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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2017

OR

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

For the transition period from ____ to ____

Commission File Number: 001-36783

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

Delaware	**2836**	**20-1450200**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

2130 W. Holcombe Blvd., Ste. 800
Houston, TX 77030
(832) 384-1100
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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** x **No** o

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, 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. (Check one):

Large accelerated filer	o		Accelerated filer	x
Non-accelerated filer	o	(Do not check if a smaller reporting company)	Smaller reporting company	o
Emerging growth company	x			

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. x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). **Yes** o **No** x
As of November 3, 2017, there were 33,226,519 outstanding shares of Bellicum's common stock, par value, $0.01 per share.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Bellicum Pharmaceuticals, Inc.
Condensed Consolidated Balance Sheets
(In thousands, except share and par value amounts)

	September 30, 2017 (Unaudited)	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	$ 54,468	$ 33,140
Investment securities, available for sale - short-term	58,608	70,632
Accounts receivable, interest and other receivables	468	334
Prepaid expenses and other current assets	2,114	1,504
Total current assets	115,658	105,610
Investment securities, available for sale - long-term	2,556	—
Property and equipment, net	26,252	16,504
Restricted cash	2,947	9,640
Other assets	358	283
TOTAL ASSETS	$ 147,771	$ 132,037
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 3,162	$ 3,623
Accrued expenses and other current liabilities	8,550	9,363
Current maturities of long-term debt	6,913	1,787
Current portion of capital lease obligations	29	21
Current portion of deferred rent	359	319
Total current liabilities	19,013	15,113
Long-term liabilities:		
Long-term debt	23,839	18,436
Capital lease obligation	140	141
Deferred rent	1,662	1,773
TOTAL LIABILITIES	44,654	35,463
Commitments and contingencies:		
Stockholders' equity:		
Preferred stock: $0.01 par value; 10,000,000 shares authorized: no shares issued and outstanding	—	—
Common stock, $0.01 par value; 200,000,000 shares authorized at September 30, 2017 and December 31, 2016, 33,929,516 shares issued and 33,252,053 shares outstanding at September 30, 2017; 27,833,028 shares issued and 27,155,565 shares outstanding at December 31, 2016	339	278
Treasury stock: 677,463 shares held at September 30, 2017 and December 31, 2016	(5,056)	(5,056)
Additional paid-in capital	408,412	332,068
Accumulated other comprehensive income	16	17
Accumulated deficit	(300,594)	(230,733)
Total stockholders' equity	103,117	96,574
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 147,771	$ 132,037

See accompanying notes, which are an integral part of these unaudited consolidated financial statements.

Bellicum Pharmaceuticals, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Income (Loss)
(In thousands, except share and per share amounts)

(Unaudited)

	Three months ended Sept 30,		Nine months ended Sept 30,	
	2017	**2016**	**2017**	**2016**
REVENUES				
Grants	$ 126	$ 114	$ 254	$ 307
Total revenues	126	114	254	307
OPERATING EXPENSES				
Research and development	18,101	13,290	51,355	36,179
License fees	151	—	849	280
General and administrative	4,579	4,252	15,992	12,715
Total operating expenses	22,831	17,542	68,196	49,174
Loss from operations	(22,705)	(17,428)	(67,942)	(48,867)
OTHER INCOME (EXPENSE):				
Interest income	284	224	788	687
Interest expense	(1,010)	(515)	(2,707)	(1,123)
Total other expense	(726)	(291)	(1,919)	(436)
NET LOSS	$ (23,431)	$ (17,719)	$ (69,861)	$ (49,303)
Net loss per common share attributable to common shareholders, basic and diluted	$ (0.71)	$ (0.66)	$ (2.24)	$ (1.83)
Weighted-average shares outstanding, basic and diluted	33,178,611	26,966,630	31,204,521	26,919,984
Net loss	$ (23,431)	$ (17,719)	$ (69,861)	$ (49,303)
Other comprehensive income (loss):				
Unrealized gain (loss) on investment securities	22	(18)	(1)	380
Comprehensive loss	$ (23,409)	$ (17,737)	$ (69,862)	$ (48,923)

See accompanying notes, which are an integral part of these unaudited consolidated financial statements.

