If other than Item 6) — CODE ASPR-BARDA01

ASPR-BARDA
330 Independence Ave, SW, Rm G644
Washington DC 20201

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

BIOCRYST PHARMACEUTICALS, INC. 726613
BIOCRYST PHARMACEUTICALS, INC.
4505 EMPEROR BLVD STE 200
DURHAM NC 277038457

CODE 726613 — FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. HHSO100201500007C

10B. DATED (SEE ITEM 13) 03/27/2015

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase: $3,600,686.00
2018.1990500.25106

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF

X D. OTHER (Specify type of modification and authority) Mutual Agreement of the Parties and FAR 52.217-7

E. IMPORTANT: Contractor is not is required to sign this document and return 2 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Tax ID Number: 62-1413174
DUNS Number: 618194609

A. The purpose of this bi-lateral modification is to supplement the Base Period/CLIN 0001 of the contract in the amount of $3,600,686, to extend the Base Period of Performance, to update the Statement of Work and the Milestone Schedule and to change the contract CORs.

1. The Base Period of Performance is hereby extended to April 17, 2020.

2. This modification hereby results in an increase in funding as follows:

a. The Total Estimated Cost of the Base Period/CLIN 0001 of the contract is increased by
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
Jon P. Stonehouse CEO	THOMAS P. HASTINGS
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED 7-20-18
16B. UNITED STATES OF AMERICA (Signature of Contracting Officer)	16C. DATE SIGNED 09/20/2018

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

NAME OF OFFEROR OR CONTRACTOR
BIOCRYST PHARMACEUTICALS, INC. 726613

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	$ * * * , from $ * * * to $ * * *.				
	b. The Total Estimated Fee of the Base Period/CLIN 0001 of the contract increased by $ * * * , from $ * * * to $ * * *.				
	c. The Total Estimated Cost Plus Fixed Fee of the Base Period/CLIN 0001 of the contract is increased by $3,600,686.00, from $14,993,766.00 to $18,594,452.00.				
	3. Attachments 1 and 2 are deleted in their entirety and replaced with the following:				
	a. Attachment 1, Statement of Work, dated March 19, 2018 (18 pages)				
	b. Attachment 2, Milestone and Deliverables Chart, dated March 19, 2018 (5 pages)				
	3. Article G.2., Contracting Officer's Representative (COR) and Alternate Contracting Officer's Representative COR is hereby revised as follows:				
	a. The COR, Malen Link, is replaced by:				
	Danielle Turley Biomedical Advanced Research and Development Authority (BARDA), Office of the Assistant Secretary for Preparedness and Response (ASPR), Department of Health and Human Services (DHHS) Email: Danielle.Turley@hhs.gov (202)692-4781				
	b. The Alternate COR, Kim Sciarretta, is replaced by:				
	Malen Link Biomedical Advanced Research and Development Authority (BARDA), Office of the Assistant Secretary for Preparedness and Response (ASPR), Department of Health and Human Services (DHHS) Malen.Link@hhs.gov (202)475-2477				
	B. All other terms and conditions of the contract remain unchanged. Delivery: 09/13/2018 Delivery Location Code: HHS/OS/ASPR HHS/OS/ASPR 200 C St SW WASHINGTON DC 20201 US				
	Appr. Yr.: 2018 CAN: 1990500 Object Class: 25106 FOB: Destination Period of Performance: 03/31/2015 to 04/17/2020				
	Add Item 8 as follows:				
8	ASPR-18-01400 -- additional funds to BioCryst for Continued ...				3,600,686.00

NAME OF OFFEROR OR CONTRACTOR
BIOCRYST PHARMACEUTICALS, INC. 726613

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	the base period for non-clinical toxicology studies under contract HHSO100201500007C Obligated Amount: $3,600,686.00				

ATTACHMENT 1

Statement of Work
HHS0100201500007C
BCX4430 NDA Enabling CMC and Non-Clinical Toxicology Studies

PREAMBLE

Independently and not as an agent of the Government, the Contractor shall furnish all the necessary services, qualified personnel, material, equipment, and facilities, not otherwise provided by the Government as needed to perform the Statement of Work submitted in response to the BARDA Broad Agency Announcement (BAA) CBRN-BAA-10-100-SOL-00013.

The Government reserves the right to modify the milestones, progress, schedule, budget, or deliverables to add or delete deliverables, process, or schedules if the need arises. Because of the nature of this research and development (R&D) contract and the complexities inherent in this and prior programs, at designated milestones the Government will evaluate whether work should be redirected, removed, or whether schedule or budget adjustments should be made.

OVERALL OBJECTIVES AND SCOPE

The overall objective of this contract is to advance the development of BCX4430, a novel small molecule nucleoside with broad spectrum antiviral activity being developed for diseases caused by RNA pathogens. BCX4430, an inhibitor of viral RNA-dependent RNA polymerase (RdRp), is the lead compound in our broad-spectrum antiviral program to meet the need for a parenteral, direct-acting antiviral medical countermeasure (MCM) having efficacy across multiple viruses. The scope of work for this contract includes preclinical and manufacturing development activities that fall into the following areas: manufacturing of clinical trial material, manufacturing process improvements and development, non-clinical toxicology studies; and all associated regulatory, quality assurance, management, and administrative activities. The R&D effort will contribute toward an NDA filing for BCX4430. Overall, this Statement of Work (SOW) focuses on:

- Drug substance (DS) and drug product (DP) manufacturing process development activities that will be conducted at US based facilities, which will result in the ability to consistently produce high quality, GMP compliant material and deliver drug supply that could be available for deployment as a medical countermeasure and support future clinical and non-clinical studies
- Nonclinical development activities to advance the intramuscular (IM) and intravenous (IV) formulation through NDA-enabling toxicology including * * * and * * * studies in the * * * and * * *

1 BASE: MANUFACTURE OF CLINICAL TRIAL MATERIAL AND CONDUCT OF NON-CLINICAL TOXICOLOGY STUDIES

Duration: 62 months

Drug Substance and Drug Product GMP manufacturing by US suppliers to support non-clinical and clinical activities. Drug Substance will be produced following an * * * starting with * * *, which will be used as the starting material to produce GMP BCX4430. Drug Substance will also be produced using * * *

* * * GMP BCX4430. Previous campaigns of GMP BCX4430 have produced between * * * to * * * per batch. The scope of work under this option will target up to a 5-fold increase in the GMP BCX4430 batch size.

Following completion of additional scale up, manufacturing and method development of the * * * to produce material, Toxicology studies will be completed, including * * * GLP Toxicology studies in * * * and * * *, * * * Assessment in * * * and * * * Toxicology Studies in * * *.

The primary objectives will be to:

- Produce a total of * * * of GMP BCX4430 drug substance following the * * *.
- Produce * * * of * * * of non-GMP BCX4430 and * * * of GMP BCX4430 using the * * *
- Conduct further optimization of the * * *
- Conduct drug product process improvements that will be focused on validation of analytical methods, stress testing, stability studies, and process design space optimization
- Conduct Drug Product * * * formulation development studies to develop a * * * process that can be scaled to a manufacturing facility
- Evaluate the potential subchronic toxicity and toxicokinetics of the test article and to evaluate reversibility, progression, or delayed appearance of any observed changes following a * * *
- Determine the toxic effect of BCX4430 on * * * and detection of functional effects of * * *
- Evaluate the possible adverse effects of the test article on the * * * and on the * * *

1.1. Procurement of Starting Materials

The contractor shall procure enough starting materials to produce up to a total of * * * of * * *, * * * of the current manufacturing process of BCX4430. The key starting materials to be procured are * * * and * * *. In addition, the contractor shall procure sufficient starting materials to produce * * * of non-GMP BCX4430 and * * * of GMP BCX4430 using the * * *.

1.1.1. Procurement of Starting Materials to produce * * *

The contractor shall procure * * * of * * * and * * * of * * * for the manufacture of * * * to support an initial campaign (WBS 1.4.1 and 1.4.2) of manufacturing * * * batches of BCX4430 followed by * * * of BCX4430 (Clinical Trial Material Batch * * * WBS1.7.1) using the * * *.

1.1.2. Procurement of Starting Materials to produce * * * BCX4430 Drug Substance

The contractor shall procure sufficient quantities of selected starting materials to support an initial campaign of manufacturing * * * of BCX4430 using the * * *.

1.2. Further Process Improvements

The contractor shall conduct further process improvements that may be identified focused on improving the existing plant-scale processes following generally the same * * *.

1.2.1 Conduct Process Improvements

The contractor shall conduct the process improvements with existing plant-scale processes.

1.2.2 Determination that Process is Sufficient to move to Commercial Scale up

The contractor shall evaluate the processes developed and provide sufficient information through a deliverable that will enable BARDA to determine that the * * * process is sufficient to move to commercial scale-up activities.

1.3. Manufacture of * * * at * * *

* * * will be utilized as the starting material for the manufacture of BCX4430 in accordance with GMP guidance.

1.3.1. Manufacture of the * * * batch of * * *

The contractor shall target producing between a * * * batch using the * * *.

1.3.2. Manufacture of * * * Batches * * *

Based on the performance of the * * * batch of * * *, additional lab-scale studies and a qualification run will be conducted to improve the * * * process. This process will then be incrementally scaled-up in the plant.

1.3.2.1. Manufacture of the * * * batch of * * *

The contractor shall produce approximately * * * per batch using the * * *.

1.3.2.2. Manufacture of the * * * batch of * * *

The contractor shall target produce approximately * * * per batch using the * * *.

1.4. Manufacturing Campaign of GMP BCX4430

The contractor shall produce * * * batches of BCX4430 at * * * in compliance with GMP.

1.4.1. Manufacturing of the * * * batch of GMP BCX4430

The contractor shall produce and release approximately * * * of GMP BCX4430 utilizing the * * * process for making BCX4430 starting with the * * * batch (* * *) of * * *.

1.4.2. Manufacturing of the * * * batch of GMP BCX4430

The contractor shall produce and release approximately 1-1.5 kg of GMP BCX4430 utilizing the * * * process for making BCX4430 starting with the recovered portion of the * * * batch (* * *) of * * *. NOTE: This quantity is dependent on the amount and quality of * * * isolated during the recovery of * * *.

1.4.3. Drug Substance Stability Studies

The contractor shall place samples from DS batch and * * * GMP DS batch of BCX4430 on a * * * stability program at * * * and * * * and a * * * accelerated stability study at * * *.

Table 1. BCX4430 Drug Substance Stability Study Sampling Points

Test	Months									
ID	0	1	3	6	9	12	18	24	48	60
A	X	X	X	X	X	X	X	X	X	X
B	X	X	X	X	X	X	X	X	X	X
C	X	X	X	X	X	X	X	X	X	X
D	X	X	X	X	X	X	X	X	X	X
E	X	X	X	X	X	X	X	X	X	X
F	X	X		X		X	X	X	X	X
G	X	X		X		X	X	X	X	X

NOTE: BARDA will only cover stability activities for * * *

Table 2. BCX4430 Drug Substance Stability Tests

Test ID	Test
A	* * *
B	* * *
c	* * *
D	* * *
E	* * *
F	* * *
G	* * *

Drug Product Development

The contractor shall conduct drug product process improvements that will be focused on validation of analytical methods, stress testing, stability studies, and process design space optimization for an IM formulation.

The contractor shall conduct formulation development activities and produce a sterile, parenteral formulation containing * * * of the active compound per unit in compliance with GMP guidance. Initial development efforts will be focused on delivering a * * * that tolerates terminal sterilization and provides an acceptable stability profile. Additionally, studies to include: * * * will be conducted to evaluate the feasibility of * * *.

1.5.1. Stress Conditions Studies

The contractor shall conduct a series of experiments under conditions outlined in ICH guidance to evaluate the stability of the drug product made from available drug substance.

1.5.2. Design Space Studies

The contractor shall conduct studies to evaluate and define the design space of the formulation process.

1.5.3. Analytical Method Validation

The contractor shall conduct analytical methods validation or qualification as listed in the Table 3 below.

Table 3. BCX4430 Drug Product Methods that will be Validated or Qualified

Test	Method and Objective
* * *	* * *
* * *	* * *
* * *	* * *
* * *	* * *
* * *	* * *
* * *	* * *
* * *	* * *
* * *	* * *
* * *	* * *
* * *	* * *
* * *	* * *
* * *	* * *

1.5.4. Prepare Process Development Report for DP

The contractor shall prepare a process development report summarizing the experiments and results of the studies conducted to define the process and evaluate the formulation.

1.5.5. Pre-formulation and Physicochemical Properties Studies

The contractor shall conduct studies to determine the physicochemical properties of the drug substance and identify potential formulations and primary packaging for an IM injection based on stability and ability to be produced on manufacturing lines.

1.5.6. Feasibility Runs

The contractor shall conduct small-scale, non-GMP manufacturing runs of potential formulations and formats.

1.5.7. Extractable/Leachable Study

The contractor shall conduct studies to determine drug product stability in primary packaging and of syringe types that will be used for delivery.

1.5.8. Excipient Compatibility Studies for IV Formulation from IM

The contractor shall conduct studies to evaluate the compatibility of the IM formulation added to various standard IV fluids.

1.6. Manufacturing of Drug Product to Support Clinical Trials

The contractor shall produce * * * of * * * of drug product suitable for clinical trial use. The drug product will be produced from the * * * GMP BCX4430 DS Batches (WBS 1.4.1).

1.6.1. Manufacture of Clinical Trial Material (DP Batch * * *)

The contractor shall produce approximately * * *, assuming * * * of BCX4430 is delivered from the DS Batch * * * of BCX4430, per GMP for use in clinical trials which will include active drug batches to support future clinical studies.

1.6.2. Prepare a Campaign Summary Reports

The contractor shall prepare a campaign summary report of the manufacture and release of the CTM Batch.

1.6.3. Drug Product Stability Studies - Active

The contractor shall place drug product on stability based on the following

conditions::

Table 4. BCX4430 Drug Product Stability Testing Conditions and sampling

Stability Conditions	Configuration	Test Points
* * *	* * *	* * *
* * *	* * *	* * *
* * *	* * *	* * *

NOTE: BARDA will only cover stability activities for * * *

Testing at each interval, unless otherwise specified below, will include:

- * * *
- * * *
- * * *
- * * *
- * * *
- * * *
- * * *

- * * *

1.6.4. Comparability Study

The contractor shall conduct comparability studies evaluating drug substance produced by * * *, and the subsequently produced drug product, will be conduct per FDA Guidance. These studies will evaluate: in-process checks, impurity profiles, release testing results, and stability profiles at standard and accelerated conditions to ensure the material produced by both manufacturers is substantially comparable.

1.7. Manufacture of Additional Supply

The contractor shall produce approximately * * * of BCX4430 utilizing the * * * process for BCX4430 from the * * * facility. The contractor shall also produce * * * of * * * of non-GMP BCX4430 and * * * of GMP BCX4430 using the * * *. The contractor shall produce approximately * * * of drug product at * * * suitable for clinical trial use.

1.7.1. Manufacturing of approximately * * * GMP BCX4430

The contractor shall produce approximately * * * of GMP BCX4430 (DS Batch * * *) from * * * following the * * *

1.7.2. Prepare a Campaign Summary Report

The contractor shall prepare a campaign summary report of the manufacture and release of DS following completion of * * * manufacture.

1.7.3. * * * Drug Substance Analytical Method Development and Validation

* * * will develop analytical methods suited for the process followed by validation conducted under protocol. Methods will be validated using standard criteria: * * *. Method qualification will be conducted prior to validation.

1.7.4. Manufacturing of approximately * * * of Non-GMP BCX4430 – * * *

Following the receipt of sufficient quantities of starting materials and reagents, * * * will qualify the selected process at * * * scale using the * * * DS process. The Analytical department will support production during the duration of the qualification run. Following completion of manufacturing the vendor will draft and issue a process qualification report.

1.7.5. Manufacturing of approximately * * * of GMP BCX4430 – * * *

Following the receipt of sufficient quantities of starting materials and reagents, * * * will manufacture * * * of GMP BCX4430 following the * * *. Following completion of manufacturing, material testing, and release the vendor will draft and issue a campaign Summary Report

1.7.6. Manufacturing of approximately * * *

The contractor shall produce approximately * * * of GMP BCX4430 drug product using * * * GMP drug substance (WBS 1.7.1)

1.7.5. Prepare a Campaign Summary Report

The contractor shall prepare a campaign summary report of the manufacture and release of CTM Batches.

1.7.6. Stability Studies for DP

The contractor shall conduct product stabilities for the DP manufactured from the batches of GMP BCX4430 drug substance.

NOTE: BARDA will only cover stability activities for * * *

1.7.7. Comparability Studies

The contractor shall conduct comparability studies evaluating drug substance produced by * * * using both processes, and the subsequently produced drug product, will be conduct per FDA Guidance. These studies will evaluate: in-process checks, impurity profiles, release testing results, and stability profiles at standard and accelerated conditions to ensure the material produced by both manufacturing processes are substantially comparable.

1.8. Drug Product * * * Formulation Development

* * * has been identified as a potential product presentation that will provide a stable formulation suitable for IV administration at potentially higher doses than are feasible by * * *. A * * * process will be developed that can be scaled to the manufacturing facility.

1.8.1. Analytical Method Development

Confirmation that the * * * is suitable for a * * * product and qualification of a * * *.

1.8.2. Pre-formulation Studies

Evaluate the current IM formulation and bulking agents to produce a prototype * * * product.

1.8.3. * * * Cycle Development

Evaluate * * * process cycles capable of producing the final product to specifications utilizing a design of experiments of known critical process parameters. The critical parameters will be confirmed and ranges established in subsequent small-scale runs.

1.8.4. Stability Study

Evaluate the stability of the product produced during cycle development. Two fill volumes will be placed on accelerated and real-time studies. * * * will be run for * * * with * * * and * * * run for * * *.

1.8.5. Terminal Sterilization

Product produced during cycle development will be subjected to terminal sterilization by gamma irradiation. The irradiated product will be tested for changes in chemical and physical characteristics.

1.8.6. Pre-manufacturing Studies

A material comparability study examining processing and packaging components will be performed. Additionally, a microbial retention filter validation study will be performed using the * * *, identified during cycle development.

1.9. Non-Clinical Toxicology Studies

Through completion of manufacturing of Drug substance there will be material to conduct further regulatory activities such as the non-clinical NDA-enabling toxicology studies in this option. This combined option will add value to the project through conducting additional non-clinical activities that will support a potential future NDA.

Decision Criterion:

- * * *
- * * *

The contractor shall perform nonclinical GLP studies of BCX4430 to characterize * * *.

The contractor shall for each study develop the protocol, select and qualify each vendor, conduct in life and recovery phases and analyze study data resulting in a final study report. Studies include:

1.9.1. GLP * * * Toxicology Studies in * * * and * * *

1.9.2. Conduct * * * Assessment in * * *

1.9.3. Conduct * * * toxicology * * *

A listing of the proposed studies to be conducted in the combined CLIN for the nonclinical NDA-enabling toxicology studies is provided in

Table 5. **Nonclinical NDA-enabling Toxicology Studies**

Description	Objectives	Species
GLP * * * general toxicology	* * *	* * *

Description	Objectives	Species
GLP * * * general toxicology	* * *	* * *
* * * assessment	* * *	* * *
*** toxicology	* * *	* * *

2 OPTION 1: COMMERCIAL SCALE UP AND NDA REGISTRATION BATCHES

Duration: * * *

Go/No Go Criteria to Initiate: WBS 1.2.2 BARDA approval of process developed
Through optimization of manufacturing processes, BARDA will evaluate and determine what process should be sufficient to initiate commercial scale up activities in this Option. This Option will add value to the project through conducting manufacturing regulatory activities that will be needed for future product approval with the FDA.

Decision Criteria:

- * * *
- * * *

The objective is to produce DS registration batches from the qualified process, * * *. This will be determined upon the conclusion of the DS development effort being undertaken by BioCryst and funded by NIAID that is scheduled to conclude in December 2015. Additionally, during this stage, the DP manufacturing process would be finalized for the commercial presentation and registration batches produced.

2.1. Procurement

The contractor shall procure the * * * and * * * starting materials needed to produce BCX4430.

2.1.1. Procurement of * * *

The contractor shall qualify a vendor(s) to produce the * * * starting material and procure

enough material to support the manufacture of * * * batches of BCX4430 drug substance.

2.1.2. Procurement of * * *

The contractor shall qualify a vendor(s) to produce the * * * starting material and procure enough material to support the manufacture of * * * batches of BCX4430 drug substance.

2.2. Drug Substance Process Scale-up

The contractor shall conduct process development work targeting a * * * that can be scaled to plant equipment. This work will include: development of a * * * through lab scale studies, process hazard evaluation including RC-1 and digital scanning calorimetry, lab scale qualification runs, pilot plant scale-up technical batches, necessary modifications to analytical methods based on the * * *, and plant-scale registration runs.

2.2.1 Further Process Improvements of Final Route

The contractor shall conduct further process improvements that may be identified focused on improving the * * * to be scaled up. The * * * will be based on * * *.

2.2.2 Process Hazard Evaluation

The contractor shall conduct process hazard evaluation studies needed for the scale-up of the optimized process into the plant.

2.2.3 Scale-up Technical Run

The contractor shall conduct a nonGMP manufacturing run at plant-scale to ensure the safety and output of the optimized process.

2.2.4 Analytical Method Development and Qualification

The contractor shall modify, add to, revalidate, or requalify the analytical methods.

2.2.5 Prepare Process Development Report

The contractor shall prepare a process development report describing the experiments and results leading to the selection of the optimized manufacturing process

2.3 Manufacture of GMP Drug Substance Registration Batches

The contractor shall produce * * * GMP batches of BCX4430 following the * * * at a scale comparable to the estimated commercial scale.

2.3.1 Manufacture of DS Batch (DS Registration Batch * * *)

The contractor shall manufacture a batch of GMP BCX4430 at plant scale.

2.3.2 Manufacture of DS Batch (DS Registration Batch * * *)

The contractor shall manufacture a batch of GMP BCX4430 at plant scale.

2.3.3 Manufacture of DS Batch (DS Registration Batch * * *)

The contractor shall manufacture a batch of GMP BCX4430 at plant scale.

2.3.4 Prepare Campaign Summary Report

The contractor shall prepare a report summarizing the conduct, observations, and results of the manufacturing of DS Registration Batches * * *.

2.4 Drug Product Registration Batches

The contractor shall produce * * * drug product lots at a qualified CMO that will be used as the NDA registration batches.

2.4.1 Manufacture of DP Registration (DP Registration Batch * * *)

The contractor shall manufacture a NDA registration batch of GMP BCX4430 drug product at a representative fraction of the estimated commercial scale.

2.4.2 Manufacture of DP Registration (DP Registration Batch * * *)

The contractor shall manufacture a NDA registration batch of GMP BCX4430 drug product at a representative fraction of the estimated commercial scale.

2.4.3 Manufacture of DP Registration (DP Registration Batch * * *)

The contractor shall manufacture a NDA registration batch of GMP BCX4430 drug product at a representative fraction of the estimated commercial scale.

2.4.4 Prepare campaign summary report

The contractor shall prepare a report summarizing the conduct, observations, and results of the manufacturing of DPR Batches * * *.

2.5 Stability studies for DS and DP

The contractor shall conduct drug substance and drug product stabilities as described in **Table *4***.

NOTE: BARDA will only cover stability activities for * * *

2.6 Comparability study

The contractor shall conduct comparability studies evaluating drug substance produced for clinical trials in the base period versus the NDA registration batches manufactured via * * *, and the subsequently produced drug product, will be conduct per FDA Guidance. These studies will evaluate: in-process checks, impurity profiles, release testing results, and stability profiles at standard and accelerated conditions to ensure the material produced by both processes is substantially comparable.

3 OPTION 2: NONCLINICAL NDA-ENABLING TOXICOLOGY

Duration: * * *

Go/No Go Criteria to Initiate: Availability of GMP BCX4430 * * * DS batch manufactured under NIAID contract HHS0100201500007C

Through completion of manufacturing of Drug substance there will be material to conduct further

regulatory activities such as the non-clinical NDA-enabling toxicology studies in this option. This Option will add value to the project through conducting additional non-clinical activities that will support a potential future NDA.

Decision Criterion:

- * * *
- * * *

The contractor shall perform nonclinical GLP studies of BCX4430 to characterize * * *.

3.1. * * * toxicology

The contractor shall for each * * * study segment develop the protocol, select and qualify the vendor, conduct in life and recovery phases and analyze study data resulting in a final study report.

Studies include:

3.1.1. Conduct * * * Dose Range Finding Studies in the * * *

3.1.2. Conduct Definitive * * * toxicology in the * * *

3.2. Nonclinical ADME

The contractor shall procure radiolabeled BCX4430. In addition, for each ADME study, the contractor shall develop the protocol, select and qualify the vendor, conduct the study and analyze study data resulting in a final study report. Studies include:

3.2.1. Conduct Radiolabeled ADME study- * * *

3.2.2. Conduct Radiolabeled ADME- * * *

A listing of the proposed studies for the nonclinical NDA-enabling toxicology studies is provided in Table 6.

Table 6. Nonclinical NDA-enabling Toxicology Studies

Description	Objectives	Species
* * * Dose Range Finding	* * *	* * *
* * * Dose Range Finding	* * *	* * *
Definitive * * * toxicology	* * *	* * *

Description	Objectives	Species
Definitive * * * toxicology	* * *	* * *
Radiolabeled ADME	Determine the absorption, distribution, metabolism and excretion of the test article following IM dosing	* * *
Radiolabeled ADME	Determine the absorption, metabolism and excretion of the test article following IM dosing	* * *

4 OPTION 3: *IN VITRO* EXPERIMENTS- IV

Duration: * * *

Go/No Go to Initiate: Selection of a preliminary IV formulation (LRI) based on initial studies

Through completion of earlier studies, it will be determined what is an appropriate IV formulation to continue with toxicology studies of the IV formulation under this Option. This Option will add value to determine if there is any identified toxicology in *in vitro* assays before moving to animal studies in **Option 4**.

Decision Criterion:

- * * *

4.1. * * * - IV

The contractor shall develop the protocol, select and qualify the vendor, conduct the experiments and analyze the data resulting in a study report.

4.2. Conduct * * * Test -IV

The contractor shall develop the protocol, select and qualify the vendor, conduct the experiment and analyze the data resulting in a study report.

A listing of the proposed experiments for the *in vitro* experiments to be conducted in advance of the nonclinical NDA-enabling toxicology studies for the IV formulation is provided in **Table 7**.

Table 7. In vitro Experiments – IV

Description	Objective(s)	Species
* * *	* * *	* * *
* * *	* * *	* * *

	* * *	

4.3 Study Report on all in vitro assays

The contractor shall submit a summarized study report with data and conclusions from all in vitro experiments conducted in Table 6 to determine whether there is any toxicology before advancing into non-clinical NDA enabling toxicology studies (Option 5).

5 OPTION 4: NONCLINICAL NDA-ENABLING TOXICOLOGY

Duration: * * *

Go/No Go Criteria to Initiate: WBS 4.3 Study Report on all *in vitro* assays

Through completion of the IV *in vitro* toxicology studies with the IV formulation conducted in Option 3 and summarized in WBS 4.3, it will be determined if the IV formulation is safe to move into non-clinical toxicology animal studies in this Option. This Option will add value to the project through conducting additional non-clinical activities that will support a potential future NDA.

Decision Criterion:

- * * *
- * * *

5.1. GLP * * * Toxicology

The contractor shall for each toxicology study develop the protocol, select and qualify the vendor, conduct in life and recovery phases and analyze study data resulting in a final study report. Studies include:

5.1.1. Conduct GLP * * * general toxicology study- * * *

5.1.2. Conduct GLP * * * toxicology study- * * *

5.2. * * * toxicology

The contractor shall for each * * * study segment develop the protocol, select and qualify the vendor, conduct in life and recovery phases and analyze study data resulting in a final study report. Studies include:

5.2.1. Conduct * * * assessment in * * *

5.2.2. Conduct * * * Dose Range Finding Studies in the * * *

5.2.3. Conduct Definitive * * * toxicology in the * * *

5.2.4. Conduct * * * Developmental toxicology * * *

A listing of the proposed studies for the nonclinical NDA-enabling toxicology studies for the IV formulation is provided in Table 8.

Table 8: Nonclinical NDA-enabling Toxicology Studies

Description	Objectives	Species
GLP * * * general toxicology	* * *	* * *
GLP * * * general toxicology	* * *	* * *
* * * assessment	* * *	* * *
* * * Dose Range Finding	* * *	* * *
* * * Dose Range Finding	* * *	* * *
Definitive * * * toxicology	* * *	* * *
Definitive * * * toxicology	* * *	* * *

Description	Objectives	Species
* * *	* * *	* * *
toxicology		

6 PROGRAM MANAGEMENT

The contractor shall provide all expertise needed for the implementation of the activities to be performed under this contract, including: research, manufacturing, regulatory, clinical, statistical analyses, management and administrative activities.

6.1. Technical and Project Management Support

The contractor shall appoint a Principal Investigator (PI) who will be responsible for all aspects of project performance and communication with BARDA.

The contractor shall provide project management that will ensure day-to-day monitoring and tracking of progress and timelines, the coordination of project activities and costs incurred.

The contractor shall provide all managerial and administrative functions necessary for overall planning, monitoring, and implementing activities for the completion of the strategic product development plan.

The contractor shall provide for all necessary legal affairs required to ensure the timely acquisition of all proprietary rights, including intellectual property rights and all materials needed to perform the project, as well as reporting to the Government all inventions made in the performance of the project.

6.2. Subcontractor Management

The contractor shall provide for tracking, coordination and oversight of subcontractor efforts and manage communications with subcontractors.

6.3. Risk Management

The contractor shall identify project risks, develop risk management strategies and implement mitigation actions.

6.4. Earned Value Management (EVM)

The contractor shall provide EVM information.

6.5. Project Communications

The contractor shall provide for project communications including communications with BARDA and external experts.

The contractor shall provide planning and steps required for the conduct of contract review meetings.

7 REGULATORY

The contractor shall ensure adherence to FDA regulations and guidance, including requirements for the conduct of animal studies and assays under GLP, the manufacturing of the therapeutic product under GMP, and the conduct of clinical trials under GCP standards.

7.1. Regulatory Authority Interactions

The contractor shall prepare and submit documentation and correspondence to regulatory authorities as required. The contractor shall request and conduct meetings with regulatory authorities to ensure the development program is conducted in accordance with regulatory guidelines and expectations.

7.2. Quality Assurance

The contractor shall maintain quality assurance documentation. The contractor shall arrange for audits of subcontractor facilities to ensure all planned procedures comply with the FDA regulations and guidance that are required to meet GLP, GMP and GCP standards. In addition, the contractor shall ensure that all contractor and/or subcontractor records and staff are available for site visits or audits.

7.3. Expert Collaborations

The contractor shall collaborate with experts in the field in the design of experiments and studies that support the advancement of the development program.

ATTACHMENT 2
MILESTONE AND DELIVERABLES CHART
Contract HHS0100201500007C

WBS	Milestone	Deliverable	Success Criteria	Timing	Go/No-go for initiation
CLIN 0001 – MANUFACTURE OF CLINICAL TRIAL MATERIAL					
1.2.1	Process Improvements Report	Report on Process Development	Process Developed	* * *	
1.2.2	Determination of sufficient Process for Commercial Scale up	Evaluation Report	BARDA approval of developed process	* * *	N/A
1.3.1	Manufacture of * * * (Batch * * *)	* * *	Acceptable quality and yield	* * *	N/A
1.3.2	Manufacture of * * * (Batch * * *)	* * *	Acceptable quality and yield	* * *	N/A
1.3.3	Manufacture of * * * (Batch * * *)	* * *	Acceptable quality and yield	* * *	N/A
1.4.1	Manufacture of GMP BCX4430 (DS Batch * * *)	BCX4430 DS, CofA	Acceptable quality and yield	* * *	N/A
1.4.2	Manufacture of GMP BCX4430 (DS Batch * * *)	BCX4430 DS, CofA	Acceptable quality and yield	* * *	N/A
1.4.3	Drug Substance Stability Study	Report on stability activities	Stability Data	* * *	N/A
1.5	Drug Product Development	DP Process Development Report (WBS 1.5.4) Pre-formulation and Physicochemical Report (WBS 1.5.5) Extractable/Leachable Report (WBS 1.5.7)	Completion of studies	* * *	N/A
1.5.8	Excipient Compatibility Report for IV Formulation	Compatibility Report	IV Formulation Completed	* * *	N/A
1.6.1	Manufacture GMP DP (DP Batch * * *)	BCX4430 DP, CofA	Acceptable quality and yield	* * *	Accepted GMP DS
1.6.2	Prepare a Campaign Summary Report	Campaign Summary Report (DP Batch * * *)	Completion of DP Campaigns	* * *	N/A

WBS	Milestone	Deliverable	Success Criteria	Timing	Go/No-go for initiation
1.6.3	Drug Product Stability Study - Active	Report of Stability Activities	Stability Data	* * *	N/A
1.6.4	Comparability Study	Comparability Protocol and Report	Completion of DS and DP Campaigns	* * *	N/A
1.7.1	Manufacture of GMP BCX4430 (DS Batch * * *)	BCX4430 DS, CofA	Acceptable DS process	* * *	N/A
1.7.2	Prepare a Campaign Summary Report	Campaign Summary Report (DS Batch * * *)	Completion of DS Campaign	* * *	N/A
1.7.3	* * * DS Analytical Method Development and Validation	Validation Report	Suitable assay method	* * *	N/A
1.7.4	* * * DS – Manufacture * * * of Non-GMP BCX4430	BCX4430 DS	Acceptable quality and yield	* * *	N/A
1.7.5	* * * DS – Manufacture * * * of GMP BCX4430	BCX4430 DS, CofA	Acceptable quality and yield	* * *	N/A
1.7.6	Manufacture GMP DP (* * *)	BCX4430 DP CofA	Acceptable Quality and yield	* * *	Accepted GMP DS
1.7.7	Prepare a Campaign Summary Report	Campaign Summary Report (CTM Batch * * *)	Completion of DS Campaign	* * *	N/A
1.7.8	Drug Product Stability study	Report on Stability Activities	Stability Data	* * *	Manufacture of 1.7.1 & 1.7.2 DS and 1.7.4 DP
1.7.9	Comparability Study	Comparability Protocol and Report	Comparable DS and DP profiles	* * *	N/A
1.8	Drug Product * * * formulation Development	* * * Process that can be scaled to a manufacturing facility	Suitable * * */ Finalized process	* * *	N/A
1.9.1	Complete GLP * * * Tox Study – * * *	Study Report	Establish NOAEL	* * *	Drug Substance confirming to release criteria
1.9.2	Conduct * * * Assessment in * * *	Study Report	No significant findings	* * *	N/A

WBS	Milestone	Deliverable	Success Criteria	Timing	Go/No-go for initiation
1.9.3	Conduct * * * Development Toxicology * * *	Study Report	No significant findings	* * *	N/A
CLIN 0002 – COMMERCIAL SCALE UP AND NDA REGISTRATION BATCHES Go/No Go Criteria to Initiate: WBS 1.2.2 BARDA approval of process developed					
2.2	Drug Substance Process Scale-Up	Process Development Report (WBS 2.2.4)	Selection of the optimized manufacturing process	* * *	* * *
2.3.1	Manufacture BCX4430 (DS Registration Batch * * *)	BCX4430 Registration DS, CofA	Acceptable quality and yield	* * *	* * *
2.3.2	Manufacture BCX4430 (DS Registration Batch * * *)	BCX4430 Registration DS, CofA	Acceptable quality and yield	* * *	* * *
2.3.3	Manufacture BCX4430 (DS Registration Batch * * *)	BCX4430 Registration DS, CofA	Acceptable quality and yield	* * *	* * *
2.3.4	Prepare a Campaign Summary Report	Campaign Summary Report (DS Batches * * *)	Completion of DS Campaign	* * *	N/A
2.4.1	Manufacture BCX4430 DP (DP Registration Batch * * *)	BCX4430 DP CofA	Acceptable quality and yield	* * *	Accepted GMP DS
2.4.2	Manufacture BCX4430 DP (DP Registration Batch * * *)	BCX4430 DP CofA	Acceptable quality and yield	* * *	Accepted GMP DS
2.4.3	Manufacture BCX4430 DP (DP Registration Batch * * *)	BCX4430 DP CofA	Acceptable quality and yield	* * *	Accepted GMP DS
2.4.4	Prepare a Campaign Summary Report	Campaign Summary Report (CTM Registration Batches * * *)	Completion of DS Campaign	* * *	N/A
2.5	Drug Substance and Drug Product Stability Study	Report on stability activities	Stability Data	* * *	N/A
2.6	Comparability Study	Comparability Protocol and Report	Comparable DS and DP profiles	* * *	Accepted GMP DS
CLIN 003 – NONCLINICAL NDA-ENABLING TOXICOLOGY **Go/No-go Criteria to Initiate: Availability of * * * of GMP batch of DS manufactured under NIAID contract HHSO100201500007C**					

WBS	Milestone	Deliverable	Success Criteria	Timing	Go/No-go for initiation
3.1.1	Conduct * * * Dose Range Finding Studies in * * *	Study Report	No significant findings	* * *	N/A
3.1.2	Conduct Definitive * * * Development Studies in * * *	Study Report	No significant findings	* * *	N/A
3.2.1	Conduct Radiolabeled ADME study – * * *	Study Report	Characterize drug disposition	* * *	Acceptable Radiolabel Material
3.2.2	Conduct Radiolabeled ADME study – * * *	Study Report	Characterize drug disposition	* * *	Acceptable Radiolabel Material
CLIN 0004 – IN VITRO EXPERIMENTS – IV Go/No Go to Initiate: Selection of an appropriate preliminary IV formulation					
4.1	Conduct * * * Test - IV	Study Report	No effect on * * * ex-vivo	* * *	IV formulation WBS 1.5.8
4.2	Conduct * * * Test IV	Study Report	No effect on mitotic apparatus	* * *	N/A
4.3	In Vitro IV experiments	Study report on all In Vitro assays with recommendation to proceed to CLIN005	No toxicology in vitro	* * *	
CLIN 0005 NONCLINICAL NDA-ENABLING TOXICOLOGY Go/No-Go to Initiate: WBS 4.3 Completion of * * * IV toxicology studies					
5.1.1	Complete GLP * * * Tox Study - * * *	Study Report	Establish NOAEL	* * *	Drug Substance Confirming to release criteria
5.1.2	Complete GLP * * * Tox Study - * * *	Study Report	Establish NOAEL	* * *	Drug Substance Confirming to release criteria
5.2.1	Conduct * * * Assessment in * * *	Study Report	No significant findings	* * *	N/A

WBS	Milestone	Deliverable	Success Criteria	Timing	Go/No-go for initiation
5.2.2	Conduct * * * Dose Range Finding Studies in * * *	Study Report	No significant findings	* * *	N/A
5.2.3	Conduct Definitive * * * Development Studies in * * *	Study Report	No significant findings	* * *	N/A
5.2.4	Conduct * * * Toxicology	Study Report	No significant findings	* * *	N/A

**Timing will depend on approval of additional CLIN1 funds/IPR approval to utilize CLIN2 funds for process optimization of the final route.