Bellicum Pharmaceuticals, Inc.
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Nine months ended September 30,	
	2017	**2016**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (69,861)	$ (49,303)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation expense	2,524	1,619
Share-based compensation	10,217	9,243
Amortization of premium on investment securities, net	214	449
Amortization of lease liability	(71)	(100)
Amortization of deferred financing costs	604	275
Loss on disposition of fixed assets	—	20
Changes in operating assets and liabilities:		
Receivables	(134)	135
Prepaid expenses and other assets	(685)	482
Accounts payable	(923)	(488)
Accrued liabilities and other	(2,046)	1,716
NET CASH USED IN OPERATING ACTIVITIES	(60,161)	(35,952)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of investment securities	(36,283)	(26,116)
Proceeds from sale of investment securities	45,536	25,767
Purchases of property and equipment	(10,554)	(5,787)
CASH USED IN INVESTING ACTIVITIES	(1,301)	(6,136)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from stock offering, net of offering costs	64,568	—
Proceeds from issuance of common stock - ESPP	167	188
Proceeds from exercise of stock options	1,453	562
Proceeds from notes payable	10,000	20,000
Payment of debt issuance costs	(75)	(199)
Payment on capital lease obligation	(16)	(10)
NET CASH PROVIDED BY FINANCING ACTIVITIES	76,097	20,541
NET CHANGE IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	14,635	(21,547)
CASH, CASH EQUIVALENTS AND RESTRICTED CASH AT BEGINNING OF PERIOD	42,780	70,241
CASH, CASH EQUIVALENTS AND RESTRICTED CASH AT END OF PERIOD	$ 57,415	$ 48,694
NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Purchases of property and equipment in accounts payables and accrued liabilities	$ 1,695	$ 1,066
Accrued debt issuance costs	$ 695	$ 1,390
Capital lease obligations incurred for equipment	$ 23	$ 34

See accompanying notes, which are an integral part of these unaudited consolidated financial statements.

NOTE 1 - ORGANIZATION AND BUSINESS DESCRIPTION

Bellicum Pharmaceuticals, Inc., or Bellicum, was incorporated in Delaware in July 2004 and is based in Houston, Texas. Bellicum is a clinical stage biopharmaceutical company focused on discovering and developing novel cellular immunotherapies for various forms of cancer, including both hematological cancers and solid tumors, as well as orphan inherited blood disorders. Bellicum is devoting substantially all of its present efforts to developing next-generation product candidates in some of the most important areas of cellular immunotherapy, including, hematopoietic stem cell transplantation, CAR T and TCR cell therapy.

In January 2017, Bellicum formed a wholly-owned subsidiary, Bellicum Pharma Limited, a private limited company organized under the laws of the United Kingdom for the purpose of developing product candidates in Europe. Bellicum and Bellicum Pharma Limited are collectively referred to herein as the Company.

NOTE 2 - BASIS OF PRESENTATION AND MANAGEMENT PLANS

The accompanying interim consolidated financial statements are unaudited. These unaudited interim financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) and follow the requirements of the U.S. Securities and Exchange Commission (“SEC”) for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by GAAP have been omitted. In management’s opinion, the unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited financial statements and include all adjustments necessary for the fair presentation of the Company’s financial position and its results of operations and its cash flows for the periods presented. All such adjustments are normal and recurring in nature. These statements should be read in conjunction with the Company's Annual Report on Form 10-K filed for the fiscal year ended December 31, 2016 (the “Annual Report”). A copy of the Annual Report is available on the SEC’s website, www.sec.gov, under the Company’s ticker symbol “BLCM” or on Bellicum’s website, www.bellicum.com. The results for the interim periods are not necessarily indicative of the results expected for the full fiscal year or any other interim period. Any reference in these footnotes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification (“ASC”) and Accounting Standards Update (“ASU”) of the Financial Accounting Standards Board (“FASB”).