OMB Approval 2700-0042

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
Twenty-two (22)	September 10, 2018	5119041	

6. ISSUED BY — CODE

National Institutes of Health
National Institute of Allergy and Infectious Diseases
DEA, Office of Acquisitions
Room 3214, MSC 7612
6700-B Rockledge Drive
Bethesda, MD 20892-7612

7. ADMINISTERED BY *(If other than Item 6)* — CODE N/A

MID RCB-A

8. NAME AND ADDRESS OF CONTRACTOR *(No. Street, county, State and ZIP: Code)*

BIOCRYST PHARMACEUTICALS, INC.
4505 EMPEROR BLVD SUITE 200
DURHAM, NC 27703

CODE | FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

X 10A. MODIFICATION OF CONTRACT/ORDER NO. HHSN272201300017C

10B. DATED *(SEE ITEM 13)* September 16, 2013

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning one (1) copy of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATA SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and data specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

SOC 25.55 18-840038 $3,557,707

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER Specify type of modification and authority) FAR 52.217-7, Mutual Agreement of the Parties

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return __ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

PURPOSE: To increase Option 10 funding to complete Phase I clinical MAD studies for safety evaluation while optimizing dosing regimens.

The completion date of the contract is changed to September 30, 2022.
Total cost obligated by this action is changed from $39,476,895 to $43,034,602
Contract cost ceiling is changed to $43,034,602

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Jon P. Stonehouse CEO	John Outen, Contracting Officer Office of Acquisitions, DEA, NIAID, NIH, DHHS

15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)	9/10/2018	BY John E. Outen -S Digitally signed by John E. Outen -S Date: 2018.09.12 09:45:25 -04'00' *(Signature of Contracting Officer)*	

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

30-105
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STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

Beginning with the effective date of this modification, ARTICLE B.2. ESTIMATED COST –OPTION AND ARTICLE G.3 INVOICE SUBMISSION /CONTRACT FINANCING REQUEST IS REVISED

ARTICLE B.2. ESTIMATED COST – OPTION 10 is revised to incorporate changes (a, and b) with changes in the Option 10 table below:

a. The estimated cost of this contract is increased to $43,034,602 with the addition of Mad and Dosing studies with additional patients as described in Option 10 for $3,557,707.

b. Payments from the additional funds may be made from the following PRISM/NBS Line Item Numbers as follows:

PRISM/NBS Line Item No.	Description	PRISM/NBS Line Item Period of Performance	Funded Amount
20	Mad Studies for Yellow Fever and Marburg program changes under Option 10	08/10/2016-09/30/2022	$3,557,707

END OF MODIFICATION 22 OF HHSN272201300017C

Exhibit 10.5

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

Execution Version

AMENDED AND RESTATED CREDIT AND SECURITY AGREEMENT

This **AMENDED AND RESTATED CREDIT AND SECURITY AGREEMENT** (this "**Agreement**"), dated as of July 20, 2018 (the "**Closing Date**") by and among **MIDCAP FINANCIAL TRUST**, a Delaware statutory trust ("**MidCap**"), as administrative agent, the Lenders listed on the Credit Facility Schedule attached hereto and otherwise party hereto from time to time (each a "**Lender**", and collectively the "**Lenders**"), **BIOCRYST PHARMACEUTICALS, INC.,** a Delaware corporation ("**BioCryst**"), **MDCP, LLC**, a Delaware limited liability company ("**Peramivir SPE**"), and the other entities shown as signatories hereto as a Borrower (collectively in the singular, "**Borrower**"), provides the terms on which Lenders agree to lend to Borrower and Borrower shall repay the Lenders.

RECITALS

WHEREAS, Borrower, Agent and certain Lenders are parties to that certain Credit and Security Agreement (as amended, supplemented or otherwise modified prior to the date hereof, the "**Original Credit Agreement**"), dated as of September 23, 2016 (the "**Original Closing Date**"), pursuant to which certain Lenders made a term loan to Borrowers in the original principal amount of Twenty-Three Million Dollars ($23,000,000) ("**Credit Facility #1**"), of which Eighteen Million Nine Hundred Seventy-Five Thousand Dollars ($18,975,000) was outstanding immediately prior to the Closing Date;

WHEREAS, in connection with the continued working capital and other needs of Borrower, Borrower has requested, among other things, that Agent and Lenders (a) provide for an additional term loan in an original principal amount of Thirty Million Dollars ($30,000,000) ("**Credit Facility #2**"), the proceeds of which is to be used to repay Credit Facility #1 in full on the Closing Date and (b) amend certain other provisions of the Original Credit Agreement; and

WHEREAS, Agent and Lenders have agreed to the requests of Borrower and the other Credit Parties on the terms and conditions set forth herein and in the other Financing Documents.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the agreements, provisions and covenants herein contained, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree to amend and restate the Original Credit Agreement in its entirety as follows:

1. **ACCOUNTING AND OTHER TERMS**

Accounting terms not defined in this Agreement shall be construed in accordance with GAAP. Calculations and determinations must be made in accordance with GAAP. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Section 15. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein. All headings numbered without a decimal point are herein referred to as "Articles," and all paragraphs numbered with a decimal point (and all subparagraphs or subsections thereof) are herein referred to as "Sections."

2. **CREDIT FACILITIES AND TERMS**

2.1 Promise to Pay. Borrower hereby unconditionally promises to pay to each Lender, in accordance with each Lender's respective Pro Rata Share of each Credit Facility, the outstanding principal amount of all Credit Extensions made by the Lenders under such Credit Facility and accrued and unpaid interest thereon and any other amounts due hereunder as and when due in accordance with this Agreement.

2.2 Credit Facilities. Subject to the terms and conditions hereof, each Lender, severally, but not jointly, agrees to make available to Borrower Credit Extensions in respect of each Credit Facility set forth opposite such Lender's name on the Credit Facility Schedule, in each case not to exceed such Lender's commitment as identified on the Credit Facility Schedule (such commitment of each Lender, as it may be amended to reflect assignments made in accordance with this Agreement or terminated or reduced in accordance with this Agreement, its "**Applicable Commitment**", and the aggregate of all such commitments of all Lenders, the "**Applicable Commitments**"). Without limiting the foregoing, the Applicable Commitment of each Lender in respect of Credit Facility #1 shall be deemed to be $0 immediately following the Closing Date and the payment in full of the Obligations due and owing to such Lender in respect of Credit Facility #1.

2.3 Credit Facilities.

(a) Nature of Credit Facility; Credit Extension Requests. Credit Extensions in respect of a Credit Facility may be requested by Borrower during the Draw Period for such Credit Facility. For any Credit Extension requested under a Credit Facility (other than Credit Extensions on the Original Closing Date and the Closing Date), Agent must receive the completed Credit Extension Form by 12:00 noon (New York time) *** prior to the date the Credit Extension is to be funded. To the extent any Credit Facility proceeds are repaid for any reason, whether voluntarily or involuntarily (including repayments from insurance or condemnation proceeds), Agent and the Lenders shall have no obligation to re-advance such sums to Borrower.

(b) Principal Payments. Principal payable on account of a Credit Facility shall be payable by Borrower to Agent, for the account of the applicable Lenders in accordance with their respective Pro Rata Shares, immediately upon the earliest of (i) the date(s) set forth in the Amortization Schedule for such Credit Facility (or, if no such Amortization Schedule is attached, then upon Agent's demand for payment), or (ii) the Maturity Date. Except as this Agreement may specifically provide otherwise, all prepayments of Credit Extensions under the Credit Facilities shall be applied by Agent to the applicable Credit Facility in inverse order of maturity. Subject to the foregoing sentence, the monthly payments required under the Amortization Schedule shall continue in the same amount (for so long as the applicable Credit Facility shall remain outstanding) notwithstanding any partial prepayment, whether mandatory or optional, of the applicable Credit Facility.

(c) Mandatory Prepayment. If a Credit Facility is accelerated following the occurrence of an Event of Default, Borrower shall immediately pay to Agent, for payment to each Lender in accordance with its respective Pro Rata Share, an amount equal to the sum of: (i) all outstanding principal of the Credit Facility and all other Obligations, *plus* accrued and unpaid interest thereon, (ii) any fees payable under the Fee Letters by reason of such prepayment, (iii) the Applicable Prepayment Fee as specified in the Credit Facility Schedule for the Credit Facility being prepaid, and (iv) all other sums that shall have become due and payable, including Protective Advances. Additionally, at the election of Agent, Borrower shall prepay the Credit Facilities (to be allocated pro rata among the outstanding Credit Extensions under all Credit Facilities) in the following amounts: (A) on the date on which any Credit Party (or Agent as loss payee or assignee) receives any casualty proceeds in excess of *** in respect of assets upon which Agent maintained a Lien, an amount equal to *** of such proceeds (net of out-of-pocket expenses and, in the case of personal property, repayment of any permitted purchase money debt encumbering the personal property that suffered such casualty), or such lesser portion of such proceeds as Agent shall elect to apply to the Obligations; and (B) upon receipt by any Credit Party of the proceeds of any asset disposition of personal property not made in the Ordinary Course of Business (other than transfers permitted by Section 7.1) an amount equal to *** of the net cash proceeds of such asset disposition (net of out-of-pocket expenses and repayment of any permitted purchase money debt encumbering such asset), or such lesser portion as Agent shall elect to apply to the Obligations. Notwithstanding the foregoing, (a) so long as no Default or Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any casualty policy up to *** (other than with respect to losses of property comprised of Inventory and Clinical Trial Materials, as to which no dollar limit shall apply) in the aggregate with respect to any property loss in any one (1) year, toward the replacement or repair of destroyed or damaged property; *provided* that any such replaced or repaired property (x) shall be of greater, equal, or like value as the replaced or repaired Collateral and (y) shall be deemed Collateral in which Agent and the Lenders have been granted a first priority security interest, and (b) after the occurrence and during the continuance of a Default or Event of Default, all proceeds payable under such casualty policy shall, at the option of Agent, be payable to Agent, for the ratable benefit of the Lenders, on account of the Obligations.

(d) Permitted Prepayment. Except as provided below, Borrower shall have no right to prepay the Credit Extensions made in respect of a Credit Facility. After the Closed Period, if any, for the applicable Credit Facility as specified in the Credit Facility Schedule therefor, Borrower shall have the option to prepay such Credit Facility advanced by the Lenders under this Agreement in whole or in part, *provided* that (i) each such prepayment (other than a prepayment in whole) shall be in an amount equal to $1,000,000 or a higher integral multiple of $1,000,000, (ii) Borrower provides written notice to Agent and each Lender of its election to make such prepayment and the amount of such prepayment on the date that is *** prior to such prepayment and (ii) Borrower pays to Agent, for payment to each applicable Lender in accordance with its respective Pro Rata Share, on the date of such prepayment, an amount equal to the sum of (A) the principal amount being so prepaid, plus accrued interest thereon, (B) any fees payable under the Fee Letters by reason of such prepayment, (C) the Applicable Prepayment Fee as specified in the Credit Facility Schedule for the Credit Facility being prepaid, and (D) all Protective Advances. To the extent requested by Borrower, Agent shall provide, within *** of Borrower's request therefor, payoff documentation, which shall be in form and substance satisfactory to Agent and Lenders, with respect to any proposed prepayment in whole of the Credit Extensions. Any notice of prepayments given by Borrowers shall be irrevocable unless all Lenders otherwise agree in writing.

2.4 Reserved.

2.5 Reserved.

2.6 Interest and Payments; Administration.

(a) Interest; Computation of Interest. Each Credit Extension shall bear interest on the outstanding principal amount thereof from the date when made until paid in full at a rate per annum equal to the Applicable Interest Rate. Each Lender may, upon the failure of Borrower to pay any fees or interest as required herein, capitalize such interest and fees and begin to accrue interest thereon until paid in full, which such interest shall be at a rate per annum equal to the Applicable Interest Rate unless and until the Default Rate shall otherwise apply. All other Obligations shall bear interest on the outstanding amount thereof from the date they first become payable by Borrower under the Financing Documents until paid in full at a rate per annum equal to the Applicable Interest Rate unless and until the Default Rate shall otherwise apply. Interest on the Credit Extensions and all fees payable under the Financing Documents shall be computed on the basis of a three hundred sixty (360)-day year and the actual number of days elapsed in the period during which such interest accrues. In computing interest on any Credit Extension or other advance, the date of the making of such Credit Extension or advance shall be included and the date of payment shall be excluded; *provided, however*, that, if any Credit Extension or advance is repaid on the same day on which it is made, such day shall be included in computing interest on such Credit Extension or advance. As of each Applicable Interest Rate Determination Date, Agent shall determine (which determination shall, absent manifest error in calculation, be final, conclusive and binding upon all parties) the interest rate that shall apply to the Credit Extensions. Borrower hereby agrees that all accrued and unpaid interest due and owing to the Lenders (as defined in the Original Credit Agreement) as of the Closing Date shall be paid in cash by Borrower to Agent, for the benefit of such Lenders, on the first (1st) day of the first calendar month following the Closing Date.

(b) Default Rate. Upon the election of Agent following the occurrence and during the continuance of an Event of Default, Obligations shall bear interest at a rate per annum which is *** above the rate that is otherwise applicable thereto (the "**Default Rate**"). Payment or acceptance of the increased interest rate provided in this subsection is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Agent or the Lenders.

(c) Payments Generally. Except as otherwise provided in this Agreement, including pursuant to Section 2.6(c), or as otherwise directed by Agent, all payments in respect of the Obligations shall be made to Agent for the account of the applicable Lenders in accordance with their Pro Rata Share. Payments of principal and interest in respect of each Credit Facility shall be made to each applicable Lender identified on the applicable Credit Facility Schedule. All Obligations are payable upon demand of Agent in the absence of any other due date specified herein. All fees payable under the Financing Documents shall be deemed non-refundable as of the date paid. Any payment required to be made to Agent or a Lender (and any servicer or trustee on behalf of a securitization vehicle designated by either) under this Agreement may be made by debit or automated clearing house payment initiated by Agent or such Lender (or any servicer designated or trustee on behalf of a securitization vehicle on behalf of either) from any of Borrower's deposit accounts, including the Designated Funding Account, and Borrower hereby authorizes Agent and each Lender (or any servicer or trustee on behalf of a securitization vehicle designated on behalf of either) to debit any such accounts for any amounts Borrower owes hereunder when due. Without limiting the foregoing, Borrower shall tender to Agent and the Lenders any authorization forms as Agent or any Lender may require to implement such debit or automated clearing house payment. These debits or automated clearing house payments shall not constitute a set-off. Payments of principal and/or interest received after 12:00 noon New York time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment is due the next Business Day and additional fees or interest, as applicable, shall continue to accrue until paid. All payments to be made by Borrower under any Financing Document shall be made without set-off, recoupment or counterclaim, in lawful money of the United States and in immediately available funds. The balance of the Obligations, as recorded in Agent's books and records at any time, shall be conclusive and binding evidence of the amounts due and owing to Agent and the Lenders by each Borrower absent manifest error; *provided, however*, that any failure to so record or any error in so recording shall not limit or otherwise affect Borrower's duty to pay all amounts owing hereunder or under any Financing Document. Agent shall endeavor to provide Borrower with a monthly statement regarding the Credit Extensions (but neither Agent nor any Lender shall have any liability if Agent shall fail to provide any such statement). Unless Borrower notifies Agent of any objection to any such statement (specifically describing the basis for such objection) within *** after the date of receipt thereof, it shall be deemed final, binding and conclusive upon Borrower in all respects as to all matters reflected therein.

(d) Interest Payments; Maturity Date. Commencing on the first (1st) Payment Date following the funding of a Credit Extension, and continuing on the Payment Date of each successive month thereafter through and including the Maturity Date, Borrower shall make monthly payments of interest, in arrears, calculated as set forth in this Section 2.6. All unpaid principal and accrued interest is due and payable in full on the Maturity Date or any earlier date specified herein. If the Obligations are not paid in full on or before the Maturity Date, all interest thereafter accruing shall be payable immediately upon accrual.

(e) Fees. Borrower shall pay, as and when due and payable under the terms of the Fee Letters, to Agent and each Lender, as applicable, for their own accounts and not for the benefit of any other Lenders, the fees set forth in the Fee Letters.

(f) Protective Advances. Borrower shall pay to Agent for the account of the Lenders all Protective Advances (including reasonable attorneys' fees and expenses for documentation and negotiation of this Agreement and the other Financing Documents) when due under any Financing Document (and in the absence of any other due date specified herein, such Protective Advances shall be due upon demand).

(g) Maximum Lawful Rate. In no event shall the interest charged hereunder with respect to the Obligations exceed the maximum amount permitted under the Laws of the State of Maryland. Notwithstanding anything to the contrary in any Financing Document, if at any time the rate of interest payable hereunder (the "**Stated Rate**") would exceed the highest rate of interest permitted under any applicable Law to be charged (the "**Maximum Lawful Rate**"), then for so long as the Maximum Lawful Rate would be so exceeded, the rate of interest payable shall be equal to the Maximum Lawful Rate; *provided, however*, that, if at any time thereafter the Stated Rate is less than the Maximum Lawful Rate, Borrower shall, to the extent permitted by Law, continue to pay interest at the Maximum Lawful Rate until such time as the total interest received is equal to the total interest which would have been received had the Stated Rate been (but for the operation of this provision) the interest rate payable. Thereafter, the interest rate payable shall be the Stated Rate unless and until the Stated Rate again would exceed the Maximum Lawful Rate, in which event this provision shall again apply. In no event shall the total interest received by any Lender exceed the amount which it could lawfully have received, had the interest been calculated for the full term hereof at the Maximum Lawful Rate. If, notwithstanding the prior sentence, any Lender has received interest hereunder in excess of the Maximum Lawful Rate, such excess amount shall be applied to the reduction of the principal balance of such Lender's Credit Extensions or to other amounts (other than interest) payable hereunder, and, if no such Credit Extensions or other amounts are then outstanding, such excess or part thereof remaining shall be paid to Borrower. In computing interest payable with reference to the Maximum Lawful Rate applicable to any Lender, such interest shall be calculated at a daily rate equal to the Maximum Lawful Rate *divided by* the number of days in the year in which such calculation is made.

(h) Taxes; Additional Costs.

(i) Any and all payments by or on account of any obligation of Borrower hereunder shall be made without deduction or withholding for any Taxes, except as required by applicable law. For purposes of this Section 2.6(h), the term "applicable law" shall include FATCA. If any applicable law (as determined in the good faith discretion of an applicable Withholding Agent) requires the deduction or withholding of any Tax from any such payment by a Withholding Agent, then Withholding Agent shall make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable law and, if such Tax is an Indemnified Tax, then the sum payable by Borrower shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section 2.6(h)) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

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

(iii) Borrower shall indemnify each Recipient, within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 2.6(h)) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to Borrower by a Lender (with a copy to Agent), or by Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(iv) Each Lender shall severally indemnify Agent, within ten (10) days after demand therefor, for (A) any Indemnified Taxes attributable to such Lender (but only to the extent that Borrower has not already indemnified Agent for such Indemnified Taxes and without limiting the obligation of Borrower to do so), (B) any Taxes attributable to such Lender's failure to comply with the provisions of Section 13.1(c) relating to the maintenance of a Participant Register and (C) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by Agent in connection with this Agreement or any Obligation, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by Agent shall be conclusive absent manifest error. Each Lender hereby authorizes Agent to set off and apply any and all amounts at any time owing to such Lender pursuant to this Agreement or otherwise payable by Agent to the Lender from any other source against any amount due to Agent under this paragraph (iv).

(v) As soon as practicable after any payment of Taxes by Borrower to a Governmental Authority pursuant to this Section 2.6(h), Borrower shall deliver to Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to Agent.

(vi) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made in connection with this Agreement or any Obligation shall deliver to Borrower and Agent, at the time or times reasonably requested by Borrower or Agent, such properly completed and executed documentation reasonably requested by Borrower or Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by Borrower or Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by Borrower or Agent as will enable Borrower or Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two (2) sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 2.6(h)(vii)(A), (vii)(B) and (vii)(D) below) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(vii) Without limiting the generality of the foregoing,

(A) any Lender that is a U.S. Person shall deliver to Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or Agent), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (I) with respect to payments of interest under this Agreement or any Financing Document, executed copies of IRS Form W-8BEN-E or W-8BEN, as applicable, establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (II) with respect to any other applicable payments under this Agreement or any other Financing Document, IRS Form W-8BEN-E or W-8BEN, as applicable, establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(2) executed copies of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the IRC, (I) executed copies of IRS Form W-8BEN-E or W-8BEN, as applicable and (II) a certification to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the IRC, a "10 percent shareholder" of Borrower within the meaning of Section 881(c)(3)(B) of the IRC, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the IRC, together with such Other Tax Certification as Agent may reasonably request from time to time; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed copies of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN-E or W-8BEN, as applicable, IRS Form W-9, and/or such Other Tax Certification from each beneficial owner as Agent may reasonably request, as applicable; *provided* that, if the Foreign Lender is a partnership and one (1) or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide such Other Tax Certification as may be reasonably required by Agent on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or Agent), executed copies of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such Other Tax Certification as may be prescribed by applicable law to permit Borrower or Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any this Agreement 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 Borrower and Agent at the time or times prescribed by law and at such time or times reasonably requested by Borrower or Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the IRC) and such Other Tax Certification reasonably requested by Borrower or Agent as may be necessary for Borrower and Agent to comply with their obligations under FATCA and to determine that 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 pursuant to Section 2.6(h)(vi) or (vii) expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify Borrower and Agent in writing of its legal inability to do so.

(viii) If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 2.6(h) (including by the payment of additional amounts pursuant to this Section 2.6(h)), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (h) (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (h), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (h) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(ix) If any Lender shall determine in its commercially reasonable judgment that the adoption or taking effect of, or any change in, any applicable Law regarding capital adequacy, in each instance, after the Original Closing Date, or any change after the Original Closing Date in the interpretation, administration or application thereof by any Governmental Authority, central bank or comparable agency charged with the interpretation, administration or application thereof, or the compliance by any Lender or any Person controlling such Lender with any request, guideline or directive regarding capital adequacy (whether or not having the force of law) of any such Governmental Authority, central bank or comparable agency adopted or otherwise taking effect after the Original Closing Date, has or would have the effect of reducing the rate of return on such Lender's or such controlling Person's capital as a consequence of such Lender's obligations hereunder to a level below that which such Lender or such controlling Person could have achieved but for such adoption, taking effect, change, interpretation, administration, application or compliance (taking into consideration such Lender's or such controlling Person's policies with respect to capital adequacy) then from time to time, upon written demand by such Lender (which demand shall be accompanied by a statement setting forth the basis for such demand and a calculation of the amount thereof in reasonable detail, a copy of which shall be furnished to Agent), Borrower shall promptly pay to such Lender such additional amount as will compensate such Lender or such controlling Person for such reduction, so long as such amounts have accrued on or after the day that is two hundred seventy (270) days prior to the date on which such Lender first made demand therefor; *provided*, *however*, that, notwithstanding anything in this Agreement to the contrary, (A) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (B) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a "change in applicable Law", regardless of the date enacted, adopted or issued.

(x) If any Lender requires compensation under this subsection (h), or requires Borrower to pay any additional amount to any Lender or any Governmental Authority for the account of any Lender pursuant to this subsection (h), then, upon the written request of Borrower, such Lender shall use reasonable efforts to designate a different lending office for funding or booking its Credit Extensions hereunder or to assign its rights and obligations hereunder (subject to the terms of this Agreement) to another of its offices, branches or affiliates, if, in the judgment of such Lender, such designation or assignment (A) would eliminate or materially reduce amounts payable pursuant to any such subsection, as the case may be, in the future, and (B) would not subject such Lender to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender (as determined in its sole discretion). Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment.

(A) If any Lender requires compensation under this subsection (h), or requires Borrower to pay any additional amount to any Lender or any Governmental Authority for the account of any Lender pursuant to this subsection (h), and such Lender has declined or is unable to designate a different lending office in accordance with Section 2.6(h)(x)(A), then the Borrower may, at its sole expense and effort, upon notice to such Lender and Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in, and consents required by, Section 13.1), all of its interests, rights (other than its existing rights to payments pursuant to this subsection (h)) and obligations under this Agreement and the related Financing Documents to an Eligible Assignee that shall assume such obligations; provided that: (x) such Lender shall have received payment of an amount equal to the outstanding principal of its Credit Extensions, accrued interest thereon, accrued fees and all other amounts payable to it hereunder and under the other Financing Documents from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts), and (y) such assignment does not conflict with applicable law and (z) in the case of any such assignment resulting from a claim for compensation or payments required to be made pursuant to this subsection (h), such assignment will result in a reduction in such compensation or payments thereafter. A Lender shall not be required to make any such assignment or delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply.

(xi) Each party's obligations under this Section 2.6(h) shall survive the resignation or replacement of Agent or any assignment of rights by, or the replacement of, a Lender, and the repayment, satisfaction or discharge of all Obligations hereunder.

(i) Administrative Fees and Charges.

(i) Borrower shall pay to Agent, for its own account and not for the benefit of any other Lenders, all reasonable fees and expenses in connection with audits and inspections of the books and records of the Credit Parties, audits, valuations or appraisals of the Collateral, audits of Borrower's compliance with applicable Laws and such other matters as Agent shall deem appropriate, which shall be due and payable on the first (1^{st}) Business Day of the month following the date of issuance by Agent of a written request for payment thereof to Borrower; *provided* that, as long as no Default has occurred within the preceding twelve (12) months, Agent shall be entitled to such reimbursement for no more than one (1) audit and inspection per calendar quarter.

(ii) If payments of principal or interest due on the Obligations, or any other amounts due hereunder or under the other Financing Documents, are not timely made and remain overdue for a period of ***, Borrower, without notice or demand by Agent, promptly shall pay to Agent, for its own account and not for the benefit of any other Lenders, as additional compensation to Agent in administering the Obligations, an amount equal to *** of each delinquent payment.

2.7 Secured Promissory Notes. At the election of any Lender made as to each Credit Facility for which it has made Credit Extensions, each Credit Facility shall be evidenced by one (1) or more secured promissory notes in form and substance reasonably satisfactory to Agent and the Lenders (each a "**Secured Promissory Note**"). Upon receipt of an affidavit of an officer of a Lender as to the loss, theft, destruction, or mutilation of its Secured Promissory Note, Borrower shall issue, in lieu thereof, a replacement Secured Promissory Note in the same principal amount thereof and of like tenor.

3. CONDITIONS OF CREDIT EXTENSIONS

3.1 Conditions Precedent to Initial Credit Extension. Each Lender's obligation to make the initial advance in respect of a Credit Facility is subject to the condition precedent that Agent shall consent to or shall have received, in form and substance reasonably satisfactory to Agent, such documents, and completion of such other matters, as Agent may reasonably deem necessary or appropriate, including, without limitation, all items listed on the Closing Deliveries Schedule attached hereto.

3.2 Conditions Precedent to all Credit Extensions. The obligation of each Lender to make each Credit Extension, including the initial Credit Extension, is subject to the following conditions precedent:

(a) satisfaction of all Applicable Funding Conditions for the applicable Credit Extension as set forth in the Credit Facility Schedule, if any, in each case each in form and substance reasonably satisfactory to Agent and each Lender;

(b) timely receipt by Agent and each Lender of an executed Credit Extension Form in the form attached hereto;

(c) (i) for Credit Extensions made on the Original Closing Date and the Closing Date, the representations and warranties in Article 5 and elsewhere in the Financing Documents shall be true, correct and complete in all respects on the Closing Date; *provided*, *however*, that those representations and warranties expressly referring to a specific date shall be true, correct and complete in all respects as of such date; and

(ii) for Credit Extensions made after the Original Closing Date (other than any Credit Extension on the Closing Date), if any, the representations and warranties in Article 5 and elsewhere in the Financing Documents shall be true, correct and complete in all material respects on the date of the Credit Extension Form and on the Funding Date of each Credit Extension; *provided*, *however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and *provided*, *further*, that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date. Each Credit Extension is Borrower's representation and warranty on that date that the representations and warranties in Article 5 and elsewhere in the Financing Documents remain true, accurate and complete in all material respects; *provided*, *however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and *provided*, *further*, that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date;

(d) no Default or Event of Default shall have occurred and be continuing or result from the Credit Extension;

(e) Agent shall be satisfied with the results of any searches conducted under Section 3.5;

(f) receipt by Agent of such evidence as Agent shall request to confirm the formation of the Peramivir SPE and inclusion in its organizational documents of the covenants set forth on the SPE Covenant Schedule attached hereto;

(g) receipt by Agent of such evidence as Agent shall request to confirm (i) the contribution by BioCryst to the Peramivir SPE of the Seqirus UK License Agreement (and all of BioCryst's rights and obligations thereunder), and (ii) the Peramivir IP has been licensed by BioCryst to the Peramivir SPE in accordance with the terms of the Seqirus License Agreement pursuant to the Intercompany License Agreement;

(h) receipt by Agent of such evidence as Agent shall request to confirm that the deliveries made in Section 3.1 remain current, accurate and in full force and effect, or if not, updates thereto, each in form and substance reasonably satisfactory to Agent; and

(i) as determined in Agent's sole discretion, there has not been any Material Adverse Change or any material adverse deviation by Borrower from the most recent business plan of Borrower presented to and accepted by Agent.

3.3 Method of Borrowing. Each Credit Extension in respect of each Credit Facility shall be in an amount at least equal to the applicable Minimum Credit Extension Amount for such Credit Facility as set forth in the Credit Facility Schedule or such lesser amount as shall remain undisbursed under the Applicable Commitments for such Credit Facility. The date of funding for any requested Credit Extension shall be a Business Day. To obtain a Credit Extension, Borrower shall deliver to Agent a completed Credit Extension Form executed by a Responsible Officer. Agent may rely on any notice given by a person whom Agent reasonably believes is a Responsible Officer or designee thereof. Agent and the Lenders shall have no duty to verify the authenticity of any such notice.

3.4 Funding of Credit Facilities. In Agent's discretion, Credit Extensions may be funded by Agent on behalf of the Lenders or by the Lenders directly. If Agent elects to fund any Credit Extension on behalf of the Lenders, upon the terms and subject to the conditions set forth in this Agreement, each Lender, severally and not jointly, shall make available to Agent its Pro Rata Share of the requested Credit Extension, in lawful money of the United States of America in immediately available funds, prior to 11:00 a.m. (New York time) on the specified date for the Credit Extension. Agent (or if Agent elects to have each Lender fund its Credit Extensions to Borrower directly, each Lender) shall, unless it shall have determined that one (1) of the conditions set forth in Section 3.1 or 3.2, as applicable, has not been satisfied, by 2:00 p.m. (New York time) on the specified date for the Credit Extension, credit the amounts received by it in like funds to Borrower by wire transfer to the Designated Funding Account (or to the account of Borrower in respect of the Obligations, if the Credit Extension is being made to pay an Obligation of Borrower). A Credit Extension made prior to the satisfaction of any conditions set forth in Section 3.1 or 3.2 shall not constitute a waiver by Agent or the Lenders of Borrower's obligation to satisfy such conditions, and any such Credit Extension made in the absence of such satisfaction shall be made in each Lender's discretion.

3.5 Searches. Before the Original Closing Date, and thereafter (as and when determined by Agent in its discretion), Agent shall have the right to perform, all at Borrower's expense, the searches described in paragraphs (a), (b), and (c) below against Borrower and any other Credit Party, the results of which are to be consistent with Borrower's representations and warranties under this Agreement and the reasonably satisfactory results of which shall be a condition precedent to all Credit Extensions requested by Borrower: (a) title investigations, UCC searches and the equivalent thereof in any foreign jurisdiction, and fixture filings searches; (b) judgment, pending litigation, federal tax lien, personal property tax lien, and corporate and partnership tax lien searches, in each jurisdiction searched under paragraph (a) above; and (c) searches of applicable corporate, limited liability company, partnership and related records to confirm the continued existence, organization and good standing of the applicable Person and the exact legal name under which such Person is organized.

4. CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Borrower hereby grants Agent, for the ratable benefit of the Lenders, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Agent, for the ratable benefit of the Lenders, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof. Borrower represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral, subject only to Permitted Liens that may have priority by operation of applicable Law or by the terms of a written intercreditor or subordination agreement entered into by Agent.

4.2 Representations and Covenants.

(a) As of the Original Closing Date and the Closing Date, Borrower has no ownership interest in any Chattel Paper, letter of credit rights, commercial tort claims, Instruments, documents or investment property (other than as disclosed on the **Disclosure Schedule** attached hereto).

(b) Except for tangible Chattel Paper, Instruments, and documents with an aggregate value of less than ***, Borrower shall promptly (and in any event within *** of acquiring any of the following) deliver to Agent all tangible Chattel Paper and all Instruments and documents owned at any time by Borrower and constituting part of the Collateral duly endorsed and accompanied by duly executed instruments of transfer or assignment, all in form and substance reasonably satisfactory to Agent. Borrower shall provide Agent with "control" (as in the Code) of all electronic Chattel Paper owned by Borrower and constituting part of the Collateral by having Agent identified as the assignee on the records pertaining to the single authoritative copy thereof and otherwise complying with the applicable elements of control set forth in the Code. Borrower also shall deliver to Agent all security agreements securing any such Chattel Paper and securing any such Instruments. Borrower will mark conspicuously all such Chattel Paper and all such Instruments and Documents with a legend, in form and substance reasonably satisfactory to Agent, indicating that such Chattel Paper and such Instruments and Documents are subject to the security interests and Liens in favor of Agent created pursuant to this Agreement and the Financing Documents.

(c) Except for letters of credit in an aggregate amount of less than ***, Borrower shall promptly (and in any event within *** of acquiring any of the following) deliver to Agent all letters of credit on which Borrower is the beneficiary and which give rise to letter of credit rights owned by Borrower which constitute part of the Collateral in each case duly endorsed and accompanied by duly executed instruments of transfer or assignment, all in form and substance reasonably satisfactory to Agent. Borrower shall take any and all actions as may be necessary or desirable, or that Agent may request, from time to time, to cause Agent to obtain exclusive "control" (as defined in the Code) of any such letter of credit rights in a manner acceptable to Agent.

(d) Except for commercial tort claims with an aggregate value of less than ***, Borrower shall promptly (and in any event within ***) advise Agent upon Borrower becoming aware that it has any interests in any commercial tort claim that constitutes part of the Collateral, which such notice shall include descriptions of the events and circumstances giving rise to such commercial tort claim and the dates such events and circumstances occurred, the potential defendants with respect such commercial tort claim and any court proceedings that have been instituted with respect to such commercial tort claims, and Borrower shall, with respect to any such commercial tort claim, execute and deliver to Agent such documents as Agent shall request to perfect, preserve or protect the Liens, rights and remedies of Agent with respect to any such commercial tort claim.

(e) Except for (i) Inventory in an aggregate amount of ***, (ii), Inventory constituting Drop-Ship Inventory, and (iii) Clinical Trial Material, no Inventory or other Collateral shall at any time be in the possession or control of any warehouse, consignee, bailee or any of Borrower's agents or processors without prior written notice to Agent and the receipt by Agent, if Agent has so requested, of warehouse receipts, consignment agreements or bailee lien waivers (as applicable) satisfactory to Agent prior to the commencement of such possession or control. Borrower shall, upon the request of Agent, notify any such warehouse, consignee, bailee, agent or processor of the security interests and Liens in favor of Agent created pursuant to this Agreement and the Financing Documents, instruct such Person to hold all such Collateral for Agent's account subject to Agent's instructions and shall, in Agent's discretion, obtain an Access Agreement or other acknowledgement from such Person that such Person holds the Collateral for Agent's benefit; *provided, however,* with respect to (i) any location occupied by Borrower on the Closing Date (other than those specifically set forth on the Post-Closing Obligations Schedule) and (ii) any new location first occupied by Borrower after the Closing Date with respect to which new location an Access Agreement was not required (on the basis of the exclusion set forth in clause (ii) above) to be delivered under this Section 4.2(e) at the time of the initial occupancy of the same by Borrower, Borrower shall have *** following the date on which Borrower would otherwise be required to deliver an Access Agreement under this Section 4.2(e) to deliver the applicable Access Agreement or to relocate all assets and property maintained at each such location to a location subject to an Access Agreement.

(f) Except with respect to property evidenced by certificates of title with an aggregate value of less than ***, upon request of Agent, Borrower shall promptly deliver to Agent any and all certificates of title, applications for title or similar evidence of ownership of all such tangible personal property and shall cause Agent to be named as lienholder on any such certificate of title or other evidence of ownership. Borrower shall not permit any such tangible personal property to become fixtures to real estate unless such real estate is subject to a Lien in favor of Agent.

(g) As of the Closing Date and each subsequent date on which the **Disclosure Schedule** is required to be updated pursuant to this Agreement, all Deposit Accounts, Securities Accounts, Commodity Accounts or other bank accounts or investment accounts owned by Borrower, together with the purpose of such accounts and the financial institutions at which such accounts reside, are listed on the **Disclosure Schedule**.

(h) Borrower hereby authorizes Agent to file without the signature of Borrower one (1) or more UCC financing statements relating to its Liens on all or any part of the Collateral, which financing statements may list Agent as the "secured party" and Borrower as the "debtor" and which describe and indicate the collateral covered thereby as all or any part of the Collateral under the Financing Documents (including an indication of the collateral covered by any such financing statement as "all assets" of Borrower now owned or hereafter acquired), in such jurisdictions as Agent from time to time determines are appropriate, and to file without the signature of Borrower any continuations of or corrective amendments to any such financing statements, in any such case in order for Agent to perfect, preserve or protect the Liens, rights and remedies of Agent with respect to the Collateral. Borrower also ratifies its authorization for Agent to have filed in any jurisdiction any initial financing statements or amendments thereto if filed prior to the date hereof. Any financing statement may include a notice that any disposition of the Collateral in contravention of this Agreement, by either Borrower or any other Person, shall be deemed to violate the rights of Agent and the Lenders under the Code.

(i) As of the Closing Date, Borrower does not hold, and after the Closing Date Borrower shall promptly notify Agent in writing upon creation or acquisition by Borrower of, any Collateral which constitutes a claim against any Governmental Authority, including, without limitation, the federal government of the United States or any instrumentality or agency thereof, the assignment of which claim is restricted by any applicable Law, including, without limitation, the federal Assignment of Claims Act and any other comparable Law. Upon the request of Agent, Borrower shall take such steps as may be necessary or desirable, or that Agent may request, to comply with any such applicable Law.

(j) Borrower shall furnish to Agent from time to time any statements and schedules further identifying or describing the Collateral and any other information, reports or evidence concerning the Collateral as Agent may reasonably request from time to time.

5. REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants as follows on the Closing Date, on the date of each Credit Extension, and on such other dates when such representations and warranties under this Agreement are made or deemed to be made:

5.1 Due Organization, Authorization: Power and Authority.

(a) Each Credit Party and each Subsidiary is duly organized, validly existing and in good standing (if applicable in such entity's jurisdiction of formation) as a Registered Organization in its respective jurisdiction of formation. Each Credit Party and each Subsidiary has the power to own its assets and is qualified and licensed to do business and is in good standing (if applicable in such jurisdiction) in any jurisdiction in which the conduct of its business or its ownership of property requires that it be qualified except where the failure to do so could not reasonably be expected to result in a Material Adverse Change. The Financing Documents have been duly authorized, executed and delivered by each Credit Party and constitute legal, valid and binding agreements enforceable in accordance with their terms, except as the enforceability thereof may be limited by bankruptcy, insolvency or other similar laws relating to the enforcement of creditors' rights generally and by general equitable principles. The execution, delivery and performance by each Credit Party of each Financing Document executed or to be executed by it is in each case within such Credit Party's powers.

(b) The execution, delivery and performance by each Credit Party of the Financing Documents to which it is a party do not (i) conflict with any of such Credit Party's organizational documents; (ii) contravene, conflict with, constitute a default under or violate any material provision of Law applicable to it; (iii) contravene, conflict or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which such Credit Party or any of its property or assets may be bound or affected; (iv) require any material action by, filing, registration, or qualification with, or Required Permit from, any Governmental Authority (except such Required Permits which have already been obtained and are in full force and effect); or (v) constitute a default under or conflict with any Material Agreement. No Credit Party is in default under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to result in a Material Adverse Change.

5.2 Litigation. Except as disclosed on the **Disclosure Schedule** or, after the Closing Date, pursuant to Section 6.7, there are no actions, suits, proceedings or investigations pending or, to the knowledge of the Responsible Officers, threatened in writing by or against any Credit Party or any Subsidiary thereof which involves the possibility of any judgment or liability of more than *** or that could reasonably be expected to result in a Material Adverse Change, or which questions the validity of the Financing Documents, or the other documents required thereby or any action to be taken pursuant to any of the foregoing, nor does any Credit Party have reason to believe that any such actions, suits, proceedings or investigations are threatened.

5.3 No Material Deterioration in Financial Condition; Financial Statements. All financial statements for the Credit Parties delivered to Agent or any Lender fairly present, in conformity with GAAP, in all material respects the consolidated financial condition and consolidated results of operations of such Credit Party. There has been no material deterioration in the consolidated financial condition of any Credit Party from the most recent financial statements and projections submitted to Agent or any Lender. There has been no material adverse deviation from the most recent annual operating plan of Borrower delivered to Agent and the Lenders.

5.4 Solvency. The fair salable value of each Credit Party's assets (including goodwill *minus* disposition costs) exceeds the fair value of its liabilities. After giving effect to the transactions described in this Agreement and taking into account any right of contribution between the Credit Parties (but without limiting Section 13.15), (a) no Credit Party is left with unreasonably small capital in relation to its business as presently conducted, and (b) each Credit Party is able to pay its debts (including trade debts) as they mature.

5.5 Subsidiaries; Investments; Margin Stock. Borrower and its Restricted Subsidiaries do not own any stock, partnership interest or other equity securities, except for Permitted Investments. Without limiting the foregoing, Borrower and its Restricted Subsidiaries do not own or hold any Margin Stock.

5.6 Tax Returns and Payments; Pension Contributions. Each Credit Party and its Restricted Subsidiaries has timely filed all required tax returns and reports, and, except for those Taxes that are subject to a Permitted Contest, each Credit Party and its Restricted Subsidiaries has timely paid all foreign, federal, state and material local Taxes, assessments, deposits and contributions owed by such Credit Party or Restricted Subsidiary. Other than as disclosed to Agent in accordance with Section 6.2, Borrower is unaware of any claims or adjustments proposed for any prior tax years of any Credit Party or any of its Restricted Subsidiaries which could result in additional Taxes becoming due and payable by such Credit Party. No Credit Party nor any trade or business (whether or not incorporated) that is under common control with any Credit Party within the meaning of Section 414(b) or (c) of the IRC (and Sections 414(m) and (o) of the IRC for purposes of the provisions relating to Section 412 of the IRC) or Section 4001 of ERISA (an "**ERISA Affiliate**") (a) has failed to satisfy the "minimum funding standards" (as defined in Section 412 of or Section 302 of ERISA), whether or not waived, with respect to any Pension Plan, (b) has incurred liability with respect to the withdrawal or partial withdrawal of any Credit Party or ERISA Affiliate from any Pension Plan or incurred a cessation of operations that is treated as a withdrawal, (c) has incurred any liability under Title IV of ERISA (other than for PBGC premiums due but not delinquent under Section 4007 of ERISA), (d) has had any "reportable event" as defined in Section 4043(c) of ERISA (or the regulations issued thereunder) (other than an event for which the thirty (30)-day notice requirement is waived) occur with respect to any Pension Plan or (e) failed to maintain (i) each "plan" (as defined by Section 3(3) of ERISA) in all material respects with the applicable provisions of ERISA, the IRC and other federal or state laws, and (ii) the tax qualified status of each plan (as defined above) intended to be so qualified.

5.7 Intellectual Property and License Agreements. A list of all Registered Intellectual Property of each Credit Party registered in any Registered IP Disclosure Location and all material in-bound license or sublicense agreements, exclusive out-bound license or sublicense agreements, or other material rights of any Credit Party to use Intellectual Property (but excluding in-bound licenses of over-the-counter software that is commercially available to the public), as of the Closing Date and, as updated pursuant to Section 6.14, is set forth on the **Intangible Assets Schedule**. Such **Intangible Assets Schedule** shall be prepared by Borrower in the form provided by Agent and contain all information required in such form. Except for Permitted Licenses, each Credit Party is the sole owner of its Intellectual Property free and clear of any Liens. Each Patent is valid and enforceable and no part of the Material Intangible Assets has been judged invalid or unenforceable, in whole or in part. To the Borrower's knowledge, no claim has been made that any part of the Intellectual Property violates the rights of any third party, except as could not reasonably be expected to result in a Material Adverse Change.

5.8 Regulatory Status. All of Borrower's material Products and material Regulatory Required Permits are listed on the **Products Schedule** and **Required Permits Schedule**, respectively (as updated from time to time pursuant to Section 6.14), and Borrower has delivered to Agent a copy of all material Regulatory Required Permits requested by Agent as of the date hereof or to the extent requested by Agent pursuant to Section 6.16. With respect to each Product, (a) Borrower and its Restricted Subsidiaries have received, and such Product is the subject of, all Regulatory Required Permits needed in connection with the testing, manufacture, marketing or sale of such Product as currently being conducted by or on behalf of Borrower, and have provided Agent and each Lender with all notices and other information required by Section 6.16, (b) such Product is being tested, manufactured, marketed or sold, as the case may be, in material compliance with all applicable Laws and Regulatory Required Permits. As of the Closing Date, there have been no Regulatory Reporting Events.

5.9 Accuracy of Schedules and Perfection Certificate. All information set forth in the **Disclosure Schedule**, **Intangible Assets Schedule**, the **Required Permits Schedule** and the **Products Schedule** is, in all material respects, true, accurate and complete as of the Closing Date, the date of delivery of the last Compliance Certificate and any other subsequent date on which Borrower is requested to update such certificate. All information set forth in the Perfection Certificate is, in all material respects, true, accurate and complete as of the Closing Date, the date of each Credit Extension and each other subsequent date on which Borrower delivers an updated Perfection Certificate pursuant to Agent's request.

5.10 FCPA and Anti-Corruption Law. For the immediately preceding five (5) year period, neither Borrower nor any of its Subsidiaries nor, to the knowledge of Borrower, any director, officer, agent, employee or other Person acting in such capacity on behalf of Borrower or any of its Subsidiaries, has taken any action, directly or indirectly, that would result in a violation by such Persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "**FCPA**") or any other applicable anti-corruption law. No part of the proceeds of the Credit Extensions shall be used, directly or indirectly, for any payments to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of the FCPA. Borrower and its Subsidiaries have conducted their businesses in compliance with applicable anti-corruption laws and has instituted and maintained policies and procedures designed to promote and achieve compliance with such laws.

6. AFFIRMATIVE COVENANTS

Borrower covenants and agrees as follows:

6.1 Organization and Existence; Government Compliance.

(a) Each Credit Party and its Restricted Subsidiaries shall maintain their respective legal existence and good standing in their respective jurisdictions of formation and maintain qualification in each jurisdiction in which the failure to so qualify could reasonably be expected to result in a Material Adverse Change. If a Credit Party is not now a Registered Organization but later becomes one, Borrower shall promptly notify Agent of such occurrence and provide Agent with such Credit Party's organizational identification number.

(b) Each Credit Party and its Restricted Subsidiaries shall comply with all Laws, ordinances and regulations to which they or their business locations are subject, the noncompliance with which could reasonably be expected to result in a Material Adverse Change. Each Credit Party shall obtain and keep in full force and effect and comply with all of the Required Permits, except where failure to have or maintain compliance with or effectiveness of such Required Permit could not reasonably be expected to result in a Material Adverse Change. Upon request of Agent or any Lender, each Credit Party shall promptly (and in any event within *** of such request) provide copies of any such obtained Required Permits to Agent. Borrower shall notify Agent within *** (but in any event prior to Borrower submitting any requests for Credit Extensions or release of any reserves) of the occurrence of any facts, events or circumstances known to a Borrower, whether threatened, existing or pending, that could cause any Required Permit to become limited, suspended or revoked, except where such limitation, suspension, or revocation could not reasonably be expected to result in a Material Adverse Change. Notwithstanding the foregoing, each Credit Party shall comply with Section 6.16 as it relates to Regulatory Required Permits and to the extent that there is a conflict between this Section and Section 6.16 as it relates to Regulatory Required Permits, Section 6.16 shall govern.

6.2 Financial Statements, Reports, Certificates.

(a) Each Credit Party shall deliver to Agent and each Lender: (i) as soon as available, but no later than *** after the last day of each month, company prepared balance sheets, income statements, and cash flow statements for each Credit Party covering such Credit Parties consolidated operations for such monthly certified by a Responsible Officer and in a form reasonably acceptable to Agent; (ii) as soon as available, but no later than *** after the last day of each of Biocryst's fiscal quarters, a company prepared consolidated and consolidating balance sheet, income statement and cash flow statement covering such Credit Party's consolidated operations for such month certified by a Responsible Officer and in a form acceptable to Agent and each Lender; (iii) as soon as available, but no later than *** after the last day of a Credit Party's fiscal year, audited consolidated and consolidating financial statements prepared under GAAP, consistently applied, together with an unqualified opinion on the financial statements from an independent certified public accounting firm acceptable to Agent and each Lender in its reasonable discretion; (iv) as soon as available after approval thereof by such Credit Party's governing board, but no later than *** after the last day of such Credit Party's fiscal year, and as amended and/or updated, such Credit Party's financial projections for the current fiscal year; (v) within *** of delivery, copies of all statements, reports and notices made available to all of such Credit Party's security holders or to any holders of Subordinated Debt; (vi) in the event that such Credit Party is or becomes subject to the reporting requirements under the Securities Exchange Act of 1934, as amended, within *** of filing, all reports on Forms 10-K, 10-Q and 8-K filed with the Securities and Exchange Commission ("**SEC**") or a link thereto on such Credit Party's or another website on the Internet (and, for avoidance of doubt, any notices required to be delivered pursuant to this Article 6 may be delivered by provision of such SEC filings or links thereto, or by other electronic means); (vii) as soon as available, but no later than *** after the last day of each month, copies of the month-end account statements for each Collateral Account maintained by a Credit Party, which statements may be provided to Agent and each Lender by Borrower or directly from the applicable institution(s); (viii) promptly (and in any event within *** of any request therefor) such readily available budgets, sales projections, operating plans, financial information and other information, reports or statements regarding the Credit Parties or their respective businesses, contractors and subcontractors reasonably requested by Agent or any Lender; and (ix) within *** after any Credit Party becomes aware of any claim or adjustment proposed for any prior tax years of any Credit Party or any of their Restricted Subsidiaries which could result in additional Taxes becoming due and payable by such Credit Party or Restricted Subsidiary, notice of such claim or adjustment.

(b) Within *** after the last day of each month, Borrower shall deliver to Agent and each Lender with the monthly statements described above, a duly completed Compliance Certificate signed by a Responsible Officer.

(c) Borrower shall cause each Credit Party to keep proper books of record and account in accordance with GAAP in which full, true and correct entries shall be made of all dealings and transactions in relation to its business and activities. Upon prior written notice and during business hours (which such limitations shall not apply if a Default or Event of Default has occurred), Borrower shall allow, and cause each Credit Party to allow, Agent and the Lenders to visit and inspect any properties of a Credit Party, to examine and make abstracts or copies from any Credit Party's books, to conduct a collateral audit and analysis of its operations and the Collateral to verify the amount and age of the accounts, the identity and credit of the respective account debtors, to review the billing practices of the Credit Party and to discuss its respective affairs, finances and accounts with their respective officers, employees and independent public accountants as often as may reasonably be desired. Borrower shall reimburse Agent and each Lender for all reasonable costs and expenses associated with such visits and inspections; *provided*, *however*, that Borrower shall be required to reimburse Agent and each Lender for such costs and expenses for no more than one (1) such visit and inspection per twelve (12)-month period unless a Default or Event of Default has occurred during such period.

(d) Borrower shall, and shall cause each Credit Party to, deliver to Agent and each Lender, within *** after the same are received, copies of all correspondence, reports, documents and other filings with any Governmental Authority that could reasonably be expected to result in a Material Adverse Change (except that reporting related to Regulatory Required Permits and/or Regulatory Reporting Events shall be governed by Section 6.16).

(e) Borrow shall, and shall cause each Credit Party to, promptly after the request by any Lender, provide all documentation and other information that such Lender reasonably requests in order to comply with its ongoing obligations under applicable "know your customer" and anti-money laundering rules and regulations, including, without limitation, the USA PATRIOT Act.

6.3 Maintenance of Property. Borrower shall cause all equipment and other tangible personal property other than Inventory to be maintained and preserved in the same condition, repair and in working order as of the date hereof, ordinary wear and tear excepted, and shall promptly make or cause to be made all repairs, replacements and other improvements in connection therewith that are necessary or desirable to such end. Borrower shall cause each Credit Party to keep all Inventory in good and marketable condition, free from material defects. Returns and allowances between a Credit Party and its Account Debtors shall follow the Credit Party's customary practices as they exist at the Original Closing Date. Borrower shall promptly notify Agent of all returns, recoveries, disputes and claims that involve more than *** of Inventory collectively among all Credit Parties.

6.4 Taxes; Pensions. Borrower shall timely file and cause each Credit Party to timely file, all required tax returns and reports and timely pay, and cause each Credit Party to timely pay, all foreign, federal, state, and local Taxes, assessments, deposits and contributions owed, and shall deliver to Agent, on demand, appropriate certificates attesting to such payments; *provided*, *however*, that a Credit Party may defer payment of any contested Taxes, so long as such Credit Party (a) in good faith contests its obligation to pay the Taxes by appropriate proceedings promptly and diligently instituted and conducted, (b) notifies Agent in writing of the commencement of, and any material development in, the proceedings, and (c) posts bonds or takes any other steps required to prevent the Governmental Authority levying such contested Taxes from obtaining a Lien upon any of the Collateral (such contest, a "**Permitted Contest**"). Borrower shall pay, and cause each Credit Party to pay, all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms. Each Credit Party and their ERISA Affiliates shall timely make all required contributions to each Pension Plan and shall maintain each "plan" (as defined by Section 3(3) of ERISA) in material compliance with the applicable provisions of ERISA, the Internal Revenue Code and other federal and state laws. Borrower shall give written notice to Agent and each Lender promptly (and in any event within ***) upon Borrower becoming aware of any (w) Credit Party's or any ERISA Affiliate's failure to make any contribution required to be made with respect to any Pension Plan not having been timely made, (x) notice of the PBGC's, any Credit Party's or any ERISA Affiliate's intention to terminate or to have a trustee appointed to administer any such Pension Plan, or (y) complete or partial withdrawal by any Credit Party or any ERISA Affiliate from any Pension Plan.

6.5 Insurance. Borrower shall, and shall cause each Credit Party to, keep its business and the Collateral insured for risks and in amounts standard for companies in Borrower's industry and location and as Agent may reasonably request. Insurance policies shall be in a form, with companies, and in amounts that are satisfactory to Agent. All property policies shall have a lender's loss payable endorsement showing Agent as primary lender's loss payee and waive subrogation against Agent, and all liability policies shall show, or have endorsements showing, Agent as an additional insured. No other loss payees may be shown on the policies other than (i) loss payees showing on such policies as of the Original Closing Date and (ii) as Agent shall otherwise consent in writing. If required by Agent, all policies (or the loss payable and additional insured endorsements) shall provide that the insurer shall endeavor to give Agent at least *** (*** for non-payment of premium) notice before canceling, amending, or declining to renew its policy. At Agent's request, Borrower shall deliver certified copies of all such Credit Party insurance policies and evidence of all premium payments. If any Credit Party fails to obtain insurance as required under this Section 6.5 or to pay any amount or furnish any required proof of payment to third persons and Agent, Agent may make all or part of such payment or obtain such insurance policies required in this Section 6.5, and take any action under the policies Agent deems prudent.

6.6 Collateral Accounts.

(a) Borrower shall, and shall cause each Credit Party to, provide Agent *** prior written notice before establishing any Collateral Account at or with any bank or financial institution. In addition, for each Collateral Account that any Credit Party at any time maintains (and in connection with any such Collateral Account established after the Closing Date, prior to opening such Collateral Account), Borrower shall, and shall cause each Credit Party to, cause the applicable bank or financial institution at or with which any Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect Agent's Lien in such Collateral Account in accordance with the terms hereunder, which Control Agreement, *inter alia*, (a) provides that, upon written notice from Agent, such bank or financial institution shall comply with instructions originated by Agent directing disposition of the funds in such Collateral Account without further consent by Borrower and (b) may not be terminated without prior written consent of Agent. The provisions of the previous sentence shall not apply to any Excluded Deposit Account; *provided*, *however*, that at all times Borrower shall maintain one (1) or more separate Deposit Accounts to hold any and all amounts to be used for payroll, payroll taxes and other employee wage and benefit payments, and shall not commingle any monies allocated for such purposes with funds in any other Deposit Account.

(b) So long as the ATM Facility Account remains open, Borrower shall cause all funds (if any) in excess of *** held in the ATM Facility Account to be transferred into a Collateral Account subject to a Control Agreement by the close of business on the *** after the funds held in the ATM Facility Account exceeded ***; *provided* that upon the occurrence and during the continuation of any Event of Default, upon Agent's request, Borrower shall cause all funds on deposit in the ATM Facility Account to be transferred into a Collateral Account subject to a Control Agreement at the end of each Business Day.

6.7 Notices of Material Agreements, Litigation and Defaults; Cooperation in Litigation.

(a) Borrower shall promptly (and in any event within the time periods specified below) provide written notice to Agent and each Lender of the following:

(i) Within *** of 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 and that is reasonably expected by Borrower to become an Event of Default;

(ii) Within *** of Borrower becoming aware of (or having reason to believe any of the following are pending or threatened in writing) any action, suit, proceeding or investigation by or against Borrower or any Credit Party which involves the possibility of any judgment or liability of more than *** or that could reasonably be expected to result in a Material Adverse Change, or which questions the validity of any of the Financing Documents, or the other documents required thereby or any action to be taken pursuant to any of the foregoing; and

(iii) Within *** of Borrower executing and delivering any Material Agreement or any material amendment, consent, waiver or other modification to any Material Agreement or receiving or delivering any notice of termination or default or similar notice in connection with any Material Agreement.

(b) Borrower shall, and shall cause each Credit Party, to provide such further information (including copies of such documentation) as Agent or any Lender shall reasonably request with respect to any of the events or notices described in paragraph (a). From the date hereof and continuing through the termination of this Agreement, Borrower shall, and shall cause each Credit Party to, make available to Agent and each Lender, without expense to Agent or any Lender, each Credit Party's officers, employees and agents and books, to the extent that Agent or any Lender may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Agent or any Lender with respect to any Collateral or relating to a Credit Party.

6.8 Creation/Acquisition of Subsidiaries; Restrictions on Investments.

(a) Borrower shall provide Agent with at least *** (or such shorter period as Agent may accept in its sole discretion) prior written notice of its intention to create or, to the extent permitted pursuant to this Agreement, acquire a new Subsidiary or Permitted Joint Venture. Upon such creation or, to the extent permitted hereunder, acquisition of any Subsidiary or Permitted Joint Venture, Borrower and such Subsidiary shall promptly (and in any event within *** of such creation or acquisition) take all such action as may be reasonably required by Agent or the Required Lenders to cause each such Subsidiary (other than a Foreign Subsidiary, an Excluded Domestic Holdco or a Permitted Joint Venture) to either, in the discretion of Agent, become a co-Borrower hereunder or to guarantee the Obligations of Borrower under the Financing Documents and, in each case, grant a continuing pledge and security interest in and to the assets of such Subsidiary (substantially as described on **Exhibit A** hereto); and Borrower shall grant and pledge to Agent, for the ratable benefit of the Lenders, a perfected security interest in the stock, units or other evidence of ownership of each Subsidiary and Permitted Joint Venture, except to the extent constituting Excluded Property (the foregoing collectively, the "**Joinder Requirements**"); *provided* that Borrower shall not be permitted to make any Investment in such Subsidiary until such time as Borrower has satisfied the Joinder Requirements, if applicable.

(b) Borrower further agrees to ensure, and cause each Restricted Subsidiary to ensure, that the total amount of cash and cash equivalents held by all Restricted Subsidiaries (other than cash and cash equivalents held by Credit Parties in Collateral Accounts that are subject to Agent's first priority perfected security interest), shall not, at any time, exceed ***. Without limiting the forgoing or the provisions of Section 7, no Credit Party may contribute or otherwise transfer any assets to any Restricted Subsidiary other than (i) cash and cash equivalents permitted to be invested pursuant to clauses (f) and (i) of the definition of "Permitted Investments" and (ii) with respect to any Subsidiary that is a Permitted Joint Venture, any Permitted License permitted pursuant to clause (j) of the definition of "Permitted Investments."

(c) Following (i) the occurrence and continuation of an Event of Default and (ii) the exercise by Agent of any right, option or remedy provided for hereunder, under any Financing Document or at law or in equity, Borrower shall cause each Foreign Subsidiary controlled (directly or indirectly) by Borrower to declare and pay to Borrower the maximum amount of dividends and other distributions in respect of its capital stock or other equity interest legally permitted to be paid by each such Foreign Subsidiary; *provided* that such Foreign Subsidiary shall be able to retain for working capital purposes such amounts used by such Foreign Subsidiaries in the Ordinary Course of Business and as are reasonably necessary for its operations based on its current projections, as provided to Agent pursuant to Section 6.2.

6.9 Use of Proceeds. Borrower shall use the proceeds of the Credit Extensions solely for (a) payment of amounts due and owing in respect of Credit Facility #1, (b) payment of transaction fees incurred in connection with the Financing Documents, (c) working capital needs of Borrower and its Subsidiaries, and (d) any other Permitted Purpose specified in the Credit Facility Schedule for such Credit Facility. No portion of the proceeds of the Credit Extensions will be used for family, personal, agricultural or household use or to purchase Margin Stock.

6.10 Hazardous Materials; Remediation.

(a) If any release or disposal of Hazardous Materials shall occur or shall have occurred on any real property or any other assets of Borrower or any other Credit Party, Borrower will cause, or direct the applicable Credit Party to cause, the prompt containment and removal of such Hazardous Materials and the remediation of such real property or other assets as is necessary to comply with all Laws and to preserve the value of such real property or other assets. Without limiting the generality of the foregoing, Borrower shall, and shall cause each other Credit Party to, comply with each Law requiring the performance at any real property by Borrower or any other Credit Party of activities in response to the release or threatened release of a Hazardous Material.

(b) Borrower will provide Agent within *** after written demand therefor with a bond, letter of credit or similar financial assurance evidencing to the reasonable satisfaction of Agent that sufficient funds are available to pay the cost of removing, treating and disposing of any Hazardous Materials or Hazardous Materials Contamination and discharging any assessment which may be established on any property as a result thereof, such demand to be made, if at all, upon Agent's determination that the failure to remove, treat or dispose of any Hazardous Materials or Hazardous Materials Contamination, or the failure to discharge any such assessment could reasonably be expected to result in a Material Adverse Change.

(c) If there is any conflict between this Section 6.10 and any environmental indemnity agreement, which is a Financing Document, the environmental indemnity agreement shall govern and control.

6.11 Power of Attorney. Each of the officers of Agent is hereby irrevocably made, constituted and appointed the true and lawful attorney for Borrower (without requiring any of them to act as such) with full power of substitution to do the following: (a) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral (in each case, so long as no Default or Event of Default has occurred, other than Permitted Liens), or any judgment based thereon, or otherwise take any action to terminate or discharge the same; (b) so long as Agent has provided not less than *** prior written notice to Borrower to perform the same and Borrower has failed to take such action, (i) execute in the name of any Person comprising Borrower any schedules, assignments, instruments, documents, and statements that Borrower is obligated to give Agent under this Agreement or that Agent or any Lender deems necessary to perfect or better perfect Agent's security interest or Lien in any Collateral, (ii) do such other and further acts and deeds in the name of Borrower that Agent may deem necessary or desirable to enforce, protect or preserve any Collateral or its rights therein, including, but not limited to, to sign Borrower's name on any invoice or bill of lading for any Account or drafts against Account Debtors, and (iii) after the occurrence and during the continuance of an Event of Default, (A) endorse the name of Borrower upon any and all checks, drafts, money orders, and other instruments for the payment of money that are payable to Borrower; (B) make, settle, and adjust all claims under Borrower's insurance policies; (C) take any action any Credit Party is required to take under this Agreement or any other Financing Document; (D) transfer the Collateral into the name of Agent or a third party as the Code permits; (E) exercise any rights and remedies described in this Agreement or the other Financing Documents; and (F) do such other and further acts and deeds in the name of Borrower that Agent may deem necessary or desirable to enforce its rights with regard to any Collateral.

6.12 Further Assurances. Borrower shall, and shall cause each Credit Party and their Restricted Subsidiaries to, promptly execute any further instruments and take further action as Agent reasonably requests to perfect or better perfect or continue Agent's Lien in the Collateral or to effect the purposes of this Agreement or any other Financing Document.

6.13 Post-Closing Obligations. Borrower shall, and shall cause each Credit Party to, complete each of the post-closing obligations and/or deliver to Agent each of the documents, instruments, agreements and information listed on the **Post-Closing Obligations Schedule** attached hereto, on or before the date set forth for each such item thereon (as the same may be extended by Agent in writing in its reasonable discretion), each of which shall be completed or provided in form and substance reasonably satisfactory to Agent and the Lenders.

6.14 Disclosure Schedule Updates. Borrower shall, in the event of any information in the **Disclosure Schedule** becoming in any material respect outdated, inaccurate, incomplete or misleading, deliver to Agent, (x) if such event occurs on or after March 31st and on or before September 30th of the applicable year, together with the Compliance Certificate to be delivered under this Agreement with respect to the period ending September 30th of such year, and (y) if such event occurs after September 30th applicable year and on or before March 31st of the following year of the, together with the Compliance Certificate to be delivered under this Agreement with respect to the period ending March 31st of such year, a proposed update to the **Disclosure Schedule** correcting all information that is outdated, inaccurate, incomplete or misleading in any material respect; *provided*, *however*, (a) with respect to any proposed updates to the **Disclosure Schedule** involving Permitted Liens, Permitted Indebtedness or Permitted Investments, Agent will replace the **Disclosure Schedule** attached hereto with such proposed update only if such updated information is consistent with the definitions of and limitations herein pertaining to Permitted Liens, Permitted Indebtedness or Permitted Investments and (b) with respect to any proposed updates to the **Disclosure Schedule** involving other matters, Agent will replace the applicable portion of the **Disclosure Schedule** attached hereto with such proposed update upon Agent's approval thereof.

6.15 Intellectual Property and Licensing.

(a) Together with each Compliance Certificate required to be delivered pursuant to Section 6.2(b) for the periods ending March 31st and September 30th, respectively, of each year, to the extent (i) Borrower acquires and/or develops any new Registered Intellectual Property registered in any Registered IP Disclosure Location, or (ii) Borrower enters into or becomes bound by any additional material in-bound license or sublicense agreement, any additional exclusive out-bound license or sublicense agreement or other agreement with respect to material rights in Intellectual Property (other than over-the-counter software that is commercially available to the public), or (iii) there occurs any other material change in Borrower's Registered Intellectual Property registered in any Registered IP Disclosure Location, in-bound licenses or sublicenses or exclusive out-bound licenses or sublicenses from that listed on the **Intangible Assets Schedule**, together with such Compliance Certificate, deliver to Agent an updated **Intangible Assets Schedule** reflecting such updated information.

(b) If Borrower obtains any Registered Intellectual Property (other than copyrights, mask works and related applications, which are addressed below) registered in any Registered IP Disclosure Location, Borrower shall promptly execute such intellectual property security agreements (which shall be filed in the United States Patent and Trademark Office) and other documents and provide such other information (including, without limitation, copies of applications) and take such other actions as Agent shall request in its good faith business judgment to perfect and maintain a first priority perfected security interest in favor of Agent, for the ratable benefit of Lenders, in such property. If Borrower decides to register any copyrights or mask works in the United States Copyright Office, Borrower shall: (i) provide Agent with at least *** prior written notice of Borrower's intent to register such copyrights or mask works together with a copy of the application it intends to file with the United States Copyright Office (excluding Exhibits thereto); (ii) execute an intellectual property security agreement and such other documents and provide such other information and take such other actions as Agent may request in its good faith business judgment to perfect and maintain a first priority perfected security interest in favor of Agent, for the ratable benefit of the Lenders, in the copyrights or mask works intended to be registered with the United States Copyright Office; and (iii) record such intellectual property security agreement with the United States Copyright Office contemporaneously with filing the copyright or mask work application(s) with the United States Copyright Office.

(c) Upon Agent's request, Borrower shall exercise its commercially reasonable efforts to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for (i) all licenses or agreements to be deemed "Collateral" and for Agent to have a security interest in it that might otherwise be restricted or prohibited by Law or by the terms of any such license or agreement, whether now existing or entered into in the future, and (ii) Agent to have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with Agent's rights and remedies under this Agreement and the other Financing Documents; *provided*, that the requirements of this paragraph (c) shall not apply with respect to the Seqirus UK License Agreement.