The Company has not generated any revenue from product sales to date and, if the Company does not successfully obtain regulatory approval and commercialize any of its product candidates, the Company will not be able to generate product revenue or achieve profitability. As of September 30, 2017, the Company had an accumulated deficit of $300.6 million.

The Company is subject to risks common to companies in the biotechnology industry and the future success of the Company is dependent on its ability to successfully complete the development of, and obtain regulatory approval for, its product candidates, manage the growth of the organization, obtain additional financing necessary in order to develop, launch and commercialize its product candidates, and compete successfully with other companies in its industry.

NOTE 3 - SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

The preparation of the consolidated financial statements in accordance with GAAP requires management to make certain estimates and judgments that affect the reported amounts of assets, liabilities, and expenses. Actual results could differ from those estimates.

Consolidation

All financial information presented includes the accounts of the Company and its wholly-owned subsidiary, for which there has been no material activity to date. All significant intercompany balances and transactions have been eliminated in consolidation.

Reclassifications

Certain prior period amounts in research and development expenses pertaining to license fees have been reclassified and listed separately to conform to the current period presentation. The reclassifications did not impact net loss or net loss per share.

Revenue Recognition

The Company has not yet generated any revenue from product sales. The Company's source of revenue in 2016 and the nine months ended September 30, 2017 has been from grants. When grant funds are received after costs have been incurred, the Company accrues revenue and records a grant receivable. Cash received from grants in advance of incurring qualifying costs is recorded as deferred revenue, and recognized as revenue when qualifying costs are incurred.

Cash and Cash Equivalents

The Company considers all short-term, highly liquid investments with maturity of three months or less from the date of purchase to be cash equivalents.

Net Loss and Net Loss per Share of Common Stock Attributable to Common Stockholders

Basic net loss per share attributable to common stockholders is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period without consideration for common stock equivalents.

The following outstanding shares of common stock equivalents were excluded from the computations of diluted net loss per share of common stock attributable to common stockholders for the periods presented, as the effect of including such securities would be anti-dilutive.

	As of September 30,	
	2017	**2016**
Common Stock Equivalents:	**Number of shares**	
Options to purchase common stock	5,299,158	4,501,561
Unvested shares of restricted stock units	96,250	—
Unvested shares of restricted stock	44,119	88,236
Total common stock equivalents	5,439,527	4,589,797

Investment Securities

Consistent with its investment policy, the Company invests its cash allocated to fund its short-term liquidity requirements with prominent financial institutions in bank depository accounts and institutional money market funds. The Company invests the remainder of its cash in corporate debt securities and municipal bonds rated at least A quality or equivalent, U.S. Treasury notes and bonds and U.S. and state government agency-backed securities.

The Company determines the appropriate classification of investment securities based on whether they represent the investment of funds available for current operations, as defined in ASC 210-10-45-1 and ASC 210-10-45-2. The Company reevaluates its classification as of each balance sheet date. All investment securities owned are classified as available-for-sale. The cost of securities sold is based on the specific identification method. Investment securities are recorded as of each balance sheet date at fair value, with unrealized gains and, to the extent deemed temporary, unrealized losses reported as accumulated other comprehensive gain (loss), a separate component of stockholders' equity. Interest and dividend income on investment securities, accretion of discounts and amortization of premiums and realized gains and losses are included in interest income in the statements of operations and comprehensive income (loss).

An investment security is considered to be impaired when a decline in fair value below its cost basis is determined to be other than temporary. The Company evaluates whether a decline in fair value of an investment security is below its cost basis is other than temporary using available evidence. In the event that the cost basis of the investment security exceeds its fair value, the Company evaluates, among other factors, the amount and duration of the period that the fair value is less than the cost basis, the financial health of and business outlook for the issuer, including industry and sector performance, and operational and financing cash flow factors, overall market conditions and trends, the Company's intent to sell the investment security and whether it is more likely than not the Company would be required to sell the investment security before its anticipated recovery. If a decline in fair value is determined to be other than temporary, the Company records an impairment charge in the statement of operations and comprehensive loss and establishes a new cost basis in the investment.

Property and Equipment

Furniture, equipment and software are recorded at cost and are depreciated using the straight-line method over the estimated useful lives of the related assets, which range from three to five years. Leasehold improvements are amortized over the shorter of the estimated useful life or the remaining lease term.

Debt Issuance Costs

Costs related to debt issuance are presented in the balance sheet as a direct deduction from the carrying amount of the debt liability, consistent with debt discounts and are amortized using the effective interest method. Amortization of debt issuance costs are included in interest expense.

Deferred Rent and Rent

The Company recognizes rent expense for leases with increasing annual rents on a straight-line basis over the term of the lease. The amount of rent expense in excess of cash payments is classified as accrued rent. Any lease incentives received are deferred and amortized over the term of the lease.

Equity Issuance Costs

Equity issuance costs represent costs paid to third parties in order to obtain equity financing. These costs have been netted against the proceeds of the equity issuances.

Licenses and Patents

Licenses and patent costs for technologies that are utilized in research and development and have no alternative future use are expensed as incurred. Costs related to the license of patents from third parties and internally developed patents are classified as research and development expenses. Legal costs related to patent applications and maintenance are classified as general and administrative expenses.

Clinical Trials

The Company estimates its clinical trial expense accrual for a given period based on the number of patients enrolled at each site, estimated cost per patient, and the length of time each patient has been in the trial, less amounts previously billed. These accruals are recorded in accrued expenses and other current liabilities, and the related expense is recorded in research and development expense.

Research and Development

Research and development expenses consist of expenses incurred in performing research and development activities, including compensation and benefits for research and development employees and consultants, facilities expenses, overhead expenses, cost of laboratory supplies, manufacturing expenses, fees paid to third parties and other outside expenses.

Research and development costs are expensed as incurred. Clinical trial and other development costs incurred by third parties are expensed as the contracted work is performed. The Company accrues for costs incurred as the services are being provided by monitoring the status of the clinical trial or project and the invoices received from its external service providers. The Company estimates depend on the timeliness and accuracy of the data provided by the vendors regarding the status of each project and total project spending. The Company adjusts its accrual as actual costs become known. Where contingent milestone payments are due to third parties under research and development arrangements, the milestone payment obligations are expensed when the milestone events are achieved.

Collaboration Agreements

The Company enters into collaboration agreements that include varying arrangements regarding which parties perform and bear the costs of research and development activities. The Company may share the costs of research and development activities with a collaborator, or the Company may be reimbursed for all or a significant portion of the costs of the Company's research and development activities. The Company records its internal and third-party development costs associated with these collaborations as research and development expenses. When the Company is entitled to reimbursement of all or a portion of the research and development expenses that it incurs under a collaboration, the Company records those reimbursable amounts as a deduction to the research and development expenses. If the collaboration is a cost-sharing arrangement in which both the Company and its collaborator perform development work and share costs. The Company also recognizes, as research and development expenses in

the period when its collaborator incurs development expenses, the portion of the collaborator's development expenses that the Company is obligated to reimburse.

Contract Manufacturing Services

Contract manufacturing services are expensed as incurred. Prepaid expenses are capitalized and amortized as services are performed.