(d) Borrower shall own, or be licensed to use or otherwise have the right to use, all Material Intangible Assets. Borrower shall cause all Registered Intellectual Property to be duly and properly registered, filed or issued in the appropriate office and jurisdictions for such registrations, filings or issuances, except where the failure to do so would not reasonably be expected to result in a Material Adverse Change. Borrower shall at all times conduct its business without infringement or claim of infringement of any Intellectual Property rights of others. Borrower shall (i) protect, defend and maintain the validity and enforceability of its Material Intangible Assets (ii) promptly advise Agent in writing of material infringements of its Material Intangible Assets, or of a material claim of infringement by Borrower on the Intellectual Property rights of others; and (iii) not allow, except as permitted under Section 7.1(j), any of Borrower's Material Intangible Assets to be abandoned, invalidated, forfeited or dedicated to the public or to become unenforceable. Borrower shall not become a party to, nor become bound by, any material license or other similar material agreement with respect to which Borrower is the licensee that prohibits or otherwise restricts Borrower from granting a security interest in Borrower's interest in such license or agreement or other property.

6.16 Regulatory Reporting and Covenants.

(a) Borrower shall notify Agent and each Lender promptly, and in any event within *** of receiving, becoming aware of or determining that (each, a "**Regulatory Reporting Event**" and collectively, the "**Regulatory Reporting Events**"): (i) any Governmental Authority, specifically including the FDA is conducting or has conducted (A) if applicable, any investigation of Borrower's or its Subsidiaries' manufacturing facilities and processes for any Product (or any investigation of the facility of a contract manufacturer engaged by Borrower or is Subsidiaries in respect of a Product of which Borrower and/or its Subsidiaries are aware), which has disclosed any material deficiencies or violations of Laws and/or the Regulatory Required Permits related thereto or (B) an investigation or review of any Regulatory Required Permit (other than routine reviews in the Ordinary Course of Business associated with the renewal of a Regulatory Required Permit), (ii) development, testing, and/or manufacturing of any Product should cease, (iii) if a Product has been approved for marketing and sale, any marketing or sales of such Product should cease or such Product should be withdrawn from the marketplace, (iv) any Regulatory Required Permit has been revoked or withdrawn, (v) adverse clinical test results have occurred with respect to any Product, (vi) any Product recalls or voluntary Product withdrawals from any market (other than with respect to discrete batches or lots that are not material in quantity or amount and are not made in conjunction with a larger recall) have occurred, or (vii) any significant failures in the manufacturing of any Product have occurred such that the amount of such Product successfully manufactured in accordance with all specifications thereof and the required payments to be made to Borrower therefor in any month shall decrease significantly with respect to the quantities of such Product and payments produced in the prior month, in each case of the foregoing clauses (i) – (vii), to the extent that such event could reasonably be expected to result in a Material Adverse Change. Borrower shall provide to Agent or any Lender such further information (including copies of such documentation) as Agent or any Lender shall reasonably request with respect to any such Regulatory Reporting Event.

(b) Borrower shall, and shall cause each Credit Party to, obtain and, to the extent applicable, use commercially reasonable efforts to cause all third parties to obtain, all Regulatory Required Permits necessary for compliance in all material respects with Laws with respect to testing, manufacturing, developing, selling or marketing of Products and shall, and shall cause each Credit Party to, maintain and comply fully and completely in all respects with all such Regulatory Required Permits, the noncompliance with which could reasonably be expected to result in a Material Adverse Change. In the event Borrower or any Credit Party obtains any new material Regulatory Required Permit or any information on the **Required Permits Schedule** becomes outdated, inaccurate, incomplete or misleading, Borrower shall, together with the next Compliance Certificate required to be delivered under this Agreement after such event or within ***, if earlier, provide Agent with an updated **Required Permits Schedule** including such updated information.

(c) If, after the Original Closing Date, (i) Borrower determines to manufacture, sell, develop, test or market any new material Product (by itself or through a third party), Borrower shall deliver prior written notice to Agent of such determination (which shall include a brief description of such Product) and (x) if such determination occurs on or after March 31st and on or before September 30th of the applicable year, together with the Compliance Certificate to be delivered under this Agreement with respect to the period ending September 30th of such year, and (y) if such determination occurs after September 30th applicable year and on or before March 31st of the following year of the, together with the Compliance Certificate to be delivered under this Agreement with respect to the period ending March 31st of such year, shall provide an updated **Intangible Assets Schedule**, **Products Schedule** and **Required Permits Schedule** (and copies of such Required Permits as Agent may request) reflecting updates related to such determination.

6.17 Peramivir SPE. Notwithstanding any provision to the contrary herein, the Peramivir SPE shall, and BioCryst shall cause the Peramivir SPE to, (a) comply with each of the covenants set forth on the SPE Covenant Schedule attached hereto (the "**SPE Covenants**") and (b) include each of the covenants set forth on the SPE Covenant Schedule attached hereto in the organizational documents of the Peramivir SPE.

6.18 JPR Royalty Sub.

(a) Until discharge of the Indenture pursuant to and in accordance with Section 11.1 thereof, Biocryst hereby agrees that it shall, to the extent required by the Indenture and other Deal Documents (as defined in the Indenture), and all agreements and documents entered into from time to time in connection therewith (including, without limitation, any amendments or modifications thereof) and not otherwise prohibited pursuant to the terms of the Financing Documents, perform (i) its obligations under the Royalty Hedge Documents, (ii) such administrative activities necessary to maintain the continuing existence of JPR Royalty Sub, such as completing required annual registration or report filings with state filing offices, and (iii) such activities in the Ordinary Course of Business incidental to its ownership of the equity interests of JPR Royalty Sub, to the extent that failure perform any of the foregoing activities described in clauses (a)(i), (ii) and (iii) could reasonably be expected to result in a Material Adverse Change.

(b) Until discharge of the Indenture pursuant to and in accordance with Section 11.1 thereof, it shall constitute a breach of this Section 6.18(b) by Borrowers if JPR Royalty Sub shall (i) transact or engage in any activities, business or operations or consummate any transactions other than the performance of its obligations and activities reasonably incidental thereto under the Indenture and the other Deal Documents, and all agreements and documents entered into from time to time in connection therewith (including, without limitation, any amendments or modifications thereof), (ii) amend the terms of the Indenture or the other Deal Documents in a manner that is materially adverse to Agent or any Lender or that could reasonably be expected to result in a Material Adverse Change, (iii) allow its organizational documents to be modified in a manner (A) that is adverse to Agent or any Lender in any material respect, (B) that could reasonably be expected to result in a Material Adverse Change or (C) that would have the effect of eliminating or modifying any of the "special purpose entity" restrictions set forth in such organizational documents (iv) violate the "special purpose entity" restrictions set forth in such organizational documents in any material respect or (v) merge or consolidate with any other entity.

(c) Following discharge of the Indenture pursuant to and accordance with Section 11.1 thereof, Borrower shall, within *** or, if not then permitted pursuant to the Indenture or other Deal Documents, within *** of such first date thereafter as may be permitted under the Indenture and such other Deal Documents, and at its election, either (a) dissolve JPR Royalty Sub and liquidate its assets into Borrower or (b) take such actions required by Agent to cause JPR Royalty Sub to become a Borrower or Credit Party under the Financing Documents pursuant to the Joinder Requirements set forth in Section 6.8 with respect to newly formed or acquired Subsidiaries.

7. NEGATIVE COVENANTS

Borrower shall not do, nor shall it permit any Credit Party or any of its Restricted Subsidiaries to do, any of the following without the prior written consent of Agent:

7.1 Dispositions. Convey, sell, abandon, lease, license, transfer, assign or otherwise dispose of (collectively, "**Transfer**") all or any part of its business or property, except for (a) sales, transfers or dispositions of Inventory in the Ordinary Course of Business or that is no longer used or useful in Borrower's business; (b) sales or abandonment of (i) worn-out or obsolete Equipment or (ii) other Equipment that is no longer used or useful in the business of Borrower with a fair salable value not to exceed *** in the aggregate for all such Equipment; (c) to the extent constituting a Transfer, Permitted Liens; (d) to the extent they may constitute a Transfer, Permitted Investments; (e) Permitted Licenses; (f) dispositions of Clinical Trial Material that, in the good faith determination of Borrower, is no longer used or useful in the conduct of the business of Borrower and its Subsidiaries; (g) dispositions of Inventory and Clinical Trial Material to licensees in connection with, and pursuant to reasonable and customary terms of, a Permitted Licenses; (h) the sale, transfer, or disposition of the Patheon Inventory pursuant to Section 3.4 of the Seqirus UK License Agreement; (i) Transfers among Borrowers; *provided* that no such Transfer shall be permitted that would cause a violation of the SPE Covenants; (j) abandonment of Intellectual Property rights in the Ordinary Course of Business that, in the good faith determination of Borrower, are obsolete, no longer used or useful in the conduct of the business of Borrower and its Subsidiaries or the cost of maintaining such Intellectual Property would outweigh the benefit to Borrower and its Subsidiaries of so maintaining it; (k) dispositions of accounts receivable to a third party in connection with the compromise, settlement or collection thereof in the Ordinary Course of Business exclusive of factoring or similar arrangements; and (l) leases of tangible personal property and real property in the Ordinary Course of Business to third parties for fair and reasonable consideration.

7.2 Changes in Business, Management, Ownership or Business Locations. (a) Engage in, or permit any of its Subsidiaries to engage in, any business other than the businesses currently engaged in by Borrower, such Credit Party or such Subsidiary, as applicable, or reasonably related thereto; (b) liquidate or dissolve; (c) (i) have a change in senior management where an interim replacement, as approved by Borrower's or such Credit Party's board of directors, has not been named and hired by not later than *** after such change, or (ii) enter into any transaction or series of related transactions which would result in a Change in Control unless the agreements with respect to such transactions provide for either (A) the indefeasible payment in full of the Obligations substantially concurrently therewith or (B) the consent of Agent and the Lenders as a condition precedent to the consummation thereof; (d) add any new offices or business locations, or enter into any new leases with respect to existing offices or business locations without first delivering a fully-executed Access Agreement to Agent (except as otherwise provided below); (e) change its jurisdiction of organization; (f) change its organizational structure or type; (g) change its legal name; (h) change any organizational number (if any) assigned by its jurisdiction of organization. Notwithstanding the foregoing, in the case of subpart (d) above, *provided* that the applicable lease or license agreement, or applicable law, does not grant to the landlord or licensor any Lien upon intangible assets of the tenant or licensee, subpart (d) shall not restrict leases or licenses for (x) such new or existing offices or business locations containing less than *** in Borrower's assets or property and not containing Borrower's Books and (y) any new or existing business location constituting a warehouse, consignee or bailee location that does not contain any of Borrower's Books and would not otherwise require an Access Agreement pursuant to Section 4.2(e).

7.3 Mergers or Acquisitions. Merge or consolidate with any other Person, or acquire all or substantially all of the capital stock or property of another Person, *provided*, *however*, that (a) a Credit Party may merge or consolidate into another Credit Party, (b) a Domestic Subsidiary may merge or consolidate into another Domestic Subsidiary that is a Credit Party, (c) a Domestic Subsidiary that is not a Credit Party may merge or consolidate into another Domestic Subsidiary, (d) a Foreign Subsidiary may merge or consolidate into another Foreign Subsidiary and (e) a Domestic Subsidiary that is not a Credit Party may merge or consolidate into a Credit Party, so long as, in each case, (i) Borrower has provided Agent with prior written notice of such transaction, (ii) if a Credit Party is a party thereto, a Person already comprising a Credit Party shall be the surviving legal entity, (iii) if the Borrower is a party thereto, the Borrower shall be the surviving legal entity, (iv) if a Credit Party is a party thereto, the surviving Credit Party's tangible net worth is not thereby reduced, (v) no Event of Default has occurred and is continuing prior thereto or arises as a result therefrom *provided, further*, that, notwithstanding the foregoing, Peramivir SPE shall not be entitled to enter into any such merger, consolidation or acquisition if doing so would cause a violation of the SPE Covenants and (f) Credit Parties may dissolve or liquidate their Subsidiaries (other than any Borrower) so long as any assets of such dissolved or liquidated Person are transferred to a Borrower.

7.4 Indebtedness. (a) Create, incur, assume, or be liable for any Indebtedness other than Permitted Indebtedness or (b) purchase, redeem, defease or prepay any principal of, premium, if any, interest or other amount payable in respect of any Indebtedness (other than with respect to the Obligations as described in Section 2.3) prior to its maturity or scheduled payment date, as applicable.

7.5 Encumbrance. (a) Create, incur, allow, or suffer any Lien on any of its property, except for Permitted Liens, (b) permit any Collateral to fail to be subject to the first priority security interest granted herein except for Permitted Liens that may have priority by operation of applicable Law or by the terms of a written intercreditor or subordination agreement entered into by Agent, or (c) enter into any agreement, document, instrument or other arrangement (except with or in favor of Agent) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower or any Restricted Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower's or any Restricted Subsidiary's Collateral, except as is otherwise permitted in the definition of "Permitted Liens" herein.

7.6 Maintenance of Collateral Accounts. Maintain any Collateral Account, except pursuant to the terms of Section 6.6 hereof.

7.7 Distributions; Investments; Margin Stock. (a) Pay any dividends (other than (i) dividends payable solely in common stock and (ii) dividends paid to BioCryst by any Subsidiary thereof (or by any Subsidiary of BioCryst to its direct parent entity)) or make any distribution or payment with respect to or redeem, retire or purchase or repurchase any of its equity interests (other than repurchases pursuant to the terms of employee stock purchase plans, employee restricted stock agreements or similar plans), or (b) directly or indirectly make any Investment (including, without limitation, any additional Investment in any Subsidiary) other than Permitted Investments. Without limiting the foregoing, Borrower shall not, and shall not permit any of its Restricted Subsidiaries or any Credit Party to, purchase or carry Margin Stock.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of any Credit Party, except for (a) transactions that are in the Ordinary Course of Business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated Person, (b) transactions permitted by Section 7.7(a) of this Agreement, and (c) transactions exclusively among Credit Parties not otherwise prohibited by this Agreement, including with respect to the Peramivir SPE, by the SPE Covenants.

7.9 Subordinated Debt. (a) Make or permit any payment on any Subordinated Debt, except to the extent expressly permitted to be made pursuant to the terms of the Subordination Agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt other than as may be expressly permitted pursuant to the terms of any applicable Subordination Agreement to which such Subordinated Debt is subject.

7.10 Compliance. Become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940, as amended or undertake as one of its important activities extending credit to purchase or carry Margin Stock, or use the proceeds of any Credit Extension for that purpose; (a) fail, or permit any ERISA Affiliate to fail, to meet "minimum funding standards" (as defined in Section 412 of the Internal Revenue Code or Section 302 of ERISA), whether or not waived, (b) permit (with respect to any Credit Party, any Restricted Subsidiary of any Credit Party or any ERISA Affiliate thereof) a "reportable event" as defined in Section 4043(c) of ERISA (or the regulations issued thereunder) (other than an event for which the thirty (30)-day notice requirement is waived) to occur, (c) engage in any "prohibited transaction" within the meaning of Section 406 of ERISA or Section 4975 of the Internal Revenue Code that could result in liability in excess of *** in the aggregate or that could reasonably be expected to result in a Material Adverse Change; (d) fail to comply with the Federal Fair Labor Standards Act that could result in liability in excess of *** in the aggregate or that could reasonably be expected to result in a Material Adverse Change; (e) permit (with respect to any Credit Party, any Restricted Subsidiary of any Credit Party or any ERISA Affiliate thereof) the withdrawal from participation in any Pension Plan, or (f) incur, or permit any Credit Party, any Restricted Subsidiary of any Credit Party or any ERISA Affiliate thereof to incur, any liability under Title IV of ERISA (other than for PBGC premiums due but not delinquent under Section 4007 of ERISA).

7.11 Amendments to Organization Documents and Material Agreements. Amend, modify or waive any provision of (a) any Material Agreement in a manner that is materially adverse to Borrower or its Restricted Subsidiaries, that is adverse to Agent or any Lender, that pertains to rights to assign or grant a security interest in such Material Agreement or that could or could reasonably be expected to result in a Material Adverse Change, or (b) any of its organizational documents (other than a change in registered agents, or a change that could not adversely affect the rights of Agent or Lenders hereunder, but, for the avoidance of doubt, under no circumstances a change of its name, type of organization or jurisdiction of organization), in each case, without the prior written consent of Agent. Borrower shall provide to Agent copies of all amendments, waivers and modifications of any Material Agreement or organizational documents. Without limiting the foregoing, no Borrower shall allow the Intercompany License Agreement to be terminated without Agent's prior written consent.

7.12 Compliance with Anti-Terrorism Laws. Directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. Borrower shall immediately notify Agent if Borrower has knowledge that Borrower or any Subsidiary, Affiliate or direct or indirect parent of a joint venture is listed on the OFAC Lists or (a) is convicted on, (b) pleads *nolo contendere* to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering. Borrower will not, nor will Borrower permit any Subsidiary, Affiliate or direct or indirect parent of a joint venture to, directly or indirectly, (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law. Agent hereby notifies Borrower that pursuant to the requirements of Anti-Terrorism Laws, and Agent's policies and practices, Agent is required to obtain, verify and record certain information and documentation that identifies Borrower and its principals, which information includes the name and address of Borrower and its principals and such other information that will allow Agent to identify such party in accordance with Anti-Terrorism Laws.

7.13 Joint Ventures.

(a) No Borrower will, nor will it permit any Subsidiary to, commingle any of its assets (including any bank accounts, cash or cash equivalents) with the assets of any joint venture, including any Permitted Joint Venture.

(b) No Borrower will, nor will it permit any Subsidiary to, enter into or own any interest in a joint venture that is not itself a corporation or limited liability company or other legal entity in respect of which the equity holders are not liable for the obligations of such entity as a matter of law.

7.14 Inactive Subsidiaries. Borrowers shall not permit any Inactive Subsidiary to (a) conduct any business operations (including the operations of a holding company, other than as a holding company of other Inactive Subsidiaries), (b) have any cash or other assets (including any licenses or permits) or any liabilities (other than de minimis assets or liabilities as required by Applicable Law and other than certain trademarks not material to the Borrower's business), (c) own any capital stock of any Credit Party or any other Subsidiary of any Credit Party, or (d) operate any part of Borrowers' business. For the avoidance of doubt, Borrower shall not make any Investment in or any asset Transfer to any Inactive Subsidiary.

8. **RESERVED**

9. **RESERVED**

10. **EVENTS OF DEFAULT**

10.1 Events of Default. The occurrence of any of the following conditions and/or events, whether voluntary or involuntary, by operation of law or otherwise, shall constitute an "**Event of Default**" and Credit Parties shall thereupon be in default under this Agreement and each of the other Financing Documents:

(a) Borrower fails to (i) make any payment of principal or interest on any Credit Extension on its due date, or (ii) pay any other Obligations within *** after such Obligations are due and payable (which *** grace period shall not apply to payments due on the Maturity Date or the date of acceleration pursuant to Section 10.2 hereof);

(b) any Credit Party defaults in the performance of or compliance with any term contained in this Agreement or in any other Financing Document (other than occurrences described in other provisions of this Section 10.1 for which a different grace or cure period is specified or for which no grace or cure period is specified and thereby constitute immediate Events of Default) and such default is not remedied by the Credit Party or waived by Agent within *** after the earlier of (i) the date of receipt by Borrower of notice from Agent or the Required Lenders of such default, or (ii) the date an officer of such Credit Party becomes aware, or through the exercise of reasonable diligence should have become aware, of such default; *provided*, *however*, that if the default cannot by its nature be cured within the *** period or cannot after diligent attempts by Borrower be cured within such *** period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional reasonable period (which shall not in any case exceed *** following such initial *** period) to attempt to cure such default, and within such reasonable time period the failure to have cured such default shall not be deemed an Event of Default;

(c) any Credit Party defaults in the performance of or compliance with any term contained in Section 6.2, 6.4, 6.5, 6.6, 6.7(a), 6.8, 6.9, 6.10, 6.13, 6.15, 6.16, 6.18 or Article 7;

(d) any representation, warranty, certification or written statement made by any Credit Party, and holder of Subordinated Debt or any other Person acting for or on behalf of a Credit Party or a holder of Subordinated Debt (i) in any Financing Document or in any certificate, financial statement or other document delivered pursuant to any Financing Document, or (ii) to induce Agent and/or Lenders to enter into this Agreement or any Financing Document is incorrect in any respect (or in any material respect if such representation, warranty, certification or written statement is not by its terms already qualified as to materiality) when made (or deemed made);

(e) (i) any Credit Party or any Restricted Subsidiary thereof defaults under or breaches any Material Agreement (after any applicable grace period contained therein), or a Material Agreement shall be terminated by a third party or parties thereto prior to the expiration thereof, or there is a loss of a material right of a Credit Party under any Material Agreement to which it is a party, in each case which could reasonably be expected to result in a Material Adverse Change, (ii) (A) any Credit Party or an Restricted Subsidiary thereof fails to make (after any applicable grace period) any payment when due (whether due because of scheduled maturity, required prepayment provisions, acceleration, demand or otherwise) on any Indebtedness (other than the Obligations) of such Credit Party or such Restricted Subsidiary having an aggregate principal amount (including undrawn committed or available amounts and including amounts owing to all creditors under any combined or syndicated credit arrangement) of more than *** ("**Material Indebtedness**"), (B) any other event shall occur or condition shall exist under any contractual obligation relating to any such Material Indebtedness, if the effect of such event or condition is to accelerate, or to permit the acceleration of (without regard to any subordination terms with respect thereto), the maturity of such Material Indebtedness or (C) any such Material Indebtedness shall become or be declared to be due and payable, or be required to be prepaid, redeemed, defeased or repurchased (other than by a regularly scheduled required prepayment), prior to the stated maturity thereof, (iii) any Credit Party defaults (beyond any applicable grace period) under any obligation for payments due or otherwise under any lease agreement for such Credit Party's principal place of business or any place of business that meets the criteria for the requirement of an Access Agreement under Section 7.2 or for which an Access Agreement exists or was required to be delivered, (iv) the occurrence of any breach or default under any terms or provisions of any Subordinated Debt Document or under any agreement subordinating the Subordinated Debt to all or any portion of the Obligations, or the occurrence of any event requiring the prepayment of any Subordinated Debt, or the delivery of any notice with respect to any Subordinated Debt or pursuant to any Subordination Agreement that triggers the start of any standstill or similar period under any Subordination Agreement, or (v) Borrower makes any payment on account of any Indebtedness that has been subordinated to any of the Obligations, other than payments specifically permitted by the terms of such subordination;

(f) (i) any Credit Party or any Restricted Subsidiary shall generally not pay its debts as such debts become due, shall admit in writing its inability to pay its debts generally, (ii) any Credit Party or any Restricted Subsidiary shall make a general assignment for the benefit of creditors, or shall cease doing business as a going concern, (iii) any proceeding shall be instituted by or against any Credit Party or any Restricted Subsidiary in any jurisdiction seeking to adjudicate it a bankrupt or insolvent or seeking liquidation, winding up, reorganization, arrangement, adjustment, protection, relief, composition of it or its debts or any similar order, in each case under any law relating to bankruptcy, insolvency or reorganization or relief of debtors or seeking the entry of an order for relief or the appointment of a custodian, receiver, trustee, conservator, liquidating agent, liquidator, other similar official or other official with similar powers, in each case for it or for any substantial part of its property and, in the case of any such proceedings instituted against (but not by or with the consent of) such Credit Party or Restricted Subsidiary, either such proceedings shall remain undismissed or unstayed for a period of *** or more or any action sought in such proceedings shall occur or (iv) any Credit Party or any Restricted Subsidiary thereof shall take any corporate or similar action or any other action to authorize any action described in clause (i)-(iii) above;

(g) (i) the service of process seeking to attach, execute or levy upon, seize or confiscate any Collateral Account, any Intellectual Property, or any funds of any Credit Party on deposit with Agent, any Lender or any Affiliate of Agent or any Lender, or (ii) a notice of lien, levy, or assessment is filed against any assets of a Credit Party by any government agency, and the same under clauses (i) and (ii) hereof are not discharged or stayed (whether through the posting of a bond or otherwise) prior to the earlier to occur of *** after the occurrence thereof or such action becoming effective;

(h) (i) any court order enjoins, restrains, or prevents Borrower from conducting any material part of its business, (ii) the institution by any Governmental Authority of criminal proceedings against any Credit Party or its Restricted Subsidiary, or (iii) one (1) or more judgments or orders for the payment of money (not paid or fully covered by insurance and as to which the relevant insurance company has acknowledged coverage in writing) aggregating in excess of *** shall be rendered against any or all Credit Parties or their Restricted Subsidiaries and either (A) enforcement proceedings shall have been commenced by any creditor upon any such judgments or orders, or (B) there shall be any period of *** during which a stay of enforcement of any such judgments or orders, by reason of a pending appeal, bond or otherwise, shall not be in effect,

(i) any Lien created by any of the Financing Documents shall at any time fail to constitute a valid and perfected Lien on all of the Collateral purported to be encumbered thereby, subject to no prior or equal Lien except Permitted Liens, or any Credit Party shall so assert; any provision of any Financing Document shall fail to be valid and binding on, or enforceable against, a Credit Party, or any Credit Party shall so assert;

(j) (i) a Change in Control occurs or (ii) any Credit Party or direct or indirect equity owner in a Credit Party shall enter into an agreement which contemplates a Change in Control (unless such agreement is either (A) non-binding on such Credit Party or (B) provides for, as a condition precedent to the consummation of such agreement, either (I) the indefeasible payment in full in cash of all Obligations or (II) the consent of Agent and Lenders);

(k) any Required Permit shall have been (i) revoked, rescinded, suspended, modified in a materially adverse manner or not renewed in the Ordinary Course of Business for a full term, or (ii) subject to any decision by a Governmental Authority that designates a hearing with respect to any applications for renewal of any of such Required Permit or that could result in the Governmental Authority taking any of the actions described in clause (i) above, and such decision or such revocation, rescission, suspension, modification or non-renewal results in, or could reasonably be expected to result in, a Material Adverse Change;

(l) (i) the voluntary withdrawal or institution of any action or proceeding by the FDA or similar Governmental Authority to order the withdrawal of the RAPIVAB Product from the market in the United States, Canada, or Europe, or to enjoin Borrower, its Restricted Subsidiaries or any representative of Borrower or its Restricted Subsidiaries from manufacturing, marketing, selling or distributing any RAPIVAB Product in the United States, Canada, or Europe, (ii) the voluntary withdrawal or institution of any action or proceeding by the FDA or similar Governmental Authority to order the withdrawal of any other Product or Product category from the market or to enjoin Borrower, its Restricted Subsidiaries or any representative of Borrower or its Restricted Subsidiaries from manufacturing, marketing, selling or distributing such other Product or Product category, which could reasonably be expected to result in a Material Adverse Change, (iii) the institution of any action or proceeding by any DEA, FDA, or any other Governmental Authority to revoke, suspend, reject, withdraw, limit, or restrict any Regulatory Required Permit held by Borrower, its Restricted Subsidiaries or any representative of Borrower or its Restricted Subsidiaries, which, in each case, has or could reasonably be expected to result in a Material Adverse Change, (iv) the commencement of any enforcement action against Borrower, its Restricted Subsidiaries or any representative of Borrower or its Restricted Subsidiaries (with respect to the business of Borrower or its Subsidiaries) by DEA, FDA, or any other Governmental Authority which has or could reasonably be expected to result in a Material Adverse Change, or (v) the occurrence of adverse test results in connection with a Product which could reasonably be expected to result in a Material Adverse Change;

(m) if Borrower is or becomes an entity whose equity is registered with the SEC, and/or is publicly traded on and/or registered with a public securities exchange, Borrower's equity fails to remain registered with the SEC in good standing, and/or such equity fails to remain publicly traded on and registered with a public securities exchange; or

(n) the occurrence of any fact, event or circumstance that could reasonably be expected to result in a Material Adverse Change.

All cure periods provided for in this Section 10.1 shall run concurrently with any cure period provided for in any applicable Financing Documents under which the default occurred.

10.2 Rights and Remedies.

(a) Upon the occurrence and during the continuance of an Event of Default, Agent may, and at the written direction of any Lender shall, without notice or demand, do any or all of the following: (i) deliver notice of the Event of Default to Borrower, (ii) by notice to Borrower declare all Obligations immediately due and payable (but if an Event of Default described in Section 10.1(f) occurs all Obligations shall be immediately due and payable without any action by Agent or the Lenders), or (iii) by notice to Borrower suspend or terminate the obligations, if any, of the Lenders to advance money or extend credit for Borrower's benefit under this Agreement or under any other agreement between any Credit Party and Agent and/or the Lenders (but if an Event of Default described in Section 10.1(f) occurs all obligations, if any, of the Lenders to advance money or extend credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Agent and/or the Lenders shall be immediately terminated without any action by Agent or the Lenders).

(b) Without limiting the rights of Agent and the Lenders set forth in Section 10.2(a) above, upon the occurrence and during the continuance of an Event of Default, Agent shall have the right, without notice or demand, to do any or all of the following:

(i) with or without legal process, enter any premises where the Collateral may be and take possession of and remove the Collateral from the premises or store it on the premises, and foreclose upon and/or sell, lease or liquidate, the Collateral, in whole or in part;

(ii) apply to the Obligations (A) any balances and deposits of any Credit Party that Agent or any Lender or any Affiliate of Agent or a Lender holds or controls, or (B) any amount held or controlled by Agent or any Lender or any Affiliate of Agent or a Lender owing to or for the credit or the account of any Credit Party;

(iii) settle, compromise or adjust and grant releases with respect to disputes and claims directly with Account Debtors for amounts on terms and in any order that Agent considers advisable, notify any Person owing any Credit Party money of Agent's security interest in such funds, and verify the amount of such Account;

(iv) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral. Borrower shall assemble the Collateral if Agent requests and make it available as Agent designates. Agent may also render any or all of the Collateral unusable at a Credit Party's premises and may dispose of such Collateral on such premises without liability for rent or costs. Borrower grants Agent a license to enter and occupy any of its premises, without charge, to exercise any of Agent's rights or remedies;

(v) pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred;

(vi) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, and/or advertise for sale, the Collateral. Agent is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's labels, patents, copyrights, mask works, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral (and including in such license access to all media in which any of the licensed items may be recorded or stored and to all computer software and programs used for the compilation or printout thereof) and, in connection with Agent's exercise of its rights under this Article 10, Borrower's rights under all licenses and all franchise agreements shall be deemed to inure to Agent for the benefit of the Lenders;

(vii) place a "hold" on any account maintained with Agent or the Lenders or any Affiliate of Agent or a Lender and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(viii) demand and receive possession of the Books of Borrower and the other Credit Parties; and

(ix) exercise all other rights and remedies available to Agent under the Financing Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof).

10.3 Notices. Any notice that Agent is required to give to a Credit Party under the UCC of the time and place of any public sale or the time after which any private sale or other intended disposition of the Collateral is to be made shall be deemed to constitute reasonable notice if such notice is given in accordance with this Agreement at least five (5) days prior to such action.

10.4 Protective Payments. If any Credit Party fails to pay or perform any covenant or obligation under this Agreement or any other Financing Document, Agent may pay or perform such covenant or obligation, and all amounts so paid by Agent are Protective Advances and immediately due and payable, bearing interest at the then highest applicable rate for the Credit Facilities hereunder, and secured by the Collateral. No such payments or performance by Agent shall be construed as an agreement to make similar payments or performance in the future or constitute Agent's waiver of any Event of Default.

10.5 Liability for Collateral No Waiver; Remedies Cumulative. So long as Agent and the Lenders comply with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Agent and the Lenders, Agent and the Lenders shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Borrower bears all risk of loss, damage or destruction of the Collateral. Agent's failure, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Financing Document shall not waive, affect, or diminish any right of Agent thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by Agent and then is only effective for the specific instance and purpose for which it is given. Agent's rights and remedies under this Agreement and the other Financing Documents are cumulative. Agent has all rights and remedies provided under the Code, by Law, or in equity. Agent's exercise of one (1) right or remedy is not an election, and Agent's waiver of any Event of Default is not a continuing waiver. Agent's delay in exercising any remedy is not a waiver, election, or acquiescence.

10.6 Application of Payments and Proceeds. Notwithstanding anything to the contrary contained in this Agreement, upon the occurrence and during the continuance of an Event of Default, (a) Borrower, for itself and the other Credit Parties, irrevocably waives the right to direct the application of any and all payments at any time or times thereafter received by Agent from or on behalf of Borrower of all or any part of the Obligations, and, as between Borrower and the Credit Parties on the one hand and Agent and the Lenders on the other, Agent shall have the continuing and exclusive right to apply and to reapply any and all payments received against the Obligations in such manner as Agent may deem advisable notwithstanding any previous application by Agent, and (b) unless Agent and the Lenders shall agree otherwise, the proceeds of any sale of, or other realization upon all or any part of the Collateral shall be applied: *first*, to the Protective Advances; *second*, to accrued and unpaid interest on the Obligations (including any interest which, but for the provisions of the United States Bankruptcy Code, would have accrued on such amounts); *third*, to the principal amount of the Obligations outstanding; and *fourth*, to any other indebtedness or obligations of the Credit Parties owing to Agent or any Lender under the Financing Documents. Borrower shall remain fully liable for any deficiency. Any balance remaining shall be delivered to Borrower or to whomever may be lawfully entitled to receive such balance or as a court of competent jurisdiction may direct. Unless Agent and the Lenders shall agree otherwise, in carrying out the foregoing, (x) amounts received shall be applied in the numerical order provided until exhausted prior to the application to the next succeeding category, and (y) each of the Persons entitled to receive a payment in any particular category shall receive an amount equal to its pro rata share of amounts available to be applied pursuant thereto for such category.

10.7 Waivers.

(a) Except as otherwise provided for in this Agreement and to the fullest extent permitted by applicable law, each Borrower waives: (i) presentment, demand and protest, and notice of presentment, dishonor, intent to accelerate, acceleration, protest, default, nonpayment, maturity, release, compromise, settlement, extension or renewal of any or all Financing Documents and hereby ratifies and confirms whatever Agent or the Lenders may do in this regard; (ii) all rights to notice and a hearing prior to Agent's or any Lender's entry upon the premises of a Borrower, the taking possession or control of, or to Agent's or any Lender's replevy, attachment or levy upon, any Collateral or any bond or security which might be required by any court prior to allowing Agent or any Lender to exercise any of its remedies; and (iii) the benefit of all valuation, appraisal and exemption Laws. Each Borrower acknowledges that it has been advised by counsel of its choices and decisions with respect to this Agreement, the other Financing Documents and the transactions evidenced hereby and thereby.

(b) Each Borrower for itself and all of its successors and assigns, (i) agrees that its liability shall not be in any manner affected by any indulgence, extension of time, renewal, waiver, or modification granted or consented to by any Lender; (ii) consents to any indulgences and all extensions of time, renewals, waivers, or modifications that may be granted by Agent or any Lender with respect to the payment or other provisions of the Financing Documents, and to any substitution, exchange or release of the Collateral, or any part thereof, with or without substitution, and agrees to the addition or release of Borrower, endorsers, guarantors, or sureties, or whether primarily or secondarily liable, (without notice to any other Borrower and without affecting its liability hereunder); (iii) agrees that its liability shall be unconditional and without regard to the liability of any other Borrower, Agent or any Lender for any tax on the indebtedness; and (iv) to the fullest extent permitted by law, expressly waives the benefit of any statute or rule of law or equity now provided, or which may hereafter be provided, which would produce a result contrary to or in conflict with the foregoing.

(c) To the extent that Agent or any Lender may have acquiesced in any noncompliance with any requirements or conditions precedent to the closing of the Credit Facilities or to any subsequent disbursement of Credit Extensions, such acquiescence shall not be deemed to constitute a waiver by Agent or any Lender of such requirements with respect to any future Credit Extensions and Agent may at any time after such acquiescence require Borrower to comply with all such requirements. Any forbearance by Agent or a Lender in exercising any right or remedy under any of the Financing Documents, or otherwise afforded by applicable law, including any failure to accelerate the maturity date of the Credit Facilities, shall not be a waiver of or preclude the exercise of any right or remedy nor shall it serve as a novation of the Financing Documents or as a reinstatement of the Obligations or a waiver of such right of acceleration or the right to insist upon strict compliance of the terms of the Financing Documents. Agent's or any Lender's acceptance of payment of any sum secured by any of the Financing Documents after the due date of such payment shall not be a waiver of Agent's and such Lender's right to either require prompt payment when due of all other sums so secured or to declare a default for failure to make prompt payment. The procurement of insurance or the payment of taxes or other Liens or charges by Agent as the result of an Event of Default shall not be a waiver of Agent's right to accelerate the maturity of the Obligations, nor shall Agent's receipt of any condemnation awards, insurance proceeds, or damages under this Agreement operate to cure or waive any Credit Party's default in payment of sums secured by any of the Financing Documents.

(d) Without limiting the generality of anything contained in this Agreement or the other Financing Documents, each Borrower agrees that if an Event of Default is continuing (i) Agent and the Lenders shall not be subject to any "one action" or "election of remedies" law or rule, and (ii) all Liens and other rights, remedies or privileges provided to Agent or the Lenders shall remain in full force and effect until Agent or the Lenders have exhausted all remedies against the Collateral and any other properties owned by Borrower and the Financing Documents and other security instruments or agreements securing the Obligations have been foreclosed, sold and/or otherwise realized upon in satisfaction of Borrower's obligations under the Financing Documents.

(e) Neither Agent nor any Lender shall be under any obligation to marshal any assets in payment of any or all of the Obligations. Nothing contained herein or in any other Financing Document shall be construed as requiring Agent or any Lender to resort to any part of the Collateral for the satisfaction of any of Borrower's obligations under the Financing Documents in preference or priority to any other Collateral, and Agent may seek satisfaction out of all of the Collateral or any part thereof, in its absolute discretion in respect of Borrower's obligations under the Financing Documents. To the fullest extent permitted by law, each Borrower, for itself and its successors and assigns, waives in the event of foreclosure of any or all of the Collateral any equitable right otherwise available to any Credit Party which would require the separate sale of any of the Collateral or require Agent or the Lenders to exhaust their remedies against any part of the Collateral before proceeding against any other part of the Collateral; and further in the event of such foreclosure each Borrower does hereby expressly consent to and authorize, at the option of Agent, the foreclosure and sale either separately or together of each part of the Collateral.

10.8 Injunctive Relief. The parties acknowledge and agree that, in the event of a breach or threatened breach of any Credit Party's obligations under any Financing Documents, Agent and the Lenders may have no adequate remedy in money damages and, accordingly, shall be entitled to an injunction (including, without limitation, a temporary restraining order, preliminary injunction, writ of attachment, or order compelling an audit) against such breach or threatened breach, including, without limitation, maintaining any cash management and collection procedure described herein. However, no specification in this Agreement of a specific legal or equitable remedy shall be construed as a waiver or prohibition against any other legal or equitable remedies in the event of a breach or threatened breach of any provision of this Agreement. Each Credit Party waives, to the fullest extent permitted by law, the requirement of the posting of any bond in connection with such injunctive relief. By joining in the Financing Documents as a Credit Party, each Credit Party specifically joins in this Section 10.8 as if this Section 10.8 were a part of each Financing Document executed by such Credit Party.

11. NOTICES

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Financing Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and five (5) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by electronic mail (if an email address is specified herein) or facsimile transmission; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, facsimile number, or email address indicated below. Any of Agent, a Lender or Borrower may change its mailing or electronic mail address or facsimile number by giving the other party written notice thereof in accordance with the terms of this Article 11.

If to Borrower:

BioCryst Pharmaceuticals, Inc.
4505 Emperor Blvd, Suite 200
Durham, NC 27703
Attention: Thomas R. Staab, II; Alane Barnes
Fax: 919-859-1314
Email: tstaab@biocryst.com; abarnes@biocryst.com

If to Agent or to MidCap (or any of its Affiliates or Approved Funds) as a Lender:

MidCap Financial Trust
c/o MidCap Financial Services, LLC, as servicer
7255 Woodmont Ave, Suite 200
Bethesda, MD 20814
Attn: Account Manager for BioCryst transaction
Fax: 301-941-1450
Email: notices@midcapfinancial.com

With a copy to:

MidCap Financial Trust
c/o MidCap Financial Services, LLC, as servicer
7255 Woodmont Ave, Suite 200
Bethesda, MD 20814
Attn: Legal
Fax: 301-941-1450
Email: legalnotices@midcapfinancial.com

If to any Lender other than MidCap: at the address set forth on the signature pages to this Agreement or provided as a notice address for such in connection with any assignment hereunder.

12. **CHOICE OF LAW, VENUE AND JURY TRIAL WAIVER**

12.1 THIS AGREEMENT, EACH SECURED PROMISSORY NOTE AND EACH OTHER FINANCING DOCUMENT (EXCLUDING THOSE FINANCING DOCUMENTS THAT BY THEIR OWN TERMS ARE EXPRESSLY GOVERNED BY THE LAWS OF ANOTHER JURISDICTION), AND THE RIGHTS, REMEDIES AND OBLIGATIONS OF THE PARTIES HERETO AND THERETO, AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AGREEMENT OR SUCH FINANCING DOCUMENT (EXCLUDING THOSE FINANCING DOCUMENTS THAT BY THEIR OWN TERMS ARE EXPRESSLY GOVERNED BY THE LAWS OF ANOTHER JURISDICTION), THE RELATIONSHIP OF THE PARTIES, AND/OR THE INTERPRETATION AND ENFORCEMENT OF THE RIGHTS AND DUTIES OF THE PARTIES AND ALL OTHER MATTERS RELATING HERETO, THERETO OR ARISING THEREFROM (WHETHER SOUNDING IN CONTRACT LAW, TORT LAW OR OTHERWISE), SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF MARYLAND, WITHOUT REFERENCE TO ITS CONFLICT OF LAW PROVISIONS. NOTWITHSTANDING THE FOREGOING, AGENT AND THE LENDERS SHALL HAVE THE RIGHT TO BRING ANY ACTION OR PROCEEDING AGAINST BORROWER OR ITS PROPERTY IN THE COURTS OF ANY OTHER JURISDICTION WHICH AGENT AND THE LENDERS (IN ACCORDANCE WITH THE PROVISIONS OF SECTION 12.1) DEEM NECESSARY OR APPROPRIATE TO REALIZE ON THE COLLATERAL OR TO OTHERWISE ENFORCE AGENT'S AND THE LENDERS' RIGHTS AGAINST BORROWER OR ITS PROPERTY. BORROWER EXPRESSLY SUBMITS AND CONSENTS IN ADVANCE TO THE JURISDICTION OF THE FEDERAL AND STATE COURTS LOCATED IN THE STATE OF MARYLAND AND ANY SUCH OTHER JURISDICTION IN ANY ACTION OR SUIT COMMENCED IN ANY SUCH COURT, AND BORROWER HEREBY WAIVES ANY OBJECTION THAT IT MAY HAVE BASED UPON LACK OF PERSONAL JURISDICTION, IMPROPER VENUE, OR FORUM NON CONVENIENS AND HEREBY CONSENTS TO THE GRANTING OF SUCH LEGAL OR EQUITABLE RELIEF AS IS DEEMED APPROPRIATE BY SUCH COURT. BORROWER HEREBY WAIVES PERSONAL SERVICE OF THE SUMMONS, COMPLAINTS, AND OTHER PROCESS ISSUED IN SUCH ACTION OR SUIT AND AGREES THAT SERVICE OF SUCH SUMMONS, COMPLAINTS, AND OTHER PROCESS MAY BE MADE BY REGISTERED OR CERTIFIED MAIL ADDRESSED TO BORROWER AT THE ADDRESS SET FORTH IN ARTICLE 11 OF THIS AGREEMENT AND THAT SERVICE SO MADE SHALL BE DEEMED COMPLETED UPON THE EARLIER TO OCCUR OF BORROWER'S ACTUAL RECEIPT THEREOF OR THREE (3) DAYS AFTER DEPOSIT IN THE U.S. MAIL, PROPER POSTAGE PREPAID.

12.2 TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, BORROWER, AGENT AND THE LENDERS EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE FINANCING DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR BOTH PARTIES TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

12.3 Borrower, Agent and each Lender agree that each Credit Extension (including those made on the Original Closing Date and the Closing Date) shall be deemed to be made in, and the transactions contemplated hereunder and in any other Financing Document shall be deemed to have been performed in, the State of Maryland.

13. GENERAL PROVISIONS

13.1 Successors and Assigns.

(a) This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not assign this Agreement or any rights or obligations under it without Agent's prior written consent (which may be granted or withheld in Agent's discretion). Any Lender may at any time assign to one (1) or more Eligible Assignees all or any portion of such Lender's Applicable Commitment and/or Credit Extensions, together with all related obligations of such Lender hereunder. Borrower and Agent shall be entitled to continue to deal solely and directly with such Lender in connection with the interests so assigned until Agent shall have received and accepted an effective assignment agreement in form and substance acceptable to Agent, executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such Eligible Assignee as Agent reasonably shall require. Notwithstanding anything set forth in this Agreement to the contrary, any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank; *provided, however,* that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto. If requested by Agent, Borrower agrees to (i) execute any documents reasonably required to effectuate and acknowledge each assignment of an Applicable Commitment or Credit Extension to an assignee hereunder, (ii) make Borrower's management available to meet with Agent and prospective participants and assignees of Applicable Commitments or Credit Extensions and (iii) assist Agent or the Lenders in the preparation of information relating to the financial affairs of Borrower as any prospective participant or assignee of an Applicable Commitment or Credit Extension reasonably may request.

(b) From and after the date on which the conditions described above have been met, (i) such Eligible Assignee shall be deemed automatically to have become a party hereto and, to the extent of the interests assigned to such Eligible Assignee pursuant to such assignment agreement, shall have the rights and obligations of a Lender hereunder, and (ii) the assigning Lender, to the extent that rights and obligations hereunder have been assigned by it pursuant to such assignment agreement, shall be released from its rights and obligations hereunder (other than those that survive termination). Upon the request of the Eligible Assignee (and, as applicable, the assigning Lender) pursuant to an effective assignment agreement, each Borrower shall execute and deliver to Agent for delivery to the Eligible Assignee (and, as applicable, the assigning Lender) secured notes in the aggregate principal amount of the Eligible Assignee's Credit Extensions or Applicable Commitments (and, as applicable, secured promissory notes in the principal amount of that portion of the principal amount of the Credit Extensions or Applicable Commitments retained by the assigning Lender).

(c) Agent, acting solely for this purpose as an agent of Borrower, shall maintain at its offices located in Bethesda, Maryland a copy of each assignment agreement delivered to it and a Register for the recordation of the names and addresses of each Lender, and the commitments of, and principal amount (and stated interest) of the Credit Extensions owing to, such Lender pursuant to the terms hereof (the "**Register**"). The entries in such Register shall be conclusive, absent manifest error, and Borrower, Agent and the Lenders may treat each Person whose name is recorded therein pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. Such Register shall be available for inspection by Borrower and any Lender, at any reasonable time upon reasonable prior notice to Agent. Each Lender that sells a participation shall, acting solely for this purpose as an agent of Borrower maintain a register on which it enters the name and address of each participant and the principal amounts (and stated interest) of each participant's interest in the Obligations (each, a "**Participant Register**"). The entries in the Participant Registers shall be conclusive, absent manifest error. Each Participant Register shall be available for inspection by Borrower and Agent at any reasonable time upon reasonable prior notice to the applicable Lender; *provided* that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any participant or any information relating to a participant's interest in any commitments, loans, letters of credit or its other obligations under any Financing Document) to any Person (including Borrower) except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. For the avoidance of doubt, Agent (in its capacity as Agent) shall have no responsibility for maintaining a participant register.

(d) Notwithstanding anything to the contrary contained in this Agreement, the Credit Extensions (including any Secured Promissory Notes evidencing such Credit Extensions) are registered obligations, the right, title and interest of the Lenders and their assignees in and to such Credit Extensions shall be transferable only upon notation of such transfer in the Register and no assignment thereof shall be effective until recorded therein. This Agreement shall be construed so that the Credit Extensions are at all times maintained in "registered form" within the meaning of Sections 163(f), 871(h)(2) and 881(c)(2) of the IRC and Section 5f.103-1(c) of the United States Treasury Regulations.

13.2 Indemnification.

(a) Borrower hereby agrees to promptly pay (i) (A) all costs and expenses of Agent (including, without limitation, the costs, expenses and reasonable fees of counsel to, and independent appraisers and consultants retained by, Agent) in connection with the examination, review, due diligence investigation, documentation, negotiation, closing and syndication of the transactions contemplated by the Financing Documents, and in connection with the continued administration of the Financing Documents including (1) any amendments, modifications, consents and waivers to and/or under any and all Financing Documents, and (2) any periodic public record searches conducted by or at the request of Agent (including, without limitation, title investigations, UCC searches, fixture filing searches, judgment, pending litigation and tax lien searches and searches of applicable corporate, limited liability, partnership and related records concerning the continued existence, organization and good standing of certain Persons), and (B) costs and expenses of Agent in connection with the performance by Agent of its rights and remedies under the Financing Documents; (ii) without limitation of the preceding clause (i), all costs and expenses of Agent in connection with the creation, perfection and maintenance of Liens pursuant to the Financing Documents; (iii) without limitation of the preceding clause (i), all costs and expenses of Agent in connection with (A) protecting, storing, insuring, handling, maintaining or selling any Collateral, (B) any litigation, dispute, suit or proceeding relating to any Financing Document, and (C) any workout, collection, bankruptcy, insolvency and other enforcement proceedings under any and all of the Financing Documents; (iv) without limitation of the preceding clause (i), all costs and expenses of Agent in connection with Agent's reservation of funds in anticipation of the funding of the Credit Extensions to be made hereunder; and (v) all costs and expenses incurred by Agent or the Lenders in connection with any litigation, dispute, suit or proceeding relating to any Financing Document and in connection with any workout, collection, bankruptcy, insolvency and other enforcement proceedings under any and all Financing Documents, whether or not Agent or the Lenders are a party thereto. If Agent or any Lender uses in-house counsel for any of these purposes, Borrower further agrees that the Obligations include reasonable charges for such work commensurate with the fees that would otherwise be charged by outside legal counsel selected by Agent or such Lender for the work performed.

(b) Borrower hereby agrees to indemnify, pay and hold harmless Agent and the Lenders and the officers, directors, employees, trustees, agents, investment advisors, collateral managers, servicers, and counsel of Agent and the Lenders (collectively called the "**Indemnitees**") from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, expenses and disbursements of any kind or nature whatsoever (including the disbursements and reasonable fees of counsel for such Indemnitee) in connection with any investigative, response, remedial, administrative or judicial matter or proceeding, whether or not such Indemnitee shall be designated a party thereto and including any such proceeding initiated by or on behalf of a Credit Party, and the reasonable expenses of investigation by engineers, environmental consultants and similar technical personnel and any commission, fee or compensation claimed by any broker (other than any broker retained by Agent or the Lenders) asserting any right to payment for the transactions contemplated hereby, which may be imposed on, incurred by or asserted against such Indemnitee as a result of or in connection with the transactions contemplated hereby and the use or intended use of the proceeds of the Credit Facilities, except that Borrower shall have no obligation hereunder to an Indemnitee with respect to any liability resulting from the gross negligence or willful misconduct of such Indemnitee, as determined by a final non-appealable judgment of a court of competent jurisdiction. To the extent that the undertaking set forth in the immediately preceding sentence may be unenforceable, Borrower shall contribute the maximum portion which it is permitted to pay and satisfy under applicable Law to the payment and satisfaction of all such Indemnified Liabilities incurred by the Indemnitees or any of them. No Indemnitee shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed by it through telecommunications, electronic or other information transmission systems in connection with this Agreement or the other Financing Documents or the transactions contemplated hereby or thereby.

(c) Notwithstanding any contrary provision in this Agreement, the obligations of Borrower under this Section 13.2 shall survive the payment in full of the Obligations and the termination of this Agreement. NO INDEMNITEE SHALL BE RESPONSIBLE OR LIABLE TO ANY CREDIT PARTY OR TO ANY OTHER PARTY TO ANY FINANCING DOCUMENT, ANY SUCCESSOR, ASSIGNEE OR THIRD PARTY BENEFICIARY OR ANY OTHER PERSON ASSERTING CLAIMS DERIVATIVELY THROUGH SUCH PARTY, FOR INDIRECT, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES WHICH MAY BE ALLEGED AS A RESULT OF CREDIT HAVING BEEN EXTENDED, SUSPENDED OR TERMINATED UNDER THIS AGREEMENT OR ANY OTHER FINANCING DOCUMENT OR AS A RESULT OF ANY OTHER TRANSACTION CONTEMPLATED HEREUNDER OR THEREUNDER.

13.3 Time of Essence. Time is of the essence for the payment and performance of the Obligations in this Agreement.

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

13.5 Correction of Financing Documents. Agent and the Lenders may correct patent errors and fill in any blanks in this Agreement and the other Financing Documents consistent with the agreement of the parties.

13.6 Integration. This Agreement and the other Financing Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Agreement and the Financing Documents merge into this Agreement and the Financing Documents.

13.7 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement. Delivery of an executed signature page of this Agreement by facsimile transmission or electronic transmission shall be as effective as delivery of a manually executed counterpart hereof.

13.8 Survival. All covenants, representations and warranties made in this Agreement continue in full force until this Agreement has terminated pursuant to its terms and all Obligations (other than inchoate indemnity obligations for which no claim has yet been made and any other obligations which, by their terms, are to survive the termination of this Agreement) have been satisfied. The obligation of Borrower in Section 13.2 to indemnify each Lender and Agent shall survive until the statute of limitations with respect to such claim or cause of action shall have run. All powers of attorney and appointments of Agent or any Lender as Borrower's attorney in fact hereunder, and all of Agent's and Lenders' rights and powers in respect thereof, are coupled with an interest, are irrevocable until all Obligations (other than inchoate indemnity obligations for which no claim has yet been made and any other obligations which, by their terms, are to survive the termination of this Agreement) have been fully repaid and performed and Agent's and the Lenders' obligation to provide Credit Extensions terminates.

13.9 Confidentiality. In handling any confidential information of Borrower, each of the Lenders and Agent shall use all reasonable efforts to maintain, in accordance with its customary practices, the confidentiality of information obtained by it pursuant to any Financing Document and designated in writing by any Credit Party as confidential, but disclosure of information may be made: (a) to the Lenders' and Agent's Subsidiaries or Affiliates; (b) to prospective transferees or purchasers of any interest in the Credit Extensions; (c) as required by Law, regulation, subpoena, order or other legal, administrative, governmental or regulatory request; (d) to regulators or as otherwise required in connection with an examination or audit, or to any nationally recognized rating agency; (e) as Agent or any Lender considers appropriate in exercising remedies under the Financing Documents; (f) to financing sources that are advised of the confidential nature of such information and are instructed to keep such information confidential; (g) to third party service providers of the Lenders and/or Agent so long as such service providers are bound to such Lender or Agent by obligations of confidentiality; (h) to the extent necessary or customary for inclusion in league table measurements; and (i) in connection with any litigation or other proceeding to which such Lender or Agent or any of their Affiliates is a party or bound, or to the extent necessary to respond to public statements or disclosures by Credit Parties or their Affiliates referring to a Lender or Agent or any of their Affiliates. Confidential information does not include information that either: (x) is in the public domain or in the Lenders' and/or Agent's possession when disclosed to the Lenders and/or Agent, or becomes part of the public domain after disclosure to the Lenders and/or Agent; or (y) is disclosed to the Lenders and/or Agent by a third party, if the Lenders and/or Agent does not know that the third party is prohibited from disclosing the information. Agent and/or the Lenders may use confidential information for the development of client databases, reporting purposes, and market analysis, so long as Agent and/or the Lenders, as applicable, do not disclose Borrower's identity or the identity of any Person associated with Borrower unless otherwise permitted by this Agreement. The provisions of the immediately preceding sentence shall survive the termination of this Agreement. The agreements provided under this Section 13.9 supersede all prior agreements, understanding, representations, warranties, and negotiations between the parties about the subject matter of this Section 13.9.

13.10 Right of Set-off. Borrower hereby grants to Agent and to each Lender, a lien, security interest and right of set-off as security for all Obligations to Agent and each Lender hereunder, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Agent or the Lenders or any entity under the control of Agent or the Lenders (including an Agent or Lender Affiliate) or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Agent or the Lenders may set-off the same or any part thereof and apply the same to any liability or obligation of Borrower even though unmatured and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE AGENT TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SET-OFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER, ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

13.11 Publicity. Borrower will not directly or indirectly publish, disclose or otherwise use in any public disclosure, advertising material, promotional material, press release or interview, any reference to the name, logo or any trademark of Agent or any Lender or any of their Affiliates or any reference to this Agreement or the financing evidenced hereby, in any case except as required by applicable Law, subpoena or judicial or similar order, in which case Borrower shall endeavor to give Agent prior written notice of such publication or other disclosure. Each Lender and Borrower hereby authorize each Lender to publish the name of such Lender and Borrower, the existence of the financing arrangements referenced under this Agreement, the primary purpose and/or structure of those arrangements, the amount of credit extended under each facility, the title and role of each party to this Agreement, and the total amount of the financing evidenced hereby in any "tombstone", comparable advertisement or press release which such Lender elects to submit for publication. In addition, each Lender and Borrower agree that each Lender may provide lending industry trade organizations with information necessary and customary for inclusion in league table measurements after the Original Closing Date. With respect to any of the foregoing, such authorization shall be subject to such Lender providing Borrower and the other Lenders with an opportunity to review and confer with such Lender regarding, and approve, the contents of any such tombstone, advertisement or information, as applicable, prior to its initial submission for publication, but subsequent publications of the same tombstone, advertisement or information shall not require Borrower's approval.

13.12 No Strict Construction. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

13.13 Approvals. Unless expressly provided herein to the contrary, any approval, consent, waiver or satisfaction of Agent or the Lenders with respect to any matter that is the subject of this Agreement or the other Financing Documents may be granted or withheld by Agent and the Lenders in their sole and absolute discretion and credit judgment.

13.14 Amendments; Required Lenders; Inter-Lender Matters.

(a) No amendment, modification, termination or waiver of any provision of this Agreement or any other Financing Document, no approval or consent thereunder, or any consent to any departure by Borrower therefrom (in each case, other than amendments, waivers, approvals or consents deemed ministerial by Agent), shall in any event be effective unless the same shall be in writing and signed by Borrower, Agent and the Required Lenders. Except as set forth in paragraph (b) below, all such amendments, modifications, terminations or waivers requiring the consent of the "Lenders" shall require the written consent of Required Lenders.

(b) No amendment, modification, termination or waiver of any provision of this Agreement or any other Financing Document shall, unless in writing and signed by Agent and by each Lender directly affected thereby: (i) increase or decrease the Applicable Commitment of any Lender (which shall be deemed to affect all Lenders), (ii) reduce the principal of or rate of interest on any Obligation or the amount of any fees payable hereunder, (iii) postpone the date fixed for or waive any payment of principal of or interest on any Credit Extension, or any fees or reimbursement obligation hereunder, (iv) release all or substantially all of the Collateral, or consent to a transfer of any of the Intellectual Property, in each case, except as otherwise expressly permitted in the Financing Documents (which shall be deemed to affect all Lenders), (v) subordinate the lien granted in favor of Agent securing the Obligations (which shall be deemed to affect all Lenders, except as otherwise provided below), (vi) release a Credit Party from, or consent to a Credit Party's assignment or delegation of, such Credit Party's obligations hereunder and under the other Financing Documents or any Guarantor from its guaranty of the Obligations (which shall be deemed to affect all Lenders) or (vii) amend, modify, terminate or waive this Section 13.14(b) or the definition of "Required Lenders" or "Pro Rata Share" or any other provision hereof specifying the number or percentage of Lenders required to amend, waive or otherwise modify any rights hereunder or make any determination or grant any consent hereunder, without the consent of each Lender. For purposes of the foregoing, no Lender shall be deemed affected by (i) waiver of the imposition of the Default Rate or imposition of the Default Rate to only a portion of the Obligations, (ii) waiver of the accrual of late charges, (iii) waiver of any fee solely payable to Agent under the Financing Documents, (iv) subordination of a lien granted in favor of Agent, *provided* that such subordination is limited to equipment being financed by a third party providing Permitted Indebtedness. Notwithstanding any provision in this Section 13.14 to the contrary, no amendment, modification, termination or waiver affecting or modifying the rights or obligations of Agent hereunder shall be effective unless signed by Agent and Required Lenders.

(c) Agent shall not grant its written consent to any deviation or departure by Borrower or any Credit Party from the provisions of Article 7 without the prior written consent of the Required Lenders. The Required Lenders shall have the right to direct Agent to take any action described in Section 10.2(b). Upon the occurrence of any Event of Default, Agent shall have the right to exercise any and all remedies referenced in Section 10.2 without the written consent of Required Lenders following the occurrence of an "Exigent Circumstance" (as defined below). All matters requiring the satisfaction or acceptance of Agent in the definition of Subordinated Debt shall further require the satisfaction and acceptance of each Required Lender. Any reference in this Agreement to an allocation between or sharing by the Lenders of any right, interest or obligation "ratably," "proportionally" or in similar terms shall refer to Pro Rata Share unless expressly provided otherwise. As used in this Section, "**Exigent Circumstance**" means any event or circumstance that, in the reasonable judgment of Agent, imminently threatens the ability of Agent to realize upon all or any material portion of the Collateral, such as, without limitation, fraudulent removal, concealment, or abscondment thereof, destruction or material waste thereof, or failure of Borrower after reasonable demand to maintain or reinstate adequate casualty insurance coverage, or which, in the judgment of Agent, could reasonably be expected to result in a material diminution in value of the Collateral.

(d) In the event that (i) Borrower or Agent has requested that the Lenders consent to a departure or waiver of any provisions of the Financing Documents or agree to any amendment thereto, (ii) the consent, waiver or amendment in question requires the agreement of each affected Lender or all the Lenders and (iii) the Required Lenders have agreed to such consent, waiver or amendment, then any Lender who does not agree to such consent, waiver or amendment shall be deemed a "Non-Consenting Lender," then the Borrower may, at its sole expense and effort, upon notice to such Non-Consenting Lender and Agent, require such Non-Consenting Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in, and consents required by, Section 13.1), all of its interests, rights (other than its existing rights to payments pursuant to this subsection (h)) and obligations under this Agreement and the related Financing Documents to an Eligible Assignee that shall assume such obligations; provided that: (x) such Non-Consenting Lender shall have received payment of an amount equal to the outstanding principal of its Credit Extensions, accrued interest thereon, accrued fees and all other amounts payable to it hereunder and under the other Financing Documents from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts), (y) such assignment does not conflict with applicable law; and (z) in the case of any assignment resulting from a Lender becoming a Non-Consenting Lender, the applicable assignee shall have consented to the applicable amendment, waiver or consent. A Lender shall not be required to make any such assignment or delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply.

13.15 Borrower Liability. If there is more than one (1) entity comprising Borrower, then (a) Borrower may request Credit Extensions hereunder, ((b) Borrower hereby appoints the other as agent for the other for all purposes hereunder, including with respect to requesting Credit Extensions hereunder, (c) each Borrower shall be jointly and severally obligated to pay and perform all obligations under the Financing Documents, including, but not limited to, the obligation to repay all Credit Extensions made hereunder and all other Obligations, regardless of which Borrower actually receives said Credit Extensions, as if each Borrower directly received all Credit Extensions, and (d) each Borrower waives (1) any suretyship defenses available to it under the Code or any other applicable law, and (2) any right to require the Lenders or Agent to: (A) proceed against Borrower or any other person; (B) proceed against or exhaust any security; or (C) pursue any other remedy.) The Lenders or Agent may exercise or not exercise any right or remedy they have against any Credit Party or any security (including the right to foreclose by judicial or non-judicial sale) without affecting any other Credit Party's liability or any Lien against any other Credit Party's assets. Notwithstanding any other provision of this Agreement or other related document, until the indefeasible payment in cash in full of the Obligations (other than inchoate indemnity obligations for which no claim has yet been made) and termination of the Applicable Commitments, Borrower irrevocably waives all rights that it may have at law or in equity (including, without limitation, any law subrogating Borrower to the rights of the Lenders and Agent under this Agreement) to seek contribution, indemnification or any other form of reimbursement from any other Credit Party, or any other Person now or hereafter primarily or secondarily liable for any of the Obligations, for any payment made by any Credit Party with respect to the Obligations in connection with this Agreement or otherwise and all rights that it might have to benefit from, or to participate in, any security for the Obligations as a result of any payment made by a Credit Party with respect to the Obligations in connection with this Agreement or otherwise. Any agreement providing for indemnification, reimbursement or any other arrangement prohibited under this Section shall be null and void. If any payment is made to a Credit Party in contravention of this Section, such Credit Party shall hold such payment in trust for the Lenders and Agent and such payment shall be promptly delivered to Agent for application to the Obligations, whether matured or unmatured.

13.16 Reinstatement. This Agreement shall remain in full force and effect and continue to be effective should any petition or other proceeding be filed by or against any Credit Party for liquidation or reorganization, should any Credit Party become insolvent or make an assignment for the benefit of any creditor or creditors or should an interim receiver, receiver, receiver and manager or trustee be appointed for all or any significant part of any Credit Party's assets, and shall continue to be effective or to be reinstated, as the case may be, if at any time payment and performance of the Obligations, or any part thereof, is, pursuant to applicable law, rescinded or reduced in amount, or must otherwise be restored or returned by any obligee of the Obligations, whether as a fraudulent preference reviewable transaction or otherwise, all as though such payment or performance had not been made. In the event that any payment, or any part thereof, is rescinded, reduced, restored or returned, the Obligations shall be reinstated and deemed reduced only by such amount paid and not so rescinded, reduced, restored or returned.

13.17 USA PATRIOT Act Notification. Agent (for itself and not on behalf of any Lender) and each Lender hereby notifies each Borrower that, pursuant to the requirements of the USA PATRIOT Act, it is required to obtain, verify and record certain information and documentation that identifies Borrower, which information includes the name and address of Borrower and such other information that will allow Agent or such Lender, as applicable, to identify Borrower in accordance with the USA PATRIOT Act.

13.18 Effect on the Original Credit Agreement; Exhibits and Schedules.

(a) The Original Credit Agreement, including the schedules thereto, is superseded by this Agreement, including the schedules hereto, which has been executed in amendment, restatement and modification of, but not in novation or extinguishment of, the obligations under the Original Credit Agreement. It is the express intention of the parties hereto to reaffirm the indebtedness created under the Original Credit Agreement, which is evidenced by the notes provided for therein and secured by the Collateral. Any and all outstanding amounts under the Original Credit Agreement, including, but not limited to principal, accrued interest, fees and other charges, not otherwise repaid with the proceeds of Credit Facility #2 as of the Closing Date shall be carried over and deemed outstanding under this Agreement.

(b) Each Credit Party reaffirms its obligations under each Financing Document to which it is a party, including but not limited to the Security Documents and the schedules thereto.

(c) Each Credit Party acknowledges and confirms that (i) the Liens and security interests granted pursuant to the Financing Documents secure the indebtedness, liabilities and obligations of the Credit Parties to Agent and the Lenders under the Original Credit Agreement, as amended and restated hereby, and that the term "Obligations" as used in the Financing Documents (or any other term used therein to describe or refer to the indebtedness, liabilities and obligations of the Borrowers and the other Credit Parties to Agent and the Lenders) includes, without limitation, the indebtedness, liabilities and obligations of the Borrower under this Agreement and the Secured Promissory Notes to be delivered hereunder, if any, and under the Original Credit Agreement, as amended and restated hereby, as the same further may be amended, restated, supplemented and/or modified from time to time, and (ii) the grants of Liens under and pursuant to the Financing Documents shall continue unaltered, and each other Financing Document shall continue in full force and effect in accordance with its terms unless otherwise amended by the parties thereto, and the parties hereto hereby ratify and confirm the terms thereof as being in full force and effect and unaltered by this Agreement and all references in the any of the Financing Documents to the "Credit Agreement" shall be deemed to refer to this Agreement.

14. AGENT

14.1 Appointment and Authorization of Agent. Each Lender hereby irrevocably appoints, designates and authorizes Agent to take such action on its behalf under the provisions of this Agreement and each other Financing Document and to exercise such powers and perform such duties as are expressly delegated to it by the terms of this Agreement or any other Financing Document, together with such powers as are reasonably incidental thereto. The provisions of this Article are solely for the benefit of Agent and the Lenders and none of Credit Parties nor any other Person shall have any rights as a third party beneficiary of any of the provisions hereof. The duties of Agent shall be mechanical and administrative in nature. Notwithstanding any provision to the contrary contained elsewhere herein or in any other Financing Document, Agent shall not have any duties or responsibilities, except those expressly set forth herein, nor shall Agent have or be deemed to have any fiduciary relationship with any Lender or participant, and no implied covenants, functions, responsibilities, duties, obligations or liabilities shall be read into this Agreement or any other Financing Document or otherwise exist against Agent. Without limiting the generality of the foregoing sentence, the use of the term "agent" herein and in the other Financing Documents with reference to Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable Law. Instead, such term is used merely as a matter of market custom, and is intended to create or reflect only an administrative relationship between independent contracting parties. Without limiting the generality of the foregoing, Agent shall have the sole and exclusive right and authority (to the exclusion of the Lenders), and is hereby authorized, to (a) act as collateral agent for Agent and each Lender for purposes of the perfection of all liens created by the Financing Documents and all other purposes stated therein, (b) manage, supervise and otherwise deal with the Collateral, (c) take such other action as is necessary or desirable to maintain the perfection and priority of the liens created or purported to be created by the Financing Documents, (d) except as may be otherwise specified in any Financing Document, exercise all remedies given to Agent and the other Lenders with respect to the Collateral, whether under the Financing Documents, applicable law or otherwise and (e) execute any amendment, consent or waiver under the Financing Documents on behalf of any Lender that has consented in writing to such amendment, consent or waiver; *provided*, *however*, that Agent hereby appoints, authorizes and directs each Lender to act as collateral sub-agent for Agent and the Lenders for purposes of the perfection of all liens with respect to the Collateral, including any deposit account maintained by a Credit Party with, and cash and cash equivalents held by, such Lender, and may further authorize and direct the Lenders to take further actions as collateral sub-agents for purposes of enforcing such liens or otherwise to transfer the Collateral subject thereto to Agent, and each Lender hereby agrees to take such further actions to the extent, and only to the extent, so authorized and directed.

14.2 Successor Agent.

(a) Agent may at any time assign its rights, powers, privileges and duties hereunder to (i) another Lender or an Affiliate of Agent or any Lender or any Approved Fund, or (ii) any Person to whom Agent, in its capacity as a Lender, has assigned (or will assign, in conjunction with such assignment of agency rights hereunder) fifty percent (50%) or more of the Credit Extensions or Applicable Commitments then held by Agent (in its capacity as a Lender), in each case without the consent of the Lenders or Borrower. Following any such assignment, Agent shall give notice to the Lenders and Borrower. An assignment by Agent pursuant to this paragraph (a) shall not be deemed a resignation by Agent for purposes of paragraph (b) below.

(b) Without limiting the rights of Agent to designate an assignee pursuant to subsection (a) above, Agent may at any time give notice of its resignation to the Lenders and Borrower. Upon receipt of any such notice of resignation, Required Lenders shall have the right to appoint a successor Agent. If no such successor shall have been so appointed by Required Lenders and shall have accepted such appointment within ten (10) Business Days after the retiring Agent gives notice of its resignation, then the retiring Agent may, on behalf of the Lenders, appoint a successor Agent; *provided, however,* that, if Agent shall notify Borrower and the Lenders that no Person has accepted such appointment, then such resignation shall nonetheless become effective in accordance with such notice from Agent that no Person has accepted such appointment and, from and following delivery of such notice, (i) the retiring Agent shall be discharged from its duties and obligations hereunder and under the other Financing Documents, and (ii) all payments, communications and determinations provided to be made by, to or through Agent shall instead be made by or to each Lender directly, until such time as Required Lenders appoint a successor Agent as provided for above in this paragraph (b).