Share-Based Compensation

The Company accounts for its share-based compensation in accordance with ASC 718, *Compensation - Stock Compensation*, which requires the measurement and recognition of compensation expense for all share-based payment awards made to employees and directors to be recognized in the financial statements, based on their fair value. The Company measures share-based compensation to consultants in accordance with ASC 505-50, *Equity-Based Payments to Non-Employees*, and recognizes the fair value of the award over the period the services are rendered.

The Company uses the Black-Scholes option-pricing model to estimate the fair value of stock option awards. The fair value is recognized as expense, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award on a straight-line basis.

Application of New Accounting Standards

During 2017, the Company adopted ASU No. 2016-09, "*Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*", which is intended to simplify the financial reporting of the income tax impacts of share-based compensation arrangements. The classification guidance under ASU No. 2016-09 requires the recognition of excess tax benefits from share-based compensation arrangements as a discrete item within income tax benefit rather than additional paid-in capital and the classification guidance requiring presentation of excess tax benefits from share-based compensation arrangements as an operating activity on the statement of cash flows, rather than as a financing activity.

The adoption of ASU No 2016-09 had no immediate impact on our financial statements and related disclosures because the Company does not currently recognize a tax benefit related to share-based compensation expense as we maintain net operating loss carryforwards and have established a valuation allowance against the entire net deferred tax asset as of September 30, 2017. Further, we have elected to continue to estimate the number of stock-based awards expected to vest, as permitted by ASU 2016-09, rather than electing to account for forfeitures as they occur.

In August 2016, the FASB issued ASU 2016-15, "*Classification of Certain Cash Receipts and Cash Payments*," which provides guidance on the classification of certain cash receipts and payments in the statement of cash flows. The pronouncement is effective for annual periods beginning after December 15, 2017, and interim periods within those annual periods. Earlier application is permitted in any interim or annual period. The Company adopted this standard in 2017, with no material effect upon its financial statements.

New Accounting Requirements and Disclosures

In January 2016, the FASB issued ASU No. 2016-01, "*Recognition and Measurement of Financial Assets and Financial Liabilities*." ASU 2016-01 requires that most equity investments be measured at fair value, with subsequent changes in fair value recognized in net income. The pronouncement also impacts financial liabilities under the fair value option and the presentation and disclosure requirements for financial instruments. This pronouncement is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, and early adoption is not permitted. The Company does not believe that the adoption of this pronouncement will have a material impact on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, "*Leases*," which requires companies that lease assets to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in its balance sheet. The pronouncement will also require additional disclosures about the amount, timing and uncertainty of cash flows arising from leases. This pronouncement is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018, and early adoption is permitted. The Company is currently evaluating the impact of this pronouncement on the Company's consolidated financial statements.

NOTE 4 - CASH, CASH EQUIVALENTS AND RESTRICTED CASH

As of September 30, 2017, and December 31, 2016, respectively, the Company maintained $2.9 million and $9.6 million as restricted cash. The funds are being held by an escrow agent to cover the construction costs related to the Company's facility lease. The restricted cash is subject to the terms of the escrow agreement and the requirements specified therein. The amount will decrease as the Company and its landlord authorize completion of certain aspects of the building improvements.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the balance sheets that sum to the total of the same such amounts shown in the statements of cash flows.

	June 30, 2017	December 31, 2016
	(in thousands)	
Cash and cash equivalents [1]	$ 54,468	$ 33,140
Restricted cash, noncurrent	2,947	9,640
Total cash, cash equivalents and restricted cash shown in the statements of cash flows	$ 57,415	$ 42,780

[1] As of September 30, 2017, and December 31, 2016, the Company invested approximately $43.6 million and $23.5 million, respectively, in cash equivalent instruments.

NOTE 5 - FAIR VALUE MEASUREMENTS AND INVESTMENT SECURITIES

Fair Value Measurement

The Company follows ASC, Topic 820, *Fair Value Measurements and Disclosures*, or ASC 820, for application to financial assets. ASC 820 defines fair value, provides a consistent framework for measuring fair value under GAAP and requires fair value financial statement disclosures. ASC 820 applies only to the measurement and disclosure of financial assets that are required or permitted to be measured and reported at fair value under other ASC topics (except for standards that relate to share-based payments such as ASC Topic 718, *Compensation - Stock Compensation*).