(c) Upon (i) an assignment permitted by paragraph (a) above, or (ii) the acceptance of a successor's appointment as Agent pursuant to paragraph (b) above, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring (or retired) Agent, and the retiring Agent shall be discharged from all of its duties and obligations hereunder and under the other Financing Documents (if not already discharged therefrom as provided above in this paragraph (c)). The fees payable by Borrower to a successor Agent shall be the same as those payable to its predecessor unless otherwise agreed between Borrower and such successor. After the retiring Agent's resignation hereunder and under the other Financing Documents, the provisions of this Article shall continue in effect for the benefit of such retiring Agent and its sub-agents in respect of any actions taken or omitted to be taken by any of them while the retiring Agent was acting or was continuing to act as Agent.

14.3 Delegation of Duties. Agent may execute any of its duties under this Agreement or any other Financing Document by or through its, or its Affiliates', agents, employees or attorneys-in-fact and shall be entitled to obtain and rely upon the advice of counsel and other consultants or experts concerning all matters pertaining to such duties. Agent shall not be responsible for the negligence or misconduct of any agent or attorney-in-fact that it selects in the absence of gross negligence or willful misconduct. Any such Person to whom Agent delegates a duty shall benefit from this Article 14 to the extent provided by Agent.

14.4 Liability of Agent. Except as otherwise provided herein, no "Agent-Related Person" (as defined below) shall (a) be liable for any action taken or omitted to be taken by any of them under or in connection with this Agreement or any other Financing Document or the transactions contemplated hereby (except for its own gross negligence or willful misconduct in connection with its duties expressly set forth herein), or (b) be responsible in any manner to any Lender or participant for any recital, statement, representation or warranty made by any Credit Party or any officer thereof, contained herein or in any other Financing Document, or in any certificate, report, statement or other document referred to or provided for in, or received by Agent under or in connection with, this Agreement or any other Financing Document, or the validity, effectiveness, genuineness, enforceability or sufficiency of this Agreement or any other Financing Document, or for any failure of any Credit Party or any other party to any Financing Document to perform its obligations hereunder or thereunder. No Agent-Related Person shall be under any obligation to any Lender or participant to ascertain or to inquire as to the observance or performance of any of the agreements contained in, or conditions of, this Agreement or any other Financing Document, or to inspect the Collateral, other properties or books or records of any Credit Party or any Affiliate thereof. The term "**Agent-Related Person**" means Agent, together with its Affiliates, and the officers, directors, employees, agents, advisors, auditors and attorneys-in-fact of such Persons; *provided, however*, that no Agent-Related Person shall be an Affiliate of Borrower.

14.5 Reliance by Agent. Agent shall be entitled to rely, and shall be fully protected in relying, upon any writing, communication, signature, resolution, representation, notice, consent, certificate, affidavit, letter, telegram, facsimile, telex or telephone message, electronic mail message, statement or other document or conversation believed by it to be genuine and correct and to have been signed, sent or made by the proper Person or Persons, and upon advice and statements of legal counsel (including counsel to Borrower), independent accountants and other experts selected by Agent. Agent shall be fully justified in failing or refusing to take any action under any Financing Document (a) if such action would, in the opinion of Agent, be contrary to law or any Financing Document, (b) if such action would, in the opinion of Agent, expose Agent to any potential liability under any law, statute or regulation or (c) if Agent shall not first have received such advice or concurrence of all Lenders as it deems appropriate and, if it so requests, it shall first be indemnified to its satisfaction by the Lenders against any and all liability and expense which may be incurred by it by reason of taking or continuing to take any such action. Agent shall in all cases be fully protected in acting, or in refraining from acting, under this Agreement or any other Financing Document in accordance with a request or consent of all Lenders (or Required Lenders where authorized herein) and such request and any action taken or failure to act pursuant thereto shall be binding upon all of the Lenders.

14.6 Notice of Default. Agent shall not be deemed to have knowledge or notice of the occurrence of any Default and/or Event of Default, unless Agent shall have received written notice from a Lender or Borrower, describing such default or Event of Default. Agent will notify the Lenders of its receipt of any such notice. While an Event of Default has occurred and is continuing, Agent may (but shall not be obligated to) take such action, or refrain from taking such action, with respect to such Event of Default as Agent shall deem advisable or in the best interests of the Lenders, including without limitation, satisfaction of other security interests, liens or encumbrances on the Collateral not permitted under the Financing Documents, payment of taxes on behalf of Borrower or any other Credit Party, payments to landlords, warehouseman, bailees and other Persons in possession of the Collateral and other actions to protect and safeguard the Collateral, and actions with respect to insurance claims for casualty events affecting a Credit Party and/or the Collateral.

14.7 Credit Decision; Disclosure of Information by Agent. Each Lender acknowledges that no Agent-Related Person has made any representation or warranty to it, and that no act by Agent hereafter taken, including any consent to and acceptance of any assignment or review of the affairs of Borrower or any Affiliate thereof, shall be deemed to constitute any representation or warranty by any Agent-Related Person to any Lender as to any matter, including whether Agent-Related Persons have disclosed material information in their possession. Each Lender represents to Agent that it has, independently and without reliance upon any Agent-Related Person and based on such documents and information as it has deemed appropriate, made its own appraisal of, and investigation into, the business, prospects, operations, property, financial and other condition and creditworthiness of the Credit Parties, and all applicable bank or other regulatory Laws relating to the transactions contemplated hereby, and made its own decision to enter into this Agreement and to extend credit to Borrower hereunder. Each Lender also represents that it will, independently and without reliance upon any Agent-Related Person and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit analysis, appraisals and decisions in taking or not taking action under this Agreement and the other Financing Documents, and to make such investigations as it deems necessary to inform itself as to the business, prospects, operations, property, financial and other condition and creditworthiness of Borrower. Except for notices, reports and other documents expressly required to be furnished to the Lenders by Agent herein, Agent shall not have any duty or responsibility to provide any Lender with any credit or other information concerning the business, prospects, operations, property, financial and other condition or creditworthiness of any Credit Party which may come into the possession of any Agent-Related Person.

14.8 Indemnification of Agent. Whether or not the transactions contemplated hereby are consummated, each Lender shall, severally and pro rata based on its respective Pro Rata Share, indemnify upon demand each Agent-Related Person (to the extent not reimbursed by or on behalf of Borrower and without limiting the obligation of Borrower to do so), and hold harmless each Agent-Related Person from and against any and all Indemnified Liabilities (which shall not include legal expenses of Agent incurred in connection with the closing of the transactions contemplated by this Agreement) incurred by it; *provided*, *however*, that no Lender shall be liable for the payment to any Agent-Related Person of any portion of such Indemnified Liabilities to the extent determined in a judgment by a court of competent jurisdiction to have resulted from such Agent-Related Person's own gross negligence or willful misconduct; *provided*, *however*, that no action taken in accordance with the directions of the Required Lenders shall be deemed to constitute gross negligence or willful misconduct for purposes of this Section. Without limitation of the foregoing, each Lender shall, severally and pro rata based on its respective Pro Rata Share, reimburse Agent upon demand for its ratable share of any costs or out-of-pocket expenses (including Protective Advances incurred after the closing of the transactions contemplated by this Agreement) incurred by Agent (in its capacity as Agent, and not as a Lender) in connection with the preparation, execution, delivery, administration, modification, amendment or enforcement (whether through negotiations, legal proceedings or otherwise) of, or legal advice in respect of rights or responsibilities under, this Agreement, any other Financing Document, or any document contemplated by or referred to herein, to the extent that Agent is not reimbursed for such expenses by or on behalf of Borrower. The undertaking in this Section shall survive the payment in full of the Obligations, the termination of this Agreement and the resignation of Agent. The term "Indemnified Liabilities" means those liabilities described in Section 13.2(a) and Section 13.2(b).

14.9 Agent in its Individual Capacity. With respect to its Credit Extensions, MidCap shall have the same rights and powers under this Agreement as any other Lender and may exercise such rights and powers as though it were not Agent, and the terms "Lender" and "Lenders" include MidCap in its individual capacity. MidCap and its Affiliates may lend money to, invest in, and generally engage in any kind of business with, any Credit Party and any of their Affiliates and any person who may do business with or own securities of any Credit Party or any of their Affiliates, all as if MidCap were not Agent and without any duty to account therefor to Lenders. MidCap and its Affiliates may accept fees and other consideration from a Credit Party for services in connection with this Agreement or otherwise without having to account for the same to the Lenders. Each Lender acknowledges the potential conflict of interest between MidCap as a Lender holding disproportionate interests in the Credit Extensions and MidCap as Agent, and expressly consents to, and waives, any claim based upon, such conflict of interest.

14.10 Agent May File Proofs of Claim. In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to any Credit Party, Agent (irrespective of whether the principal of any Credit Extension, shall then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether Agent shall have made any demand on such Credit Party) shall be entitled and empowered, by intervention in such proceeding or otherwise:

(a) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Credit Extensions and all other Obligations that are owing and unpaid and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders and Agent (including any claim for the reasonable compensation, expenses, disbursements and advances of the Lenders and Agent and their respective agents and counsel and all other amounts due the Lenders and Agent allowed in such judicial proceeding); and

(b) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender to make such payments to Agent and, in the event that Agent shall consent to the making of such payments directly to the Lenders, to pay to Agent any amount due for the reasonable compensation, expenses, disbursements and advances of Agent and its agents and counsel, including Protective Advances. To the extent that Agent fails timely to do so, each Lender may file a claim relating to such Lender's claim.

14.11 Collateral and Guaranty Matters. The Lenders irrevocably authorize Agent, at its option and in its discretion, to release (a) any Credit Party and any Lien on any Collateral granted to or held by Agent under any Financing Document upon the date that all Obligations (other than inchoate indemnity obligations for which no claim has yet been made and any other obligations which, by their terms, are to survive the termination of this Agreement) due hereunder have been fully and indefeasibly paid in full and no Applicable Commitments or other obligations of any Lender to provide funds to Borrower under this Agreement remain outstanding, and (b) any Lien on any Collateral that is transferred or to be transferred as part of or in connection with any transfer permitted hereunder or under any other Financing Document. Upon request by Agent at any time, all Lenders will confirm in writing Agent's authority to release its interest in particular types or items of Collateral pursuant to this Section 14.11.

14.12 Advances; Payments; Non-Funding Lenders.

(a) Advances; Payments. If Agent receives any payment for the account of the Lenders on or prior to 11:00 a.m. (New York time) on any Business Day, Agent shall pay to each applicable Lender such Lender's Pro Rata Share of such payment on such Business Day. If Agent receives any payment for the account of the Lenders after 11:00 a.m. (New York time) on any Business Day, Agent shall pay to each applicable Lender such Lender's Pro Rata Share of such payment on the next Business Day. To the extent that any Lender has failed to fund any Credit Extension (a "**Non-Funding Lender**"), Agent shall be entitled to set-off the funding short-fall against that Non-Funding Lender's Pro Rata Share of all payments received from Borrower.

(b) Return of Payments.

(i) If Agent pays an amount to a Lender under this Agreement in the belief or expectation that a related payment has been or will be received by Agent from a Credit Party and such related payment is not received by Agent, then Agent will be entitled to recover such amount (including interest accruing on such amount at the Federal Funds Rate for the first Business Day and thereafter, at the rate otherwise applicable to such Obligation) from such Lender on demand without set-off, counterclaim or deduction of any kind.

(ii) If Agent determines at any time that any amount received by Agent under this Agreement must be returned to a Credit Party or paid to any other person pursuant to any insolvency law or otherwise, then, notwithstanding any other term or condition of this Agreement or any other Financing Document, Agent will not be required to distribute any portion thereof to any Lender. In addition, each Lender will repay to Agent on demand any portion of such amount that Agent has distributed to such Lender, together with interest at such rate, if any, as Agent is required to pay to a Credit Party or such other person, without set-off, counterclaim or deduction of any kind.

14.13 Miscellaneous.

(a) Neither Agent nor any Lender shall be responsible for the failure of any Non-Funding Lender to make a Credit Extension or make any other advance required hereunder. The failure of any Non-Funding Lender to make any Credit Extension or any payment required by it hereunder shall not relieve any other Lender (each such other Lender, an "**Other Lender**") of its obligations to make the Credit Extension or payment required by it, but neither any Other Lender nor Agent shall be responsible for the failure of any Non-Funding Lender to make a Credit Extension or make any other payment required hereunder. Notwithstanding anything set forth herein to the contrary, a Non-Funding Lender shall not have any voting or consent rights under or with respect to any Financing Document or constitute a "Lender" (or be included in the calculation of "Required Lender" hereunder) for any voting or consent rights under or with respect to any Financing Document. At Borrower's request, Agent or a person reasonably acceptable to Agent shall have the right with Agent's consent and in Agent's sole discretion (but shall have no obligation) to purchase from any Non-Funding Lender, and each Non-Funding Lender agrees that it shall, at Agent's request, sell and assign to Agent or such person, all of the Applicable Commitments and all of the outstanding Credit Extensions of that Non-Funding Lender for an amount equal to the principal balance of the Credit Extensions held by such Non-Funding Lender and all accrued interest and fees with respect thereto through the date of sale, such purchase and sale to be consummated pursuant to an executed assignment agreement reasonably acceptable to Agent.

(b) Each Lender shall promptly remit to the other Lenders such sums as may be necessary to ensure the ratable repayment of each Lender's portion of any Credit Extension and the ratable distribution of interest, fees and reimbursements paid or made by any Credit Party. Notwithstanding the foregoing, if this Agreement requires payments of principal and interest to be made directly to the Lenders, a Lender receiving a scheduled payment shall not be responsible for determining whether the other Lenders also received their scheduled payment on such date; *provided*, *however*, if it is determined that a Lender received more than its ratable share of scheduled payments made on any date or dates, then such Lender shall remit to Agent (for Agent to redistribute to itself and the Lenders in a manner to ensure the payment to Agent of any sums due Agent hereunder and the ratable repayment of each Lender's portion of any Credit Extension and the ratable distribution of interest, fees and reimbursements) such sums as may be necessary to ensure the ratable payment of such scheduled payments, as instructed by Agent. If any payment or distribution of any kind or character, whether in cash, properties or securities and whether voluntary, involuntary, through the exercise of any right of set-off, or otherwise, shall be received by a Lender in excess of its ratable share, then (i) the portion of such payment or distribution in excess of such Lender's ratable share shall be received by such Lender in trust for application to the payments of amounts due on the other Lender's claims, or, in the case of Collateral, shall hold such Collateral for itself and as agent and bailee for Agent and other Lenders and (ii) such Lender shall promptly advise Agent of the receipt of such payment, and, within five (5) Business Days of such receipt and, in the case of payments and distributions, such Lender shall purchase (for cash at face value) from the other Lenders (through Agent), without recourse, such participations in the Credit Extension made by the other Lenders as shall be necessary to cause such purchasing Lender to share the excess payment ratably with each of them in accordance with the respective Pro Rata Shares of the Lenders; *provided*, *however*, that, if all or any portion of such excess payment is thereafter recovered by or on behalf of a Credit Party from such purchasing Lender, the purchase shall be rescinded and the purchase price restored to the extent of such recovery, but without interest; *provided*, *further*, that the provisions of this Section shall not be construed to apply to (x) any payment made by a Credit Party pursuant to and in accordance with the express terms of this Agreement or the other Financing Documents, or (y) any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Applicable Commitment pursuant to Section 13.1. Borrower agrees that any Lender so purchasing a participation from another Lender pursuant to this Section may exercise all of its rights of payment (including the right of set-off) with respect to such participation as fully as if such Lender were the direct creditor of Borrower in the amount of such participation. No documentation other than notices and the like shall be required to implement the terms of this Section. Agent shall keep records (which shall be conclusive and binding in the absence of manifest error) of participations purchased pursuant to this Section and shall in each case notify the Lenders following any such purchases.

15. DEFINITIONS

In addition to any terms defined elsewhere in this Agreement, or in any schedule or exhibit attached hereto, as used in this Agreement, the following terms have the following meanings:

"**Access Agreement**" means a landlord consent, bailee letter or warehouseman's letter, in form and substance reasonably satisfactory to Agent, in favor of Agent executed by such landlord, bailee or warehouseman, as applicable, for any third party location.

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

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

"**Affiliate**" means, with respect to any Person, a Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person's senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person's managers and members.

"**Agent**" means, MidCap, not in its individual capacity, but solely in its capacity as agent on behalf of and for the benefit of the Lenders, together with its successors and assigns.

"**Agreement**" has the meaning given it in the preamble of this Agreement.

"**Anti-Terrorism Laws**" means any Laws relating to terrorism or money laundering, including Executive Order No. 13224 (effective September 24, 2001), the USA PATRIOT Act, the Laws comprising or implementing the Bank Secrecy Act, and the Laws administered by OFAC.

"**Applicable Commitment**" has the meaning given it in Section 2.2

"**Applicable Floor**" means for each Credit Facility the per annum rate of interest specified on the Credit Facility Schedule; *provided*, *however*, that, for the Applicable Prime Rate, the Applicable Floor is a per annum rate that is three hundred (300) basis points above the Applicable Floor for the Applicable Libor Rate.

"**Applicable Index Rate**" means, for any Applicable Interest Period, the rate per annum determined by Agent equal to the Applicable Libor Rate; *provided*, *however*, that, in the event that any change in market conditions or any law, regulation, treaty, or directive, or any change therein or in the interpretation of application thereof, shall at any time after the date hereof, in the reasonable opinion of Agent or any Lender, make it unlawful or impractical for Agent or such Lender to fund or maintain Obligations bearing interest based upon the Applicable Libor Rate, Agent or such Lender shall give notice of such changed circumstances to Agent and Borrower and the Applicable Index Rate for Obligations outstanding or thereafter extended or made by Agent or such Lender shall thereafter be the Applicable Prime Rate until Agent or such Lender determines (as to the portion of the Credit Extensions or Obligations owed to it) that it would no longer be unlawful or impractical to fund or maintain such Obligations or Credit Extensions at the Applicable Libor Rate. In the event that Agent shall have determined (which determination shall be final and conclusive and binding upon all parties hereto), as of any Applicable Interest Rate Determination Date, that adequate and fair means do not exist for ascertaining the interest rate applicable to any Credit Facility on the basis provided for herein, then Agent may select a comparable replacement index and corresponding margin.

"**Applicable Interest Period**" for each Credit Facility has the meaning specified for that Credit Facility in the Credit Facility Schedule; *provided*, *however*, that, at any time that the Applicable Prime Rate is the Applicable Index Rate, Applicable Interest Period shall mean the period commencing as of the most recent Applicable Interest Rate Determination Date and continuing until the next Applicable Interest Rate Determination Date or such earlier date as the Applicable Prime Rate shall no longer be the Applicable Index Rate; and *provided*, *further*, that, at any time the Libor Rate Index is adjusted as set forth in the definition thereof, or re-implemented following invocation of the Applicable Prime Rate as permitted herein, the Applicable Interest Period shall mean the period commencing as of such adjustment or re-implementation and continuing until the next Applicable Interest Rate Determination Date, if any.

"Applicable Interest Rate" means a per annum rate of interest equal to the Applicable Index Rate plus the Applicable Margin.

"**Applicable Interest Rate Determination Date**" means the second (2^{nd}) Business Day prior to the first (1^{st}) day of the related Applicable Interest Period; *provided*, *however*, that, at any time that the Applicable Prime Rate is the Applicable Index Rate, Applicable Interest Rate Determination Date means the date of any change in the Base Rate Index; and *provided*, *further*, that, at any time the Libor Rate Index is adjusted as set forth in the definition thereof, the Applicable Interest Rate Determination Date shall mean the date of such adjustment or the second (2^{nd}) Business Day prior to the first (1^{st}) day of the related Applicable Interest Period, as elected by Agent.

"**Applicable Libor Rate**" means, for any Applicable Interest Period, the rate per annum, determined by Agent (rounded upwards, if necessary, to the next 1/100th%), equal to the greater of (a) the Applicable Floor and (b) the Libor Rate Index.

"**Applicable Margin**" for each Credit Facility has the meaning specified for that Credit Facility in the Credit Facility Schedule.

"**Applicable Prepayment Fee**", for each Credit Facility, has the meaning given it in the Credit Facility Schedule for such Credit Facility.

"**Applicable Prime Rate**" means, for any Applicable Interest Period, the rate per annum, determined by Agent (rounded upwards, if necessary, to the next 1/100th%), equal to the greater of (a) the Applicable Floor and (b) the Base Rate Index.

"**Approved Fund**" means any (a) investment company, fund, trust, securitization vehicle or conduit that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the Ordinary Course of Business, or (b) any Person (other than a natural person) which temporarily warehouses loans for any Lender or any entity described in the preceding clause (a) and that, with respect to each of the preceding clauses (a) and (b), is administered or managed by (i) a Lender, (ii) an Affiliate of a Lender or (iii) a Person (other than a natural person) or an Affiliate of a Person (other than a natural person) that administers or manages a Lender.

"**ATM Facility Account**" means a Deposit Account of BioCryst established and maintained at JPMorgan Chase Bank, N.A. on or about the Closing Date for the sole purpose of collecting direct proceeds from sales of equity by BioCryst in connection with its at-the-market facility in accordance with the terms of the Financing Documents.

"**Base Rate Index**" means, for any Applicable Interest Period, the rate per annum, determined by Agent (rounded upwards, if necessary, to the next 1/100th%) as being the rate of interest announced, from time to time, within Wells Fargo Bank, N.A. ("**Wells Fargo**") at its principal office in San Francisco as its "prime rate," with the understanding that the "prime rate" is one of Wells Fargo's base rates (not necessarily the lowest of such rates) and serves as the basis upon which effective rates of interest are calculated for those loans making reference thereto and is evidenced by the recording thereof after its announcement in such internal publications as Wells Fargo may designate; *provided*, *however*, that Agent may, upon prior written notice to Borrower, choose a reasonably comparable index or source to use as the basis for the Base Rate Index.

"**BioCryst**" has the meaning given it in the preamble.

"**Blocked Person**" means: (a) any Person listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (c) a Person with whom any Lender is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law, (d) a Person that commits, threatens or conspires to commit or supports "terrorism" as defined in Executive Order No. 13224, or (e) a Person that is named a "specially designated national" or "blocked person" on the most current list published by OFAC or other similar list.

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

"**Borrower**" mean the entity(ies) described in the first paragraph of this Agreement and each of their successors and permitted assigns. The term "each Borrower" shall refer to each Person comprising the Borrower if there is more than one (1) such Person, or the sole Borrower if there is only one (1) such Person. The term "Borrower" shall refer to any Person comprising the Borrower if there is more than one (1) such Person, or the sole Borrower if there is only one (1) such Person.

"**Borrowing Resolutions**" means, with respect to any Person, those resolutions, in form and substance reasonably satisfactory to Agent, adopted by such Person's Board of Directors or other appropriate governing body and delivered by such Person to Agent approving the Financing Documents to which such Person is a party and the transactions contemplated thereby, as well as any other approvals as may be necessary or desired to approve the entering into the Financing Documents or the consummation of the transactions contemplated thereby or in connection therewith.

"**Business Day**" means any day that is not (a) a Saturday or Sunday or (b) a day on which Agent is closed.

"**Change in Control**" means any event, transaction, or occurrence as a result of which (a) any "person" (as such term is defined in Sections 3(a)(9) and 13(d)(3) of the Exchange Act), other than a trustee or other fiduciary holding securities under an employee benefit plan of Borrower, is or becomes a beneficial owner (within the meaning Rule 13d-3 promulgated under the Exchange Act), directly or indirectly, of securities of Borrower, representing forty percent (40%) or more of the combined voting power of Borrower then outstanding securities; (b) during any period of twelve (12) consecutive calendar months, individuals who at the beginning of such period constituted the board of directors or board of managers or similar governing Person(s) of Borrower (together with any new directors or managers whose election by the board of directors or board of managers or similar governing Person(s) of Borrower was approved by a vote of not less than two-thirds (2/3) of the directors or managers then still in office who either were directors or managers at the beginning of such period or whose election or nomination for election was previously so approved) cease for any reason other than death or disability to constitute a majority of the directors or managers then in office; (c) Borrower ceases to own and control, directly or indirectly, all of the economic and voting rights associated with the outstanding securities of each of its Restricted Subsidiaries except to the extent otherwise permitted pursuant to the terms of this Agreement; or (d) the occurrence of any "change in control" or any term or provision of similar effect under any Subordinated Debt Document or Borrower's Operating Documents.

"**Clinical Trial Material**" means any raw materials, parts, or supplies used in the ordinary course of development of a Product for which regulatory approval has not yet been obtained and that are used exclusively for purposes of supporting clinical and preclinical research.

"**Closing Date**" has the meaning given it in the preamble of this Agreement.

"**Code**" means the Uniform Commercial Code in effect on the date hereof, as the same may, from time to time, be enacted and in effect in the State of Maryland; *provided*, *however*, that to the extent that the Code is used to define any term herein or in any Financing Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; and *provided*, *further*, that in the event that, by reason of mandatory provisions of Law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Agent's Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State of Maryland, the term "**Code**" shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

"**Collateral**" means all property (other than Excluded Property), now existing or hereafter acquired, mortgaged or pledged to, or purported to be subjected to a Lien in favor of, Agent, for the benefit of Agent and the Lenders, pursuant to this Agreement and the other Financing Documents, including, without limitation, all of the property described in **Exhibit A** hereto.

"**Collateral Account**" means any Deposit Account, Securities Account or Commodity Account, other than Excluded Deposit Accounts.

"**Commitment Commencement Date**" has the meaning given it in the Credit Facility Schedule.

"**Commitment Termination Date**" has the meaning given it in the Credit Facility Schedule.

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

"**Compliance Certificate**" means a certificate, duly executed by an authorized officer of Borrower, appropriately completed and substantially in the form of **Exhibit B**.

"**Contingent Obligation**" means, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but "Contingent Obligation" does not include endorsements in the Ordinary Course of Business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"**Control Agreement**" means any control agreement, each of which shall be in form and substance reasonably satisfactory to Agent, entered into among the depository institution at which Borrower maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower maintains a Securities Account or a Commodity Account, Borrower, and Agent pursuant to which Agent obtains control (within the meaning of the Code) for the benefit of the Lenders over such Deposit Account, Securities Account or Commodity Account.

"**Credit Extension**" means an advance or disbursement of proceeds to or for the account of Borrower in respect of a Credit Facility.

"**Credit Extension Form**" means that certain form attached hereto as **Exhibit C**, as the same may be from time to time revised by Agent.

"**Credit Facility**" means the term loan credit facilities specified on the Credit Facility Schedule, including Credit Facility #1 and Credit Facility #2.

"**Credit Party**" means Borrower, any Guarantor under a guarantee of the Obligations or any part thereof, and any other Person (other than Agent, a Lender or a participant of a Lender), whether now existing or hereafter acquired or formed, that becomes obligated as a borrower, guarantor, surety, indemnitor, pledgor, assignor or other obligor under any Financing Document, and any Person all of whose equity interests have been pledged or hypothecated to Agent under any Financing Document; and "**Credit Parties**" means all such Persons, collectively. Notwithstanding the foregoing, unless the parties shall otherwise agree in writing, the term "**Credit Party**" and **"Credit Parties**" shall not include any Foreign Subsidiary, Excluded Domestic Holdco or Permitted Joint Venture.

"**DEA**" means the Drug Enforcement Administration of the United States of America, any comparable state or local Government Authority, any comparable Government Authority in any non-United States jurisdiction, and any successor agency of any of the foregoing.

"**Default**" means any fact, event or circumstance which with notice or passage of time or both, could constitute an Event of Default.

"**Default Rate**" has the meaning given it in Section 2.6(b).

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

"**Designated Funding Account**" is Borrower's Deposit Account, account number ***, maintained with Wells Fargo Bank, National Association, and over which Agent has been granted control for the ratable benefit of all Lenders.

"**Disqualified Institution**" mean any Person that is a pharmaceutical, medical, biomedical, or life sciences company or any Affiliate thereof (other than any Affiliate that is (i) a financial investor in such competitor and is not an operating company or an Affiliate of an operating company (other than such competitor) and (ii) a bona fide diversified debt fund), in each case as reasonably determined by Agent.

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

"**Domestic Subsidiar**y" means each direct or indirect Subsidiary of the Borrower that is organized under the laws of the United States, a state thereof, or the District of Columbia.

"**Draw Period**" means, for each Credit Facility, the period commencing on the Commitment Commencement Date and ending on the Commitment Termination Date.

"**Drop-Ship Inventory**" means Inventory not to exceed $* * * in value comprised solely of goods (a) manufactured by * * * ("**Supplier**") to fulfill an order placed by Green Cross Corporation ("**Customer**") and held at Supplier's premises at * * *, (b) sold to Borrower upon completion of the amount necessary to fulfill the Customer's order (at which time title to such goods is transferred to Borrower), and (c) drop-shipped to Customer by Supplier within 5 Business Days of Borrower taking title thereto.

"**Drug Application**" means a new drug application, an abbreviated drug application, or a product license application for any Product, as appropriate, as those terms are defined in the FDCA.

"**Eligible Assignee**" means (a) a Lender, (b) an Affiliate of a Lender, (c) an Approved Fund, and (d) any other Person (other than a natural person) approved by Agent; *provided*, *however*, that notwithstanding the foregoing, "Eligible Assignee" shall not include any (i) Credit Party or any Subsidiary of a Credit Party or (ii) so long as no Event of Default has occurred and is continuing, any Disqualified Institution. Notwithstanding the foregoing, in connection with assignments by a Lender due to a forced divestiture at the request of any regulatory agency, the restrictions set forth herein shall not apply and Eligible Assignee shall mean any Person or party becoming an assignee incident to such forced divestiture, other than a Disqualified Institution.

"**Environmental Law**" means each present and future law (statutory or common), ordinance, treaty, rule, regulation, order, policy, other legal requirement or determination of an arbitrator or of a Governmental Authority and/or Required Permits imposing liability or standards of conduct for or relating to the regulation and protection of human health, safety, the workplace, the environment and natural resources, and including public notification requirements and environmental transfer of ownership, notification or approval statutes.

"**Equipment**" means all "equipment", as defined in the Code, with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

"**ERISA**" means the Employee Retirement Income Security Act of 1974, and all regulations promulgated thereunder.

"**Event of Default**" has the meaning given it in Section 10.1.

"**Excluded Deposit Account**" means any deposit account or securities account used exclusively as (a) payroll and other employee wage and benefit accounts, (b) zero balance accounts, (c) the HSBC Cash Collateral Accounts, (d) the Royalty Hedge Collateral Accounts, (e) the ATM Facility Account, *provided* that (i) such ATM Facility Account is not subject to any Lien other than Permitted Liens permitted pursuant to clause (f) of the definition thereof and (ii) no funds are deposited or maintained in such ATM Facility Account other than the direct proceeds from sales of equity by BioCryst in connection with its at-the-market facility, and (f) the funds or other property held in or maintained in any such account identified in clauses (a) through (d) in accordance with the terms of this Agreement.

"**Excluded Domestic Holdco**" means a Subsidiary of the Borrower substantially all of the assets of which consist of capital stock or other equity interests of a Foreign Subsidiary held directly or indirectly by such Subsidiary and that does not engage in any business operations or activities other than that of a holding company.

"**Excluded Property**" has the meaning given it on Schedule 9.1.

"**Excluded Taxes**" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Credit Extension or Applicable Commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Credit Extension or Applicable Commitment or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 2.6(h)(i) or 2.6(h)(iii), amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) Taxes attributable to such Recipient's failure to comply with Sections 2.6(h)(vi) and (vii) and (d) any U.S. federal withholding Taxes imposed under FATCA.

"**Exigent Circumstance**" has the meaning given it in Section 13.14.

"**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.

"**FCPA**" has the meaning given it in Section 5.10.

"**FDA**" means the Food and Drug Administration of the United States of America, any comparable state or local Government Authority, any comparable Government Authority in any non-United States jurisdiction, including without limitation the United Kingdom, and any successor agency of any of the foregoing.

"**FDCA**" means the Federal Food, Drug and Cosmetic Act, as amended, 21 U.S.C. Section 301 et seq., and all regulations promulgated thereunder.

"**Federal Funds Rate**" means, for any day, the rate per annum equal to the weighted average of the rates on overnight Federal funds transactions with members of the Federal Reserve System arranged by Federal funds brokers on such day, as published by the Federal Reserve Bank of New York on the Business Day next succeeding such day, *provided* that, if no such rate is so published on such next succeeding Business Day, the Federal Funds Rate for such day shall be the average rate quoted to Agent on such day on such transactions as determined by Agent in a commercially reasonable manner.

"**Fee Letters**" means, collectively, the fee letter agreements among Borrower and Agent and Borrower and each Lender.

"**Financing Documents**" means, collectively, this Agreement, the Perfection Certificate, the Security Documents, each Subordination Agreement and any subordination or intercreditor agreement pursuant to which any Indebtedness and/or any Liens securing such Indebtedness is subordinated to all or any portion of the Obligations, the Fee Letter(s), each note and guarantee executed by one (1) or more Credit Parties in connection with the indebtedness governed by this Agreement, and each other present or future agreement executed by one (1) or more Credit Parties and, or for the benefit of, the Lenders and/or Agent in connection with this Agreement, all as amended, restated, or otherwise modified from time to time.

"**Foreign Lender**" means a Lender that is not a U.S. Person.

"**Foreign Subsidiary**" means (a) BioCryst UK Limited and (b) each other direct or indirect Subsidiary of the Borrower not organized under the laws of the United States, a state thereof, or the District of Columbia.

"**Funding Date**" means any date on which a Credit Extension is made to or on account of Borrower which shall be a Business Day.

"**GAAP**" means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession in the United States, which are applicable to the circumstances as of the date of determination.

"**General Intangibles**" means all "general intangibles", as defined in the Code, with such additions to such term as may hereafter be made, and includes without limitation all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work, whether published or unpublished, any patents, trademarks, service marks and, to the extent permitted under applicable Law, any applications therefor, whether registered or not, any trade secret rights, including any rights to unpatented inventions, payment intangibles, royalties, contract rights, goodwill, franchise agreements, purchase orders, customer lists, route lists, telephone numbers, domain names, claims, income and other tax refunds, security and other deposits, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including, without limitation, key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

"**Governmental Authority**" means any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

"**Guarantor**" means any present or future guarantor of the Obligations.

"**Hazardous Materials**" means petroleum and petroleum products and compounds containing them, including gasoline, diesel fuel and oil; explosives, flammable materials; radioactive materials; polychlorinated biphenyls and compounds containing them; lead and lead-based paint; asbestos or asbestos-containing materials; underground or above-ground storage tanks, whether empty or containing any substance; any substance the presence of which is prohibited by any Laws; toxic mold, any substance that requires special handling; and any other material or substance now or in the future defined as a "hazardous substance," "hazardous material," "hazardous waste," "toxic substance," "toxic pollutant," "contaminant," "pollutant" or other words of similar import within the meaning of any Environmental Law, including: (a) any "hazardous substance" defined as such in (or for purposes of) CERCLA, or any so-called "superfund" or "superlien" Law, including the judicial interpretation thereof; (b) any "pollutant or contaminant" as defined in 42 U.S.C.A. § 9601(33); (c) any material now defined as "hazardous waste" pursuant to 40 C.F.R. Part 260; (d) any petroleum or petroleum by-products, including crude oil or any fraction thereof; (e) natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel; (f) any "hazardous chemical" as defined pursuant to 29 C.F.R. Part 1910; (g) any toxic or harmful substances, wastes, materials, pollutants or contaminants (including, without limitation, asbestos, polychlorinated biphenyls, flammable explosives, radioactive materials, infectious substances, materials containing lead-based paint or raw materials which include hazardous constituents); and (h) any other toxic substance or contaminant that is subject to any Environmental Laws or other past or present requirement of any Governmental Authority.

"**Hazardous Materials Contamination**" means contamination (whether now existing or hereafter occurring) of the improvements, buildings, facilities, personalty, soil, groundwater, air or other elements on or of the relevant property by Hazardous Materials, or any derivatives thereof, or on or of any other property as a result of Hazardous Materials, or any derivatives thereof, generated on, emanating from or disposed of in connection with the relevant property.

"**HSBC Cash Collateral Accounts**" means, collectively, Deposit Account #*** and Deposit Account #*** of BioCryst established and maintained at HSBC Bank for the sole purpose of securing BioCryst's obligations under the HSBC Letter of Credit; *provided* that (a) no such Deposit Account shall hold an aggregate of cash and cash equivalents in excess of *** of the aggregate value of the letters of credit it is securing and (b) with respect to all such Deposit Accounts, the aggregate amount deposited there in at any time does not exceed ***.

"**HSBC Letter of Credit**" means the letter of credit issued by HSBC Bank in favor of the landlord with respect to BioCryst's leased real property located at 2100 Riverchase Center, Ste. 200 / Building 200, Birmingham, AL 35244, in an aggregate face amount equal to One Million Four Hundred Thousand Dollars ($1,400,000).

"**Indebtedness**" means, without duplication of amounts described by more than one of the following, (a) indebtedness for borrowed money (including the Obligations) or the deferred price of, or payment for, property or services, such as reimbursement and other obligations for surety bonds and letters of credit (other than trade accounts payable in the Ordinary Course of Business and liabilities associated with customer prepayments and deposits), (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations, (d) non-contingent obligations of such Person to reimburse any bank or other Person in respect of amounts paid under a letter of credit, banker's acceptance or similar instrument, (e) equity securities of such Person subject to repurchase or redemption other than at the sole option of such Person, (f) obligations secured by a Lien on any asset of such Person, whether or not such obligation is otherwise an obligation of such Person, (g) "earnouts", purchase price adjustments, profit sharing arrangements, deferred purchase money amounts and similar payment obligations or continuing obligations of any nature of such Person arising out of purchase and sale contracts, (h) all Indebtedness of others guaranteed by such Person, (i) off-balance sheet liabilities and/or pension plan or multiemployer plan liabilities of such Person, (j) obligations arising under non-compete agreements, (k) obligations arising under bonus, deferred compensation, incentive compensation or similar arrangements, other than those arising in the Ordinary Course of Business, and (l) Contingent Obligations.

"**Indemnified Liabilities**" has the meaning given it in Section 14.8.

"**Indemnified Taxes**" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of Borrower under this Agreement and (b) to the extent not otherwise described in (a), Other Taxes.

"**Indemnitees**" has the meaning given it in Section 13.2(b).

"**Indenture**" means that certain Indenture, dated as of March 9, 2011, by and between JPR Royalty Sub and U.S. Bank, National Association, as in effect on the date hereof.

"**Insolvency Proceeding**" means any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency Law, including without limitation the laws of the United Kingdom, and including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"**Intellectual Property**" means all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work, whether published or unpublished, any patents, patent applications and like protections, including improvements, divisions, continuations, renewals, reissues, extensions, and continuations-in-part of the same, trademarks, trade names, service marks, mask works, rights of use of any name, domain names, or any other similar rights, any applications therefor, whether registered or not, know-how, operating manuals, trade secret rights, clinical and non-clinical data, rights to unpatented inventions, and any claims for damage by way of any past, present, or future infringement of any of the foregoing.

"**Inventory**" means all "inventory", as defined in the Code, with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of Borrower's custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

"**Investment**" means, with respect to any Person, directly or indirectly, (a) to purchase or acquire any stock or stock equivalents, or any obligations or other securities of, or any interest in, any Person, including the establishment or creation of a Subsidiary or a joint venture, (b) to make or commit to make any acquisition (including through licensing) of (i) of all or substantially all of the assets of another Person, or (ii) any business, Product, business line or product line, division or other unit operation of any Person or (c) to make or purchase any advance, loan, extension of credit or capital contribution to, or any other investment in, any Person.

"**IP Security Agreement**" means any security agreement executed by Borrower that grants (or is prepared as a notice filing or recording with respect to) a Lien or security interest in favor of Agent and/or Lenders on Intellectual Property, each as amended, restated, or otherwise modified from time to time.

"**Inactive Subsidiaries**" means collectively, Nautilus Holdco, Inc., Boat Merger Sub, Inc., and Island Merger Sub, Inc.

"**IRC**" means the Internal Revenue Code of 1986, as amended, and any successor provisions.

"**IRS**" means the United States Internal Revenue Service.

"**Joinder Requirements**" has the meaning given it in Section 6.8(a).

"**JPR Royalty Sub**" means JPR Royalty Sub LLC, a Delaware limited liability company.

"**Laws**" means any and all federal, state, provincial, territorial, local and foreign statutes, laws, judicial decisions, regulations, guidance, guidelines, ordinances, rules, judgments, orders, decrees, codes, plans, injunctions, permits, concessions, grants, franchises, governmental agreements and governmental restrictions, whether now or hereafter in effect, which are applicable to any Credit Party in any particular circumstance.

"**Lenders**" means each of the Persons identified on the Credit Facility Schedule, as amended from time to time to reflect assignments made in accordance with this Agreement, that holds an Applicable Commitment.

"**Libor Rate Index**" means, for any Applicable Interest Period, the rate per annum, determined by Agent (rounded upwards, if necessary, to the next 1/100th%) by dividing (a) the rate per annum, determined by Agent in accordance with its customary procedures, and utilizing such electronic or other quotation sources as it considers appropriate (rounded upwards, if necessary, to the next 1/100%), to be the rate at which Dollar deposits (for delivery on the first (1^{st}) day of such Applicable Interest Period or, if such day is not a Business Day, on the preceding Business Day) in the amount of One Million Dollars ($1,000,000) are offered to major banks in the London interbank market on or about 11:00 a.m. (New York time) on the Applicable Interest Rate Determination Date, for a period of thirty (30) days, which determination shall be conclusive in the absence of manifest error, by (b) one hundred percent (100%) *minus* the Reserve Percentage; *provided*, *however*, that Agent may, upon prior written notice to Borrower, choose a reasonably comparable index or source to use as the basis for the Libor Rate Index. The Libor Rate Index may be adjusted by Agent with respect to any Lender on a prospective basis to take into account any additional or increased costs to such Lender of maintaining or obtaining any eurodollar deposits or increased costs, in each case, due to changes in applicable Law occurring subsequent to the commencement of the then Applicable Interest Period, including changes in tax laws (except changes of general applicability in corporate income tax laws) and changes in the reserve requirements imposed by the Board of Governors of the Federal Reserve System (or any successor), which additional or increased costs would increase the cost of funding loans bearing interest based upon the Libor Rate Index; *provided*, *however*, that, notwithstanding anything in this Agreement to the contrary, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (ii) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a "change in applicable Law", regardless of the date enacted, adopted or issued. In any such event, the affected Lender shall give Borrower and Agent notice of such a determination and adjustment and Agent promptly shall transmit the notice to each other Lender and, upon its receipt of the notice from the affected Lender, Borrower may, by notice to such affected Lender require such Lender to furnish to Borrower a statement setting forth the basis for adjusting such Libor Rate Index and the method for determining the amount of such adjustment.

"**Lien**" means a claim, mortgage, deed of trust, lien, levy, charge, pledge, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of Law or otherwise against any property.

"**Margin Stock**" means "margin stock" as such term is defined in Regulation T, U, or X of the Board of Governors of the Federal Reserve System.

"**Material Adverse Change**" means (a) a material impairment in the perfection or priority of Agent's Lien (or any Lender's Lien therein to the extent provided for in the Financing Documents) in the Collateral; (b) a material impairment in the value of the Collateral; (c) a material adverse change in the business, operations, or condition (financial or otherwise) or prospects of the Credit Parties, taken as a whole; or (d) a material impairment of the prospect of repayment of any portion of the Obligations.

"**Material Agreement**" means (a) each Royalty Hedge Document, (b) the Seqirus UK License Agreement, (c) the License and Services Agreement between BioCryst and MDCP, LLC, dated as of September 23, 2016, as amended restated or otherwise modified from time to time in accordance with the terms of this Agreement (the "**Intercompany License Agreement**"), (d) the agreements listed in the **Disclosure Schedule** under the heading "Material Agreements", (e) each agreement or contract to which a Credit Party is a party relating to Material Intangible Assets or development of Products or Intellectual Property and that is material to the business of the Credit Parties, (f) any agreement with respect to any material Product, the loss of which would materially impair Borrower's ability to sell or market such Product, and (g) any agreement or contract to which such Credit Party or its Restricted Subsidiaries is a party, the termination of which could reasonably be expected to result in a Material Adverse Change.

"**Material Indebtedness**" has the meaning given it in Section 10.1(e).

"**Material Intangible Assets**" means (a) all of Borrower's Intellectual Property and (b) each license or sublicense agreements or other agreements with respect to rights in Intellectual Property, that, in the case of each of clauses (a) and (b), is material to the condition (financial or other), business or operations of Borrower.

"**Maturity Date**" means January 1, 2022.

"**Maximum Lawful Rate**" has the meaning given it in Section 2.6(g).

"**MidCap**" has the meaning given it in the preamble of this Agreement.

"**Multiemployer Plan**" means any employee benefit plan of the type described in Section 4001(a)(3) or ERISA, to which any Credit Party or any ERISA Affiliate has at any time (whether presently or in the past) sponsored, maintained, contributed to, or had an obligation to make contributions to or to which any Credit Party or any ERISA Affiliate has any liability, contingent or otherwise.

"**Non-Consenting Lender**" has the meaning given it in Section 13.14(d).

"**Obligations**" means all of Borrower's obligations to pay when due any debts, principal, interest, Protective Advances, fees, indemnities and other amounts Borrower owes Agent or the Lenders now or later, under this Agreement or the other Financing Documents, including, without limitation, interest accruing after Insolvency Proceedings begin (whether or not allowed) and debts, liabilities, or obligations of Borrower assigned to the Lenders and/or Agent, and the payment and performance of each other Credit Party's covenants and obligations under the Financing Documents. "Obligations" does not include obligations under any warrants issued to Agent or a Lender.

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

"**OFAC Lists**" means, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

"**Operating Documents**" means, for any Person, such Person's formation documents, as certified with the Secretary of State (or other appropriate Governmental Authority) of such Person's jurisdiction of formation on a date that is no earlier than thirty (30) days prior to the Closing Date, and (a) if such Person is a corporation, its bylaws and articles of incorporation, articles of association, articles of amalgamation or articles of amendment (as applicable) in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

"**Ordinary Course of Business**" means, in respect of any transaction involving any Credit Party, the ordinary course of business of such Credit Party, as conducted by such Credit Party in accordance with past practices or then current business practices set forth in the most recent operating plan of Borrower to the extent approved by Agent, which shall in any event be at arms-length.

"**Original Closing Date**" has the meaning set forth in the Recitals hereto.

"**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 this Agreement, or sold or assigned an interest in any Obligation hereunder).

"**Other Tax Certification**" means such certification or evidence, in each case in form and substance reasonably satisfactory to Agent, that any Lender or prospective Lender is exempt from, or eligible for a reduction in, U.S. federal withholding tax or backup withholding tax, including evidence supporting the basis for such exemption or reduction.

"**Other Taxes**" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, this Agreement, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment.

"**Participant Register**" has the meaning given it in Section 13.1(c).

"**Patheon Inventory**" means that Inventory of the Credit Parties to be sold to Seqirus UK Limited pursuant to Section 3.4 of the Seqirus UK License Agreement.

"**Payment Date**" means the first calendar day of each calendar month.

"**PBGC**" means the Pension Benefit Guaranty Corporation, or any successor entity thereto.

"**Pension Plan**" means any employee benefit pension plan that is subject to the minimum funding standards under Section 412 of the Code or is covered by Title IV of ERISA (including a Multiemployer Plan) that any Credit Party or any ERISA Affiliate has, at any time (whether presently or in the past) sponsored, maintained, contributed to, or had an obligation to make contributions to or to which any Credit Party or any ERISA Affiliate has any liability (contingent or otherwise).

"**Peramivir IP**" means the BioCryst Patents (as defined in the Seqirus UK License Agreement), the BioCryst Know-How (as defined in the Seqirus UK License Agreement) and any other Intellectual Property necessary to perform Borrower's obligations under the Seqirus UK License Agreement.

"**Peramivir SPE**" has the meaning given it in the preamble.

"**Perfection Certificate**" means the Perfection Certificate delivered to Agent as of the Closing Date, together with any amendments thereto required under this Agreement.

"**Permitted Contest**" has the meaning given it in Section 6.4.

"**Permitted Contingent Obligations**" means (a) Contingent Obligations resulting from endorsements for collection or deposit in the Ordinary Course of Business; (b) Contingent Obligations incurred in the Ordinary Course of Business with respect to surety and appeal bonds, performance bonds and other similar obligations not to exceed *** in the aggregate at any time outstanding; (c) Contingent Obligations arising under indemnity agreements with title insurers; (d) Contingent Obligations arising with respect to customary indemnification obligations in favor of purchasers in connection with dispositions of personal property assets permitted under Article 7; (e) Contingent Obligations arising under the Financing Documents; (f) so long as there exists no Event of Default both immediately before and immediately after giving effect to any such transaction, Contingent Obligations existing or arising under any swap contract, *provided*, *however*, that such obligations are (or were) entered into by Borrower or an Affiliate in the Ordinary Course of Business for the purpose of directly mitigating risks associated with liabilities, commitments, investments, assets, or property held or reasonably anticipated by such Person and not for purposes of speculation; (g) Contingent Obligations existing or arising in connection with any security deposit or letter of credit obtained for the sole purpose of securing a lease of real property, or in connection with ancillary bank services such as a corporate credit card facility, *provided* that the aggregate face amount of all such security deposits, letters of credit and ancillary bank services does not at any time exceed ***; (h) Contingent Obligations arising in connection with the HSBC Letters of Credit secured solely by Liens permitted pursuant to clause (m) of the definition of Permitted Liens; (i) Contingent Obligations not to exceed Three Million Nine Hundred Thousand Dollars ($3,900,000) arising in connection with the Royalty Hedges; and (j) other Contingent Obligations not permitted by clauses (a) through (h) above, not to exceed *** in the aggregate at any time outstanding; *provided*, *however*, that, notwithstanding the foregoing, the Peramivir SPE shall not be entitled to incur any Contingent Obligations if doing so would cause a violation of the SPE Covenants.

"**Permitted Indebtedness**" means: (a) Borrower's Indebtedness to the Lenders and Agent under this Agreement and the other Financing Documents; (b) Indebtedness existing on the Closing Date and described on the **Disclosure Schedule**; (c) Indebtedness secured by Permitted Liens permitted pursuant to clause (b) of the definition thereof; (d) Subordinated Debt; (e) unsecured Indebtedness to trade creditors incurred in the Ordinary Course of Business; (f) Permitted Contingent Obligations; (g) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness set forth in (b) and (c) above, *provided*, *however*, that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon the obligors thereunder; (h) intercompany Indebtedness owed by a Foreign Subsidiary to a Credit Party that does not exceed *** outstanding in the aggregate at any one time and solely to the extent that such Indebtedness constitutes a "Permitted Investment" of such Credit Party; and (i) Indebtedness consisting of intercompany loans and advances made by any Credit Party to any other Credit Party, *provided* that (1) the obligations of the Credit Parties under such intercompany loan shall be subordinated at all times to the Obligations of the Credit Parties hereunder or under the other Financing Documents in a manner satisfactory to Agent, and (2) to the extent that such Indebtedness is evidenced by a promissory note or other written instrument, Borrower shall pledge and deliver to Agent, for the benefit of itself and the Lenders, the original promissory note or instrument, as applicable, along with an endorsement in blank in form and substance reasonably satisfactory to Agent; *provided*, *further*, that, notwithstanding the foregoing, the Peramivir SPE shall not be entitled to incur any Indebtedness if doing so would cause a violation of the SPE Covenants.

"**Permitted Investments**" means: (a) Investments (i) existing on the Closing Date and described on the **Disclosure Schedule** and (ii) in Subsidiaries made prior to the Original Closing Date; (b) Investments consisting of cash equivalents; (c) any Investments permitted by Borrower's investment policy, as amended from time to time, *provided* that such investment policy (and any material amendment thereto) has been approved in writing by Agent, it being acknowledged and agreed that the investment policy provided to Agent on or prior to the Original Closing Date has been approved (*provided* that under no circumstances shall Borrower be permitted to invest in or hold Margin Stock); (d) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of any Credit Party; (e) Investments consisting of deposit accounts or securities accounts in which Agent has a first priority perfected security interest; (f) Investments of cash and cash equivalents in (x) Restricted Subsidiaries that are Foreign Subsidiaries, but solely to the extent that the aggregate amount of such Investments does not exceed *** for the twelve (12)-month period immediately preceding the making of any such Investment, and (y) Restricted Subsidiaries that are Domestic Subsidiaries but solely to the extent that the aggregate amount of such Investments does not exceed *** for the twelve (12)-month period immediately preceding the making of any such Investment; *provided*, *however*, that the aggregate amount of such Investments made in any Restricted Subsidiary shall not, in any event, exceed the amount necessary to fund the current operating expenses of such Restricted Subsidiary (taking into account their revenue from other sources); (g) 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; (h) 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; (i) Investments by one Borrower in another Borrower; and (j) to the extent constituting Investments, Investments consisting of Permitted Licenses; *provided*, *however*, that, notwithstanding the foregoing, no Borrower shall be entitled to make any Investment if doing so would cause a violation of the SPE Covenants.

"**Permitted Joint Venture**" means any joint venture formed or entered into by a Credit Party for the sole purposes of entering into Permitted License with a Credit Party and undertaking activities directly related thereto to the extent such activities are not otherwise prohibited pursuant to the terms of this Agreement or any other Financing Document.

"**Permitted License**" means:

(a) the licenses set forth on the **Disclosure Schedules** as of the Closing Date, as such licenses are in effect on the Closing Date and without giving effect to any material amendments or other modifications thereto,

(b) the license of Intellectual Property rights granted by Peramivir SPE pursuant to the Seqirus UK License Agreement,

(c) the Intercompany License Agreement,

(d) any non-exclusive license of Intellectual Property rights of Borrower (other than the Peramivir SPE) or its Subsidiaries to a third party or Permitted Joint Venture,

(e) any exclusive license of Intellectual Property rights of Borrower (other than the Peramivir SPE) or its Subsidiaries to a third party or a Permitted Joint Venture so long as such Permitted Licenses are exclusive solely as to ***,

(f) any exclusive license of Intellectual Property rights of Borrower (other than the Peramivir SPE) to a third party or a Permitted Joint Venture to the extent such Intellectual Property rights relate solely to the ***,

(g) any exclusive license of Intellectual Property rights of Borrower (other than the Peramivir SPE) to a third party or a Permitted Joint Venture to the extent such Intellectual Property rights relate solely to (i) *** or (ii) ***; *provided* that no such license shall be permitted pursuant to this clause (g) unless, at the time such license is entered into, Borrower is ***;

provided, however, no license shall be permitted pursuant to clauses (d)-(g) above unless such license (x) has been approved by Borrower's Board of Directors, (y) does not result in a legal transfer of title to the licensed property, and (z) is granted in exchange for fair consideration and pursuant to commercially reasonable arms' length terms.

"**Permitted Liens**" means: (a) Liens existing on the Closing Date and shown on the **Disclosure Schedule** or arising under this Agreement and the other Financing Documents; (b) purchase money Liens or capital leases securing no more than *** in the aggregate amount outstanding (in addition to any Liens permitted pursuant to subsection (a) above) (i) on Equipment acquired or held by a Credit Party incurred for financing the acquisition of the Equipment, or (ii) existing on Equipment when acquired, if the Lien is confined to the property and improvements and the proceeds of the Equipment; (c) Liens for taxes, fees, assessments or other government charges or levies, either not delinquent or being contested in good faith and for which adequate reserves are maintained on the Books of the Credit Party against whose asset such Lien exists, *provided* that no notice of any such Lien has been filed or recorded under any applicable law, including, without limitation, the IRC and the treasury regulations adopted thereunder; (d) statutory Liens securing claims or demands of materialmen, mechanics, carriers, warehousemen, landlords and other Persons imposed without action of such parties, *provided* that they have no priority over any of Agent's Liens and the aggregate amount of such Liens for all Credit Parties does not at any time exceed ***; (e) leases or subleases of real property granted in the Ordinary Course of Business, and leases, subleases, non-exclusive licenses or sublicenses of property (other than real property or Intellectual Property) granted in the Ordinary Course of Business, if the leases, subleases, licenses and sublicenses do not prohibit granting Agent a security interest; (f) banker's liens, rights of set-off and Liens in favor of financial institutions incurred made in the Ordinary Course of Business arising in connection with a Credit Party's Collateral Accounts *provided* that such Collateral Accounts are subject to a Control Agreement to the extent required hereunder; (g) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the Ordinary Course of Business (other than Liens imposed by ERISA); (h) Liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default; (i) easements, reservations, rights-of-way, restrictions, minor defects or irregularities in title and similar charges or encumbrances affecting real property not constituting a Material Adverse Change; (j) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) and (b) above, but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness may not increase; (k) [reserved]; (l) solely with respect to BioCryst, the pledge of its membership interests in JPR Royalty Sub pursuant to the "Pledge and Security Agreement" (as defined in the Indenture); (m) Liens in favor of HSBC Bank on the HSBC Cash Collateral Accounts to the extent securing obligations of Borrowers permitted pursuant to clause (h) of the definition of Permitted Contingent Obligations; and (n) Liens in favor of Morgan Stanley Capital Services, Inc. on the Royalty Hedge Collateral Account to the extent securing obligations of Borrowers permitted pursuant to clause (i) of the definition of Permitted Contingent Obligations; *provided, however,* that, notwithstanding the foregoing, the Peramivir SPE shall not be entitled grant or suffer to exist any Lien if doing so would cause a violation of the SPE Covenant.

"**Person**" means any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"**Pledge Agreement**" means that certain Pledge Agreement, dated as of the date hereof, executed by Borrower in favor of Agent, for the benefit of the Lenders, covering all the equity interests respectively owned by the Credit Parties, as amended, restated, or otherwise modified from time to time.

"**Pro Rata Share**" means, as determined by Agent, with respect to each Credit Facility and Lender holding an Applicable Commitment or Credit Extensions in respect of such Credit Facility, a percentage (expressed as a decimal, rounded to the ninth decimal place) determined by *dividing* (a) in the case of fully-funded Credit Facilities, the amount of Credit Extensions held by such Lender in such Credit Facility *by* the aggregate amount of all outstanding Credit Extensions for such Credit Facility, and (b) in the case of Credit Facilities that are not fully-funded, the amount of Credit Extensions and unfunded Applicable Commitments held by such Lender in such Credit Facility *by* the aggregate amount of all outstanding Credit Extensions and unfunded Applicable Commitments for such Credit Facility.

"**Products**" means any products manufactured, sold, developed, tested or marketed by Borrower or any of its Subsidiaries, including without limitation, those products set forth on the **Products Schedule** (as updated from time to time in accordance with Section 6); *provided* that, for the avoidance of doubt, any new Product not disclosed on the **Products Schedule** shall still constitute a "Product" as herein defined.

"**Protective Advances**" means all audit fees and expenses, costs, and expenses (including reasonable attorneys' fees and expenses) of Agent and the Lenders for preparing, amending, negotiating, administering, defending and enforcing the Financing Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred by Agent or the Lenders in connection with the Financing Documents.

"**Reaffirmation Agreement**" means that certain Reaffirmation Agreement, dated as of the date hereof, executed by the Borrower in favor of Agent, in form and substance satisfactory to Agent.

"**Recipient**" means Agent and any Lender, as applicable.

"**Register**" has the meaning given it in Section 13.1(c).

"**Registered Intellectual Property**" means any patent, registered trademark or servicemark, registered copyright, registered mask work, or any pending application for any of the foregoing.

"**Registered IP Disclosure Location**" means Canada, France, Germany, Japan, the United Kingdom and the United States.

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

"**Regulatory Reporting Event**" has the meaning given it in Section 6.16(a).

"**Regulatory Required Permit**" means any and all licenses, approvals and permits issued by the FDA, DEA or any other applicable Governmental Authority, including without limitation Drug Applications, necessary for the testing, manufacture, marketing or sale of any Product by any applicable Borrower(s) and its Restricted Subsidiaries as such activities are being conducted by such Borrower and its Restricted Subsidiaries with respect to such Product at such time and any drug listings and drug establishment registrations under 21 U.S.C. Section 510, registrations issued by DEA under 21 U.S.C. Section 823 (if applicable to any Product), and those issued by State governments for the conduct of Borrower's or any Restricted Subsidiary's business.

"**Required Lenders**" means, unless all of the Lenders and Agent agree otherwise in writing, Lenders having (a) more than fifty-one percent (51%) of the Applicable Commitments of all Lenders, or (b) if such Applicable Commitments have expired or been terminated, more than fifty-one percent (51%) of the aggregate outstanding principal amount of the Credit Extensions.

"**Required Permit**" means all licenses, certificates, accreditations, product clearances or approvals, provider numbers or provider authorizations, supplier numbers, provider numbers, marketing authorizations, other authorizations, registrations, permits, consents and approvals of a Credit Party issued or required under Laws applicable to the business of Borrower or any of its Restricted Subsidiaries or necessary in the manufacturing, importing, exporting, possession, ownership, warehousing, marketing, promoting, sale, labeling, furnishing, distribution or delivery of goods or services under Laws applicable to the business of Borrower or any of its Restricted Subsidiaries. Without limiting the generality of the foregoing, "**Required Permits**" includes any Regulatory Required Permit.

"**Reserve Percentage**" means, on any day, for any Lender, the maximum percentage prescribed by the Board of Governors of the Federal Reserve System (or any successor Governmental Authority) for determining the reserve requirements (including any basic, supplemental, marginal, or emergency reserves) that are in effect on such date with respect to eurocurrency funding (currently referred to as "eurocurrency liabilities") of that Lender, but so long as such Lender is not required or directed under applicable regulations to maintain such reserves, the Reserve Percentage shall be zero.

"**Responsible Officer**" means any of the President and Chief Executive Officer or Chief Financial Officer of Borrower.

"**Restricted Subsidiary**" means (i) to the extent constituting a Subsidiary, each Permitted Joint Venture, (ii) each Excluded Domestic Holdco, (iii) each Foreign Subsidiary, and (iv) any other Subsidiary that is not an Unrestricted Subsidiary.

"**Royalty Hedge Collateral Account**" means Deposit Account #*** of BioCryst established and maintained at Morgan Stanley Capital Services Inc. for the sole purpose of securing BioCryst's obligations under the Royalty Hedge; *provided*, that (a) the aggregate amount deposited therein at any time does not exceed Three Million Nine Hundred Thousand Dollars ($3,900,000) and (b) Borrower shall not deposit any amounts therein in excess of the maximum amount required to be deposited therein at the time of such deposit.

"**Royalty Hedge**" means the Confirmation of terms and conditions of ISDA Master Agreement, dated as of March 7, 2011, between Morgan Stanley Capital Services Inc. and BioCryst Pharmaceuticals, Inc. dated as of March 9, 2011, in an aggregate notional amount equal to Three Million Nine Hundred Thousand Dollars ($3,900,000).

"**Royalty Hedge Documents**" means the Royalty Hedge and all agreements and documents entered into from time to time by a Credit Party in connection therewith.

"**Secretary's Certificate**" means, with respect to any Person, a certificate, in form and substance reasonably satisfactory to Agent, executed by such Person's secretary (or other appropriate officer acceptable to Agent in its sole but reasonable discretion) on behalf of such Person certifying (a) that such Person has the authority to execute, deliver, and perform its obligations under each of the Financing Documents to which it is a party, (b) that attached to such certificate is a true, correct, and complete copy of the Borrowing Resolutions then in full force and effect authorizing and ratifying the execution, delivery, and performance by such Person of the Financing Documents to which it is a party, (c) the name(s) of the Person(s) authorized to execute the Financing Documents on behalf of such Person, together with a sample of the true signature(s) of such Person(s), (d) that attached to such certificate are true, correct, and complete copies of the Operating Documents of Borrower (or the equivalent thereof in the relevant jurisdiction of organization of such Credit Party) and good standing certificates of Borrower certified by the Secretary of State of the state(s) of organization of Borrower (or the equivalent thereof in the relevant jurisdiction of organization of such Credit Party) as of a date no earlier than thirty (30) days prior to the Closing Date, (e) that attached to such certificate is true, correct, and complete copy of the Borrower's Registration Rights Agreement/Investors' Rights Agreement, voting agreements or other agreements among shareholders and any amendments to the foregoing, and (f) that Agent and the Lenders may conclusively rely on such certificate unless and until such Person shall have delivered to Agent a further certificate canceling or amending such prior certificate.

"**Secured Promissory Note**" has the meaning given it in Section 2.7.

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

"**Security Documents**" means, collectively, the Pledge Agreement, each IP Security Agreement, each Control Agreement, the Reaffirmation Agreement, and each other agreement, document or instrument executed concurrently herewith or at any time hereafter pursuant to which one (1) or more Credit Parties or any other Person provides, as security for all or any portion of the Obligations, a Lien on any of its assets in favor of Agent for its own benefit and the benefit of the Lenders, as any or all of the same may be amended, supplemented, restated or otherwise modified from time to time.

"**Seqirus UK License Agreement**" means that certain License Agreement, by and among BioCryst Pharmaceuticals, Inc. and Seqirus UK Limited, dated as of June 16, 2015, as in effect on the date hereof.

"**Stated Rate**" has the meaning given it in Section 2.6(g).

"**Subordinated Debt**" means indebtedness incurred by Borrower which shall be (a) in an amount satisfactory to Agent, (b) made pursuant to documents in form and substance reasonably satisfactory to Agent (the "**Subordinated Debt Documents**"), and (c) subordinated to all of Borrower's now or hereafter indebtedness to Agent and the Lenders pursuant to a Subordination Agreement.

"**Subordination Agreement**" means a subordination, intercreditor, or other similar agreement in form and substance, and on terms, approved by Agent in writing.

"**Subsidiary**" means, with respect to any Person, any Person of which more than fifty percent (50.0%) of the voting stock or other equity interests (in the case of Persons other than corporations) is owned or controlled, directly or indirectly, by such Person. Unless the context otherwise requires, each reference to a Subsidiary shall be a reference to a Subsidiary of Borrower.

"**Taxes**" means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

"**Transfer**" has the meaning given it in Section 7.1.

"**Unrestricted Subsidiary**" means (a) JPR Royalty Sub and (b) any other any Subsidiary of Borrower which Agent may agree from time to time, in its sole discretion, that Borrower may designate as an Unrestricted Subsidiary for purposes of this Agreement.

"**U.S. Person**" means any Person that is a "United States Person" as defined in Section 7701(a)(30) of the Code.

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

[SIGNATURES APPEAR ON FOLLOWING PAGES]

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

IN WITNESS WHEREOF, intending that this instrument constitute an instrument executed and delivered under seal, the parties hereto have caused this Agreement to be executed as of the Closing Date.

BORROWER:

BIOCRYST PHARMACEUTICALS, INC.

By: /s/ Jon Stonehouse (SEAL)
Name: Jon Stonehouse
Title: Chief Executive Officer

MDCP, LLC

By: /s/ Jon Stonehouse (SEAL)
Name: Jon Stonehouse
Title: Chief Executive Officer

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AGENT:

MIDCAP FINANCIAL TRUST

By: Apollo Capital Management, L.P.,
its investment manager

By: Apollo Capital Management GP, LLC,
its general partner

By: /s/ Maurice Amsellem (SEAL)
Name: Maurice Amsellem
Title: Authorized Signatory

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

LENDERS:

MIDCAP FINANCIAL TRUST

By: Apollo Capital Management, L.P.,
its investment manager

By: Apollo Capital Management GP, LLC,
its general partner

By: /s/ Maurice Amsellem (SEAL)
Name: Maurice Amsellem
Title: Authorized Signatory

MIDCAP FUNDING V TRUST

By: Apollo Capital Management, L.P.,
its investment manager

By: Apollo Capital Management GP, LLC,
its general partner

By: /s/ Maurice Amsellem (SEAL)
Name: Maurice Amsellem
Title: Authorized Signatory

MIDCAP FUNDING XIII TRUST

By: Apollo Capital Management, L.P.,
its investment manager

By: Apollo Capital Management GP, LLC,
its general partner

By: /s/ Maurice Amsellem (SEAL)
Name: Maurice Amsellem
Title: Authorized Signatory

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

LENDERS:

ELM 2016-1 TRUST

By: MidCap Financial Services Capital Management, LLC, as Servicer

By: /s/ John O'Dea (SEAL)
Name: John O'Dea
Title: Authorized Signatory

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

LENDERS:

FLEXPOINT MCLS SPV LLC

By: /s/ Daniel Edelman (SEAL)
Name: Daniel Edelman
Title: Vice President

Address:

Flexpoint MCLS SPV, LLC
c/o MidCap Financial Services, LLC, as servicer
7255 Woodmont Avenue, Suite 200
Bethesda, Maryland 20814
Attn: Account Manager for BioCryst transaction
Facsimile: 301-941-1450
E-mail: notices@midcapfinancial.com

with a copy to:

Flexpoint MCLS SPV, LLC
c/o MidCap Financial Services, LLC, as servicer
7255 Woodmont Avenue, Suite 200
Bethesda, Maryland 20814
Attn: General Counsel
Facsimile: 301-941-1450
E-mail: legalnotices@midcapfinancial.com

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBITS AND SCHEDULES

EXHIBITS

Exhibit A	Collateral
Exhibit B	Form of Compliance Certificate
Exhibit C	Credit Extension Form

SCHEDULES

Credit Facility Schedule
Amortization Schedule (for each Credit Facility)
Post-Closing Obligations Schedule
Closing Deliveries Schedule
Disclosure Schedule
Intangible Assets Schedule
Products Schedule
Required Permits Schedule
SPE Covenant Schedule

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT A

COLLATERAL

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

(a) all goods, Accounts (including health-care insurance receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles, commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts, investment accounts, commodity accounts and other Collateral Accounts, all certificates of deposit, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and

(b) all 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.

Pursuant to the terms of a certain negative pledge arrangement with Agent and the Lenders, Borrower has agreed not to encumber any of its Intellectual Property without Agent's and the Lenders' prior written consent.

Notwithstanding the foregoing, in no event shall Collateral include any of the following: (a) any license or contract as in effect on the date hereof, but only to the extent that the granting of a security interest therein is prohibited by or would constitute a default under such license or contract as in effect on the date hereof, and only to the extent that such prohibition or default is not terminated or rendered unenforceable or otherwise deemed ineffective by the UCC (including, without limitation, Sections 9-406, 9-407 and 9-408 of the UCC) or any other applicable law, *provided* that, upon the termination or expiration of any such prohibition or default, such license or contract shall automatically be subject to the security interest granted in favor of Agent hereunder and shall become part of the "Collateral", (b) the equity interests in JPR Royalty Sub to the extent that Borrower is prohibited from pledging such interests pursuant to the terms of the Pledge and Security Agreement (as defined in the Indenture), *provided* that, upon the termination or expiration of such prohibition or termination of, or payment in full of the "Secured Obligations" under the Indenture, the equity interests in JPR Royalty Sub shall automatically be subject to the security interest granted in favor of Agent hereunder and shall become part of the "Collateral," (c) any United States intent-to-use trademark applications to the extent that, and solely during the period in which the grant of a security interest therein would impair the validity or enforceability of or render void or result in the cancellation of, any registration issued as a result of such intent-to-use trademark applications under applicable law, provided that upon submission and acceptance by the United States Patent and Trademark Office of an amendment to allege use pursuant to 15 U.S.C. Section 1051(c) or any successor provision, such intent-to-use trademark application shall be considered Collateral, (d) any equity interests in any Subsidiary that is a Foreign Subsidiary that is not a Credit Party or Excluded Domestic Holdco, in each case in excess of 65% of all of the issued and outstanding voting shares of capital stock of such Foreign Subsidiary or Excluded Domestic Holdco, (e) any Excluded Deposit Accounts, and (f) the Patheon Inventory, but only to the extent that the granting of a security interest therein is prohibited by the Seqirus UK License Agreement; *provided* that, upon the termination or expiration of any such prohibition, the Patheon Inventory, to the extent Borrower has a right, title or interest therein, then shall automatically be subject to the security interest granted in favor of Agent hereunder and shall become part of the "Collateral" (collectively, all of the foregoing exclusions in clauses (a)-(f), "**Excluded Property**"); *provided*, *however*, that Excluded Property shall not include any proceeds, products, substitutions, receivables or replacements of Excluded Property (unless such proceeds, products, substitutions, receivables or replacements would otherwise constitute Excluded Property).