The valuation techniques required by ASC 820 may be based on either observable or unobservable inputs. Observable inputs reflect readily obtainable data from independent sources, and unobservable inputs reflect the Company’s market assumptions.

These inputs are classified into the following hierarchy:

Level 1 Inputs - quoted prices (unadjusted) in active markets for identical assets that the reporting entity has the ability to access at the measurement date;

Level 2 Inputs - inputs other than quoted prices included within Level 1 that are observable for the asset, either directly or indirectly; and

Level 3 Inputs - unobservable inputs for the assets.

The following tables present the Company's investment securities (including, if applicable, those classified on the Company's balance sheet as cash equivalents) that are measured at fair value on a recurring basis as of September 30, 2017 and December 31, 2016, respectively:

		Fair Value Measurements at Reporting Date		
	Balance at September 30, 2017	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
	(in thousands)			
Cash Equivalents:				
Money market funds	$ 43,573	$ 43,573	$ —	$ —
Total Cash Equivalents	$ 43,573	$ 43,573	$ —	$ —
Investment Securities:				
U.S. government agency-backed securities	$ 19,434	$ —	$ 19,434	$ —
Corporate debt securities	41,082	—	41,082	—
Municipal bonds	648	—	648	—
Total Investment Securities	$ 61,164	$ —	$ 61,164	$ —

		Fair Value Measurements at Reporting Date		
	Balance at December 31, 2016	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
	(in thousands)			
Cash Equivalents:				
Money market funds	$ 23,459	$ 23,459	$ —	$ —
Total Cash Equivalents	$ 23,459	$ 23,459	$ —	$ —
Investment Securities:				
U.S. government agency-backed securities	$ 25,908	$ —	$ 25,908	$ —
Corporate debt securities	42,053	—	42,053	—
Municipal bonds	2,671	—	2,671	—
Total Investment Securities	$ 70,632	$ —	$ 70,632	$ —

U.S. Treasury, U.S. government agency-backed securities, corporate debt securities and municipal bonds are valued based on various observable inputs such as benchmark yields, reported trades, broker/dealer quotes, benchmark securities and bids.

Investment securities, all classified as available-for-sale, consisted of the following as of September 30, 2017 and December 31, 2016, respectively:

September 30, 2017	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Aggregate Estimated Fair Value
	(in thousands)			
Investment Securities:				
U.S. government agency-backed securities	$ 19,449	$ —	$ (15)	$ 19,434
Corporate debt securities	41,051	37	(6)	41,082
Municipal bonds	648	—	—	648
Total Investment Securities	$ 61,148	$ 37	$ (21)	$ 61,164

December 31, 2016	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Aggregate Estimated Fair Value
	(in thousands)			
U.S. government agency-backed securities	$ 25,906	$ 7	$ (5)	$ 25,908
Corporate debt securities	42,040	41	(28)	42,053
Municipal bonds	2,669	2	—	2,671
Total	$ 70,615	$ 50	$ (33)	$ 70,632

The Company's investment securities as of September 30, 2017, will reach maturity between October 2017 and January 2019, with a weighted-average maturity date in March 2018.

At December 31, 2016, the Company classified all of its available-for-sale investment securities, including those with maturities beyond one year, as current assets on the accompanying balance sheets based on the highly liquid nature of the investment securities and because these investment securities were considered available for use in current operations. However, as of September 30, 2017, the Company reclassified the investment securities with maturity dates beyond one year as non-current assets as the Company does not intend to utilize them to fund current operations.