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT B

COMPLIANCE CERTIFICATE

TO: MidCap Financial Trust, as Agent
FROM: _____
DATE: _____, 201__

The undersigned authorized officer of **BIOCRYST PHARMACEUTICALS, INC.**, a Delaware corporation ("**Borrower**"), certifies that, under the terms and conditions of the Credit and Security Agreement between Borrower, Agent and the Lenders (as amended, restated, supplemented, replaced or otherwise modified from time to time, the "**Agreement**"):

(1) Borrower is in complete compliance with all required covenants for the month ending _____, 201__, except as noted below;

(2) there are no Events of Default;

(3) all representations and warranties in the Agreement are true and correct in all material respects on this date except as noted below; *provided, however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and *provided, further,* that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date;

(4) each of Borrower and the other Credit Parties and Restricted Subsidiaries has timely filed all required Tax returns and reports, and has timely paid all foreign, federal, state and local Taxes, assessments, deposits and contributions owed except as otherwise permitted pursuant to the terms of the Agreement;

(5) no Liens have been levied or claims made against Borrower or any of its Restricted Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Agent; and

(6) [attached hereto is an updated [Disclosure Schedule][Required Permits Schedule][Products Schedule][Intangible Assets Schedule][INSERT AS APPROPRIATE] as required to be updated pursuant to the terms of the Credit and Security Agreement.][1]

Attached are the required documents supporting the certifications set forth in this Compliance Certificate. The undersigned certifies, in his/her capacity as an officer of Borrower, that these are prepared in accordance with GAAP consistently applied from one period to the next except as explained in an accompanying letter or footnotes. The undersigned acknowledges, in his/her capacity as an officer of Borrower, that no borrowings may be requested at any time or date of determination that Borrower is not in compliance with any of the terms of the Agreement, and that compliance is determined not just at the date this certificate is delivered. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

[1] To be included only with financial statements delivered for periods ending March 31st and September 30th, respectively.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

Please indicate compliance status by circling Yes/No under "Complies" column.

Reporting Covenant	Required	Complies
Monthly Financial Statements	Monthly within ***	Yes No
Audited Financial Statements	Annually within *** after FYE	Yes No
Board Approved Projections	Annually within *** after FYE	Yes No
Compliance Certificate	Monthly within ***	Yes No

The following are the exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions to note.")

_____

_____

_____

BIOCRYST PHARMACEUTICALS, INC.

By: _____
Name: _____
Title: _____

AGENT USE ONLY

Received by: _____
AUTHORIZED SIGNER
Date: _____

Verified: _____
AUTHORIZED SIGNER
Date: _____

Compliance Status: Yes No

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT C

CREDIT EXTENSION FORM

DEADLINE IS NOON NEW YORK TIME

Date: _____, 201__

LOAN ADVANCE:

Complete *Outgoing Wire Request* section below if all or a portion of the funds from this loan advance are for an outgoing wire.

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

Amount of Advance $ _____

Requested Date of Advance (subject to requirements of Credit and Security Agreement): _____

All of Borrower's representations and warranties in the Credit and Security Agreement are true, correct and complete in all material respects on the date of the request for an advance; *provided, however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and *provided, further*, that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date:

Authorized Signature: _____ Phone Number: _____

Print Name/Title: _____

OUTGOING WIRE REQUEST:

Complete only if all or a portion of funds from the loan advance above is to be wired.

Beneficiary Name: _____ Amount of Wire: $ _____

Beneficiary Lender: _____ Account Number: _____

City and State: _____

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

(For International Wire Only)

Intermediary Lender: _____ Transit (ABA) #: _____

For Further Credit to: _____

Special Instruction: _____

By signing below, I (we) acknowledge and agree that my (our) funds transfer request shall be processed in accordance with and subject to the terms and conditions set forth in the agreements(s) covering funds transfer service(s), which agreements(s) were previously received and executed by me.

Authorized Signature: _____ 2nd Signature (if required): _____

Print Name/Title: _____ Print Name/Title: _____

Telephone #: _____ Telephone #: _____

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CREDIT FACILITY SCHEDULE

The following Credit Facility is specified on this Credit Facility Schedule:

Credit Facility #1:

Credit Facility and Type: Term

Lenders for and their respective Applicable Commitments to this Credit Facility:

Lender	**Applicable Commitment**
MidCap Funding V Trust	**One Million Five Hundred Thousand Dollars ($1,500,000)**
MidCap Funding XIII Trust	**Five Million Dollars ($5,000,000)**
Elm 2016-1 Trust	**Thirteen Million and Five Hundred Thousand Dollars ($13,500,000)**
Flexpoint MCLS SPV LLC	**Three Million Dollars ($3,000,000)**
Total	**Twenty-Three Million Dollars ($23,000,000)**

The following defined terms apply to this Credit Facility:

Applicable Interest Period: means the one (1)-month period starting on the first (1st) day of each month and ending on the last day of such month; *provided*, *however*, that the first (1st) Applicable Interest Period for each Credit Extension under this Credit Facility shall commence on the date that the applicable Credit Extension is made and end on the last day of such month.

Applicable Floor: means one half of one percent (0.5%) per annum for the Applicable Libor Rate.

Applicable Funding Conditions: Not applicable.

Applicable Margin: a rate of interest equal to eight percent (8.0%) per annum.

Applicable Prepayment Fee: None, it being understood that Credit Facility # 1 was paid in full on the Closing Date.

Closed Period: Not applicable.

Commitment Commencement Date: Original Closing Date.

Commitment Termination Date: the close of the Business Day following the Original Closing Date.

Minimum Credit Extension Amount: $23,000,000.

Permitted Purpose: Not Applicable

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

Credit Facility #2:

Credit Facility and Type: Term

Lenders for and their respective Applicable Commitments to this Credit Facility:

Lender	**Applicable Commitment**
MidCap Financial Trust	**Twelve Million and Five Hundred Thousand Dollars ($12,500,00)**
MidCap Funding XIII Trust	**Fourteen Million and Five Hundred Thousand Dollars ($14,500,00)**
Flexpoint MCLS SPV LLC	**Three Million Dollars ($3,000,000)**
Total:	**Thirty Million Dollars ($30,000,000)**

The following defined terms apply to this Credit Facility:

Applicable Interest Period: means the one (1)-month period starting on the first (1st) day of each month and ending on the last day of such month; *provided*, *however*, that the first (1st) Applicable Interest Period for each Credit Extension under this Credit Facility shall commence on the date that the applicable Credit Extension is made and end on the last day of such month.

Applicable Floor: means one half of one percent (0.5%) per annum for the Applicable Libor Rate.

Applicable Funding Conditions: Not applicable.

Applicable Margin: a rate of interest equal to eight percent (8.0%) per annum.

Applicable Prepayment Fee: means the following amount, calculated as of the date (the "**Accrual Date**") that the Applicable Prepayment Fee becomes payable in the case of prepayments required under the Financing Documents or the date that any voluntary prepayment is made: (a) for an Accrual Date on or after the Closing Date through and including the date that is twelve (12) months after the Closing Date, three percent (3.0%) *multiplied by* the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater); (b) for an Accrual Date after the date that is twelve (12) months after the Closing Date through and including the date that is twenty-four (24) months after the Closing Date, two percent (2.0%) *multiplied by* the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater); or (c) for an Accrual Date after the date that is twenty-four (24) months after the Closing Date, zero percent (0.0%) *multiplied by* the amount of the outstanding principal of the Credit Extension prepaid or required to be prepaid (whichever is greater).

Closed Period: Not applicable.

Commitment Commencement Date: Closing Date.

Commitment Termination Date: the close of the Business Day following the Closing Date.

Minimum Credit Extension Amount: $30,000,000.

Permitted Purpose: Not Applicable

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

AMORTIZATION SCHEDULE

Credit Facility #1:

Not applicable, it being understood that Credit Facility # 1 was paid in full on the Closing Date.

Credit Facility #2:

Commencing on August 1, 2019, and continuing on the first (1^{st}) day of each calendar month thereafter, Borrower shall pay to Agent as a principal payment under the Credit Facility outstanding an amount equal to the Amortization Payment (defined below) as an amortization payment in respect of the Credit Extensions made under such Credit Facility. The term "**Amortization Payment**" means the principal payment based upon a thirty (30)-month straight-line amortization of equal monthly principal payments. Notwithstanding anything to the contrary contained in the foregoing, the entire remaining outstanding principal balance under the Credit Extensions shall mature and be due and payable upon the Maturity Date.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

POST CLOSING OBLIGATIONS SCHEDULE

Borrower shall satisfy and complete each of the following obligations, or provide Agent with each of the items listed below, as applicable, on or before the date indicated below, all to the satisfaction of Agent in its sole and absolute discretion:

1. Borrowers shall, by the date that is *** following the Closing Date (or such later date as Agent may reasonably agree in writing), provide Agent evidence satisfactory to Agent that each Inactive Subsidiary has been dissolved or otherwise wound up or merged out of existence, in each case, in accordance with applicable Law and the terms of the Financing Documents.

Borrower's failure to complete and satisfy any of the above obligations on or before the date indicated above, or Borrower's failure to deliver any of the above listed items on or before the date indicated above, shall constitute an immediate and automatic Event of Default.

CLOSING DELIVERIES SCHEDULE

1. duly executed signatures to the Financing Documents to which Borrower is a party;
2. [reserved];
3. the Operating Documents of Borrower and good standing certificates of Borrower (or the equivalent thereof in the relevant jurisdiction of organization of Borrower) certified by the Secretary of State or similar entity of the jurisdiction of organization of Borrower as of a date no earlier than thirty (30) days prior to the Closing Date;
4. good standing certificates (or the equivalent thereof in the relevant jurisdiction of organization of Borrower) dated as of a date no earlier than thirty (30) days prior to the Closing Date to the effect that Borrower is qualified to transact business in all states in which the nature of Borrower's business so requires;
5. duly executed signatures to the completed Borrowing Resolutions for Borrower;
6. certified copies, dated as of a recent date, of Lien, bankruptcy, insolvency, judgment, copyright, patent and trademark searches in each jurisdiction reasonably requested by Agent with respect to the Credit Parties, as Agent shall request, accompanied by written evidence (including any UCC termination statements) that the Liens indicated in any such financing statements either constitute Permitted Liens or have been or, in connection with the initial Credit Extension, will be terminated or released;
7. the Perfection Certificate executed by Borrower;
8. a legal opinion of Borrower's counsel dated as of the Closing Date together with the duly executed signatures thereto;
9. payment of the fees and expenses of Agent and the Lenders then accrued, including pursuant to the Fee Letters;
10. a duly executed Secretary's Certificate dated as of the Closing Date which includes copies of the completed Borrowing Resolutions for Borrower;
11. timely receipt by Agent of an executed disbursement letter;
12. a certificate executed by a Responsible Officer of Borrower, in form and substance reasonably satisfactory to Agent, which shall certify as to certain conditions to the funding of the Credit Extensions on the Closing Date;
13. a Control Agreement, duly executed by BioCryst, Agent and Wells Fargo Bank, N.A. with respect to each Securities Account maintained at Wells Fargo Bank, N.A.; and

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

DISCLOSURE SCHEDULE

Scheduled Collateral Accounts

Bank Name	Account Type	Account Number
Wells Fargo Bank, NA	***	***
Wells Fargo Bank, NA	***	***
Wells Fargo Bank, NA	***	***
Wells Fargo Bank, NA	***	***
Wells Fargo Bank, NA	***	***
Wells Fargo Bank, NA	***	***
HSBC	***	***
HSBC	***	***
Wells Fargo Clearing Services, LLC	***	***
US Bank, NA	***	***
Morgan Stanley	***	***
J.P. Morgan	***	***

Scheduled Permitted Investments

NONE.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

Scheduled Permitted Liens

Debtor	Secured Party	Collateral	State and Jurisdiction	Filing Date and Number (include original file date and continuations, amendments, etc.)
BioCryst Pharmaceuticals, Inc.	MRC Computer Corp.	Laboratory and Computer equipment	Delaware	Initial Filing 2/21/13 20130692039
BioCryst Pharmaceuticals, Inc.	MRC Computer Corp.	Laboratory and Computer equipment	Delaware	Initial Filing 2/21/13 20130691841
BioCryst Pharmaceuticals, Inc.	GreatAmerica Financial Services Corporation	Copier	Delaware	Initial Filing 8/7/14 20143219284
BioCryst Pharmaceuticals, Inc.	GreatAmerica Financial Services Corporation	Copier	Delaware	TBD

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

Scheduled Permitted Indebtedness

Lease Obligations							
			Maturity	**Months Remaining**	**Original Asset Cost**	**Total Monthly Payment**	**Outstanding Obligation**
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

Scheduled Material Agreements

1. Joint Research and License Agreement, dated November 23, 1994, by and between BioCryst Pharmaceuticals, Inc. and The University of Alabama at Birmingham ("UAB Agreement").

Permitted License

1. See "Intangible Assets Schedule—License and Similar Agreements—Material License Agreements"

The Company also has the following outbound licenses existing on the Closing Date:

1. License, Development and Commercialization Agreement, dated February 28, 2007, by and between Shionogi & Co., Ltd. and BioCryst Pharmaceuticals, Inc.

2. First Amendment to License, Development and Commercialization Agreement, effective as of September 30, 2008, between BioCryst Pharmaceuticals, Inc. and Shionogi & Co., Ltd.

3. Amended and Restated Agreement, dated November 11, 2011, by and between BioCryst Pharmaceuticals, Inc. and Mundipharma International Holdings Limited.

4. Supply, Distribution and Licensing Agreement, dated March 2, 2011, by and between BioCryst Pharmaceuticals, Inc. and Neopharm Scientific Ltd.

5. License, Development and Commercialization Agreement, dated June 12, 2006, by and between BioCryst Pharmaceuticals, Inc. and Green Cross Corporation.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

Scheduled Litigation

NONE.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

Scheduled ownership interest in any Chattel Paper, letter of credit rights, commercial tort claims, Instruments, documents or investment property

NONE.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

INTANGIBLE ASSETS SCHEDULE

See Summaries of US, Canadian, UK, German, French, and Japanese Patents and Applications in BioCryst Patent Estate, attached as Exhibit A.

See Summary of US, Canadian, UK, German, French, and Japanese Trademark Registrations and Applications in BioCryst Estate, attached as Exhibit B.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT A

Summary of US Patents and Applications in BioCryst Patent Estate – July 12, 2018

Borrower that is Owner of IP[1]	Name/Identifier of IP	Type of IP	Patent or Application Number	Filing Date[2]	Projected Expiration Date[3]
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT A

Summary of US Patents and Applications in BioCryst Patent Estate – July 12, 2018

Borrower that is Owner of IP[1]	**Name/Identifier of IP**	**Type of IP**	**Patent or Application Number**	**Filing Date[2]**	**Projected Expiration Date[3]**
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT A

Summary of US Patents and Applications in BioCryst Patent Estate – July 12, 2018

Borrower that is Owner of IP[1]	Name/Identifier of IP	Type of IP	Patent or Application Number	Filing Date[2]	Projected Expiration Date[3]
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *

NOTES:

[1] The asterisk (*) indicates "Licensee" status.

[2] Unless otherwise indicated, PCT filing date is listed. The asterisk (*) indicates earliest US Utility filing date for non-PCT- based applications.

[3] Projected expiration dates extending beyond 20 years include PTA adjustments.

[4] Safety continuation application based on parent * * *.

[5] Safety continuation application based on parent * * *.

[6] Safety continuation application based on parent * * *.

[7] US national-stage of * * *.

[8] US national-stage of * * *.

[9] Safety continuation application based on parent * * *.

[10] Safety divisional application based on parent * * *.

[11] US national-stage of * * *.

[12] Not yet published, so unavailable to the public.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT A

Summary of Canadian Patents and Applications in BioCryst Patent Estate – July 12, 2018

Borrower that is Owner of IP[1]	**Name/Identifier of IP**	**Type of IP**	**Patent or Application Number**	**Filing Date[2]**	**Projected Expiration Date**
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *

NOTES:

[1] The asterisk (*) indicates "Licensee" status.

[2] PCT application filing date is listed.

[3] Canadian national-stage of * * *.

[4] Canadian national-stage of * * *.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT A

Summary of United Kingdom (GB), France (FR), and Germany (DE) Patents and Applications in BioCryst Patent Estate - July 12, 2018

Borrower that is Owner of IP[1]	Name/Identifier of IP	Type of IP	Country	Patent or Application Number[2]	Filing Date[3]	Projected Expiration Date
BioCryst	* * *	Patent	GB, FR	* * *	* * *	* * *
BioCryst	* * *	Patent	DE	* * *	* * *	* * *
BioCryst*	* * *	Patent	GB, FR	* * *	* * *	* * *
BioCryst*	* * *	Patent	DE	* * *	* * *	* * *
BioCryst*	* * *	Patent	GB, FR	* * *	* * *	* * *
BioCryst*	* * *	Patent	DE	* * *	* * *	* * *
BioCryst*	* * *	Patent	GB, FR	* * *	* * *	* * *
BioCryst*	* * *	Patent	DE	* * *	* * *	* * *
BioCryst	* * *	Patent	GB, FR	* * *	* * *	* * *
BioCryst	* * *	Patent	DE	* * *	* * *	* * *
BioCryst*	* * *	Patent	GB, FR	* * *	* * *	* * *
BioCryst*	* * *	Patent	DE	* * *	* * *	* * *
BioCryst	* * *	Patent	GB, FR	* * *	* * *	* * *
BioCryst	* * *	Patent	DE	* * *	* * *	* * *
BioCryst*	* * *	Patent	GB, FR	* * *	* * *	* * *
BioCryst*	* * *	Patent	DE	* * *	* * *	* * *
BioCryst	* * *	Patent	GB, FR	* * *	* * *	* * *
BioCryst	* * *	Patent	DE	* * *	* * *	* * *
BioCryst	* * *	Patent	GB, FR	* * *	* * *	* * *
BioCryst	* * *	Patent	DE	* * *	* * *	* * *
BioCryst	* * *	Patent	EP	* * *	* * *	* * *
BioCryst	* * *	Patent	EP	* * *	* * *	* * *
BioCryst	* * *	Patent	EP	* * *	* * *	* * *
BioCryst	* * *	Patent	EP	* * *	* * *	* * *
BioCryst	* * *	Patent	GB, FR	* * *	* * *	* * *

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT A

Summary of United Kingdom (GB), France (FR), and Germany (DE) Patents and Applications in BioCryst Patent Estate - July 12, 2018

Borrower that is Owner of IP[1]	Name/Identifier of IP	Type of IP	Country	Patent or Application Number[2]	Filing Date[3]	Projected Expiration Date
BioCryst	* * *	Patent	DE	* * *	* * *	* * *
BioCryst	* * *	Patent	EP	* * *	* * *	* * *
BioCryst	* * *	Patent	EP	* * *	* * *	* * *
BioCryst	* * *	Patent	EP	* * *	* * *	* * *

NOTES:

[1] The asterisk (*) indicates "Licensee" status.

[2] All GB, FR, and DE patents are validations of an EP granted patent. GB and FR validations retain the EP patent number; DE validation numbers reflect the assigned German file number. Pending EP applications have GB, FR, and DE listed as designated states in which a future EP grant may be validated.

[3] PCT application filing date is listed.

[4] EP Application No. * * * has granted as European Patent No. * * *; the patent is validated in GB, FR, and DE (German File No. * * *).

[5] EP Application No. * * * has granted as European Patent No. * * *; the patent is validated in GB, FR, and DE (German File No. * * *).

[6] EP Application No. * * * has granted as European Patent No. * * *; the patent is validated in GB, FR, and DE (German File No. * * *).

[7] Safety divisional application based on parent EP Application No. * * *.

[8] European national-stage of * * *.

[9] European national-stage of * * *.

[10] European national-stage of * * *.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT A

Summary of Japanese Patents and Applications in BioCryst Patent Estate - July 12, 2018

Borrower that is Owner of IP[1]	Name/Identifier of IP	Type of IP	Patent or Application Number	Filing Date[2]	Projected Expiration Date[3]
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst*	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *
BioCryst	* * *	Patent	* * *	* * *	* * *

NOTES:

[1] The asterisk (*) indicates "Licensee" status.

[2] PCT application filing date is listed.

[3] Projected expiration dates extending beyond 20 years include PTE adjustments.

[4] Japanese national-stage of * * *.

[5] Japanese national-stage of * * *.

[6] Japanese national-stage of * * *.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT B

Summary of Trademark Registrations and Applications in BioCryst Estate – July 12, 2018

Borrower that is Owner of IP[1]	**Country**	**Name/Identifier of IP**	**Type of IP**	**Trademark Registration or Application Number**	**Filing Date**	**Expiration Date[1]**
BioCryst	US	BIOCRYST	Trademark	3,974,837	08/14/2007	06/07/2021
BioCryst	US	BIOCRYST	Trademark	4,096,431	08/14/2007	02/07/2022
BioCryst	US	BIOCRYST LOGO	Trademark	3,966,596	08/14/2007	05/24/2021
BioCryst	US	BIOCRYST LOGO	Trademark	86/461,211	11/21/2014	To Be Determined
BioCryst	US	BIOCRYST PHARMACEUTICALS, INC	Trademark	2,902,002	06/11/2002	11/09/2024
BioCryst	US	BIOCRYST PHARMACEUTICALS, INC	Trademark	3,974,836	08/14/2007	06/07/2021
BioCryst	US	DESIGN. OPTIMIZE. DELIVER.	Trademark	4,074,214	05/19/2011	12/20/2021
BioCryst	US	BIO CRYST	Trademark	87/743,886	01/04/2018	To Be Determined
BioCryst	US	BIOCRYST NEW LOGO	Trademark	87/743,895	01/04/2018	To Be Determined
BioCryst	US	DELIVERING EXTRAORDINARY. EMPOWERING ORDINARY.	Trademark	87/748,712	01/09/2018	To Be Determined
BioCryst	US	BIO CRYST	Trademark	87/748,718	01/09/2018	To Be Determined
BioCryst	US	BIOCRYST NEW LOGO	Trademark	87/748,724	01/09/2018	To Be Determined
BioCryst	US	VALENSCION[2]	Trademark	87/796,333	02/13/2018	To Be Determined
BioCryst	US	VALENSCION[2]	Trademark	87/796,359	02/13/2018	To Be Determined
BioCryst	US	VALENSCION LOGO[2]	Trademark	87/821,005	03/05/2018	To Be Determined
BioCryst	US	VALENSCION LOGO[2]	Trademark	87/821,010	03/05/2018	To Be Determined
BioCryst	US	VALENSCION LOGO[2]	Trademark	87/857,667	03/30/2018	To Be Determined
BioCryst	US	VALENSCION LOGO[2]	Trademark	87/857,674	03/30/2018	To Be Determined

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT B

Summary of Trademark Registrations and Applications in BioCryst Estate – July 12, 2018

Borrower that is Owner of IP[1]	**Country**	**Name/Identifier of IP**	**Type of IP**	**Trademark Registration or Application Number**	**Filing Date**	**Expiration Date[1]**
BioCryst	US	VALENSCION LOGO[2]	Trademark	87/857,682	03/30/2018	To Be Determined
BioCryst	US	VALENSCION LOGO[2]	Trademark	87/857,690	03/30/2018	To Be Determined
BioCryst	US	JORLAH	Trademark	87/897,786	04/27/2018	To Be Determined
BioCryst	US	ORLADEO	Trademark	87/897,806	04/27/2018	To Be Determined
BioCryst	US	ORLADEYO	Trademark	87/897,816	04/27/2018	To Be Determined
BioCryst	US	JORLAVIVE	Trademark	87/897,828	04/27/2018	To Be Determined
BioCryst	US	ORDAYBA	Trademark	87/897,842	04/27/2018	To Be Determined
BioCryst	US	JORLADEYO	Trademark	87/897,852	04/27/2018	To Be Determined
BioCryst	CA	BIOCRYST PHARMACEUTICALS, INC.	Trademark	1,801,455	09/21/2016	To Be Determined
BioCryst	EU	BIOCRYST PHARMACEUTICALS, INC.	Trademark	2960995	12/04/2002	10/24/2022
BioCryst	JP	BIOCRYST PHARMACEUTICALS, INC.	Trademark	4721741	12/04/2002	10/24/2023
BioCryst	CA	BIO CRYST	Trademark	Not Yet Available	07/09/2018	To Be Determined
BioCryst	CA	BIOCRYST NEW LOGO	Trademark	Not Yet Available	07/09/2018	To Be Determined
BioCryst	WO (Madrid System)	BIO CRYST	Trademark	Not Yet Available	07/09/2018	To Be Determined
BioCryst	WO (Madrid System)	BIOCRYST NEW LOGO	Trademark	Not Yet Available	07/09/2018	To Be Determined

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

EXHIBIT B

Summary of Trademark Registrations and Applications in BioCryst Estate – July 12, 2018

[1] For US trademarks, 10-year date based on initial registration date or subsequent renewal date. Assumes "Declaration of Use under Section 8" is filed between the fifth and sixth year following registration. The filing of a combined "Declaration of Use and Application for Renewal under Sections 8 and 9" must be filed between the ninth and tenth year after registration, and every 10 years thereafter, to maintain mark beyond the initial 10-year expiration date.

[2] To be abandoned in view of termination of merger agreement with Idera Pharmaceuticals, Inc.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

INTANGIBLE ASSETS SCHEDULE (*CONTINUED*)

LICENSE AND SIMILAR AGREEMENTS

Material License Agreements

INBOUND LICENSE # 1		
Name and Date of License Agreement:	Joint Research and License Agreement by and between BioCryst Pharmaceuticals, Inc. and The UAB Research Foundation re: Neuraminidase (IVN), dated November 23, 1994	
Borrower that is Licensee:	BioCryst Pharmaceuticals, Inc.	
Name and address of Licensor:	The UAB Research Foundation, 701 South 20th Street, Suite 1120G/AB, Birmingham, Alabama 35294-0111	
Expiration Date of License	See Section 13.1, at page 41	
Exclusive License [Y/N]?	Yes	
Restrictions on:	**Right to Grant a Lien [Y/N]?**	
	Right to Assign [Y/N]?	No, without the prior written consent of UAB (which shall not be unreasonably withheld), the licenses and other rights granted pusuant to this Agreement, shall not be transferred in their entirety by BioCryst to any other party other than to a successor of the business of BioCryst relating to IVNI and any other such transfer shall be null and void.
	Right to Sublicense [Y/N]?	BioCryst is free to grant licenses and sublicenses to Third Parties without the necessity of obtaining any consent from UAB. (Section 14.5).
Under the terms of this agreement, UAB performed specific research for us in return for research payments and license fees. UAB has granted us certain rights to any discoveries in these areas resulting from research developed by UAB or jointly developed with us. We have agreed to pay single digit royalties on sales of any resulting product and to share in future payments received from other third-party partners. These two agreements have initial 25-year terms, are automatically renewable for five-year terms throughout the life of the last patent and are terminable by us upon three months' notice and by UAB under certain circumstances.		

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

OUTBOUND LICENSE #1 [COMPLETE FOR EACH AGREEMENT]		
Name and Date of License Agreement:	License Agreement by and between BioCryst Pharmaceuticals, Inc. and Seqirus UK Limited, dated June 16, 2015	
Borrower that is Licensor:	BioCryst Pharmaceuticals, Inc.	
Name and address of Licensee:	Seqirus UK Limited, 100 New Bridge Street, London, England, EC4V 6JA	
Expiration Date of License	See Article 13, Section 13.1, at page 40	
Exclusive License [Y/N]?	Yes, in the Field and in the Territory (worldwide, excluding Israel, Japan, South Korea and Taiwan)	
Restrictions on:	**Right to Grant a Lien [Y/N]?**	No, unless Seqirus provides written consent. (Section 16.1)
	Right to Assign [Y/N]?	No, unless Seqirus provides written consent, except that assignment to an affiliate is permitted (Section 16.1)
	Right to Sublicense [Y/N]?	A limited sublicense to Third Party contractors as permitted under Section 3.6 does not require the prior approval of BioCryst. Any other sublicense requires the prior approval of BioCryst. (Sections 2.1, 3.6)
Does Default or Termination Affect Agent's Ability to sell [Y/N]?	Yes.	

Describe Licensed Intellectual Property For This License			
Name / Identifier of IP	**Type of IP (e.g., patent, TM, ©, mask work)**	**Registration/ Publication or Application Number[1]**	**Filing Date[2] / Expiration Date[3]**

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

PRODUCTS SCHEDULE

RAPIVAB

BCX7353

BCX4430

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

REQUIRED PERMITS SCHEDULE

NDA 206426 FOR RAPIVAB (PERAMIVIR) WAS SUBMITTED ON 22 DEC 2013 AND APPROVED ON 19 DEC 2014.

Pursuant to 17 CFR 20.24b-2, confidential information has been omitted in places marked "***" and has been filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request with the Commission.

SPE COVENANT SCHEDULE

Since the date of its formation and at all times on and after the date thereof, Peramivir SPE has complied with and shall at all times after the date hereof comply with the following requirements:

(a) does not have and will not have any assets other than (i) the Seqirus UK License Agreement and all of its rights thereunder, (ii) its rights under a license agreement between Borrower, as licensor, and Peramivir SPE, as licensee, regarding the Peramivir IP and (iii) de minimis cash necessary to pay fees and costs associated with maintaining its legal existence and good standing in its respective jurisdiction of formation, each in accordance with Section 6.1 of the Agreement;

(b) is not engaged and will not engage in any business unrelated to the performance of its obligations under the Seqirus UK License Agreement and the license agreement with Borrower regarding the Peramivir IP;

(c) is organized solely for the purpose of assuming all of Biocryst's rights and obligations under the Seqirus UK License Agreement;

(d) has not entered into and will not enter into any contract or agreement with any Affiliate of such entity, any constituent party of such entity or any Affiliate of any constituent party, except upon terms and conditions, that have been, are and shall be intrinsically fair and substantially similar to those that would be available on an arms-length basis with third parties other than any such party;

(e) has not incurred and will not incur any Indebtedness other than the Obligations incurred hereunder;

(f) has not made and will not make any loans or advances to any third party (including any affiliate or constituent party or any affiliate of any constituent party) and has not and shall not acquire obligations or securities of its Affiliates or any constituent party;

(g) has been, is and will remain solvent and has paid, and will pay, its debts and liabilities (including, as applicable, shared personnel and overhead expenses) from its own funds and assets as the same have become due and as same shall become due;

(h) has done or caused to be done and will do all things necessary to observe organizational formalities and preserve its existence and will not, nor will such entity permit any constituent party, to amend, modify or otherwise change the organizational documents of such entity or such constituent party without the prior written consent of Agent;

(i) has maintained, and will maintain, all of its books, records, financial statements and bank accounts separate from those of its Affiliates and any constituent party and such entity will file its own tax returns. Such entity shall maintain its books, records, resolutions and agreements as official records;

(j) has been and will be, and at all times has held itself out and will hold itself out to the public as, a legal entity separate and distinct from any other entity (including any Affiliate of such entity, any constituent party of such entity or any Affiliate of any constituent party), shall correct any known misunderstanding regarding its status as a separate entity, shall conduct business in its own name, shall not identify itself or any of its Affiliates as a division or part of the other and shall maintain and utilize a separate telephone number, if any, and separate stationery, invoices and checks;

(k) has maintained, and will maintain, adequate capital for the normal obligations reasonably foreseeable in a business of its size and character and in light of its contemplated business operations;

(l) has not engaged, sought or consented to and will not engage in, seek or consent to any dissolution, winding up, liquidation, consolidation, merger, sale of all or substantially all of its assets, transfer of its equity interests or amendment of its operating documents with respect to the matters set forth in this SPE Covenant Schedule;

(m) has not commingled and will not commingle its funds and other assets with those of any Affiliate or constituent party, or any Affiliate of any constituent party, or any other person;

(n) has and will maintain its assets in such a manner that it will not be costly or difficult to segregate, ascertain or identify its individual assets from those of any Affiliate or constituent party, or any Affiliate of any constituent party, or any other Person and has held and will hold its assets in its own name;

(o) has not and will not assume or guarantee or become obligated for the debts of any other Person or hold out its credit as being available to satisfy the obligations of any other Person except as permitted pursuant to this Agreement;

(p) [reserved];

(q) has organizational documents that provide that it will not: (i) dissolve, merge, liquidate, consolidate; (ii) sell all or substantially all of its assets; (iii) engage in any other business activity or amend its organizational documents with respect to the matters set forth in this SPE Covenant Schedule without the consent of Agent; or (iv) without the affirmative vote of all directors or managers of such entity, file a bankruptcy or insolvency petition or otherwise institute insolvency proceedings with respect to itself or to any other entity in which it has a direct or indirect legal or beneficial ownership interest;

(r) has maintained and will maintain its financial statements, accounting records and other entity documents separate from any other Person and has not permitted and will not permit its assets to be listed as assets on the financial statement of any other entity except as required by GAAP; *provided*, *however*, that any such consolidated financial statement shall contain a note indicating that its separate assets and liabilities are neither available to pay the debts of the consolidated entity nor constitute obligations of the consolidated entity;

(s) has paid and will pay its own liabilities and expenses, including the salaries of its own employees, out of its own funds and assets, and has maintained and will maintain a sufficient number of employees in light of its contemplated business operations;

(t) has allocated and will allocate fairly and reasonably any overhead expenses that are shared with any Affiliate, including, but not limited to, paying for shared office space and services performed by any employee of an Affiliate;

(u) maintains and uses and will maintain and use separate stationery, invoices and checks bearing its name;

(v) has not pledged and will not pledge its assets for the benefit of any other Person, except as permitted pursuant to this Agreement;

(w) has not identified and will not identify its partners, members or shareholders, or any Affiliate of any of them, as a division or part of it and has not identified itself and shall not identify itself as a division of any other Person;

(x) has not and will not have any obligation to, and will not, indemnify its partners, officers, directors or members, as the case may be, unless such an obligation is fully subordinated to the Obligations and will not constitute a claim against it in the event that cash flow in excess of the amount required to pay the Obligations is insufficient to pay such obligation; and

(y) shall conduct its business so that the assumptions made with respect to such entity in any opinion letter (the "**Non-Consolidation Opinion**") to be delivered by counsel for such entity, as reasonably requested by Agent in connection with a secondary market transaction undertaken with respect to the Credit Extensions shall be true and correct in all respects.

Exhibit 31.1

CERTIFICATIONS

I, Jon P. Stonehouse, certify that:

1. I have reviewed this quarterly report on Form 10-Q of BioCryst Pharmaceuticals, 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(s) 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: November 8, 2018

/s/ Jon P. Stonehouse
Jon P. Stonehouse
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Thomas R. Staab, II, certify that:

1. I have reviewed this quarterly report on Form 10-Q of BioCryst Pharmaceuticals, 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(s) 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: November 8, 2018

/s/ Thomas R. Staab, II
Thomas R. Staab, II
Senior Vice President, Chief Financial Officer and Treasurer

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 BioCryst Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the period ending September 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jon P. Stonehouse, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(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.

/s/ Jon P. Stonehouse
Jon P. Stonehouse
President and Chief Executive Officer
Date: November 8, 2018

Exhibit 32.2

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 BioCryst Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the period ending September 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Thomas R. Staab, II, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(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.

/s/ Thomas R. Staab, II
Thomas R. Staab, II
Senior Vice President, Chief Financial Officer and Treasurer
Date: November 8, 2018