NOTE 6 - PROPERTY AND EQUIPMENT

Property and equipment consists of the following:

	September 30, 2017	December 31, 2016
	(in thousands)	
Leasehold improvements	$ 21,033	$ 12,131
Lab equipment	7,777	5,397
Office furniture	1,569	1,560
Manufacturing equipment	1,691	1,275
Computer and office equipment	1,040	623
Equipment held under capital leases	204	181
Software	210	85
Total	33,524	21,252
Less: accumulated depreciation	(7,272)	(4,748)
Property and equipment, net	$ 26,252	$ 16,504

During the nine months ended September 30, 2017 and 2016, the Company recorded $2.5 million and $1.6 million of depreciation expense, respectively. Leasehold improvements as of September 30, 2017 includes $2.5 million related to costs incurred by the landlord.

NOTE 7 – ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other liabilities consist of the following:

	September 30, 2017	December 31, 2016
	(in thousands)	
Accrued construction costs	$ 1,195	$ 3,120
Accrued payroll	2,208	1,568
Accrued patient treatment costs	1,153	1,006
Accrued manufacturing costs	2,195	1,704
Accrued other	1,799	1,965
Total accrued expenses and other current liabilities	$ 8,550	$ 9,363

NOTE 8 - DEBT

On March 10, 2016, (the “Closing Date”), the Company, entered into a Loan and Security Agreement (the “Loan Agreement”) with Hercules Capital, Inc. Hercules Technology II, L.P., and Hercules Technology III, L.P., or collectively, Hercules, as a lender, under which the Company borrowed $15.0 million on the Closing Date. The Company borrowed an additional $5.0 million and $10.0 million on September 15, 2016 and March 8, 2017, respectively. The total debt is secured by a lien covering substantially all of the Company's assets, excluding intellectual property, but including proceeds from the sale, license, or disposition of our intellectual property. The interest rate will be calculated at a rate equal to the greater of either (i) 9.35% plus the prime rate as reported in The Wall Street Journal minus 3.50%, or (ii) 9.35%. The interest rate on amounts borrowed under the Loan Agreement was 9.60% and 10.10% at December 31, 2016 and September 30, 2017, respectively.

As a result of the additional borrowing on March 8, 2017, the interest only period was extended for an additional six months through March 2018. Beginning in April 2018, equal monthly payments of principal and interest are due over a 24 month period through the maturity date of March 1, 2020, upon which the remaining principal balance and the final facility charge of $2.1 million will be due and payable.

The Company paid expenses related to the Loan Agreement of $0.3 million, which, along with the final facility charge of $2.1 million, have been recorded as deferred financing costs, which offset long-term debt on the Company's balance sheet. The deferred financing costs are being amortized over the term of the loan as interest expense. During the three and nine months ended September 30, 2017, interest expense included $0.2 million and $0.6 million, respectively, of amortized deferred financing costs. During the three and nine months ended September 30, 2016, interest expense included $0.1 million and $0.3 million, respectively, of amortized deferred financing costs.

Management believes that the carrying value of the debt facility approximates its fair value, as the Company's debt facility bears interest at a rate that approximates prevailing market rates for instruments with similar characteristics. The fair value of the Company's debt facility is determined under Level 2 in the fair value hierarchy.

NOTE 9 - STOCKHOLDERS' EQUITY

On March 29, 2017, the Company completed an underwritten public offering of 5,750,000 shares of its common stock at a price of $12.00 per share, for an aggregate offering size of $69.0 million, pursuant to a registration statement on Form S-3. The net proceeds to the Company, after deducting underwriting discounts, and commissions and offering expenses was approximately $64.6 million. These costs have been recorded as a reduction of the proceeds received from the offering.

On June 28, 2017, the Company filed a Registration Statement on Form S-3 for the offer and sale by the Company of its securities in one or more offerings for up to an aggregate maximum offering price of $150,000,000.

NOTE 10 - CANCER RESEARCH GRANT CONTRACT

On August 9, 2017, the Company entered into a Cancer Research Grant Contract (the “Agreement”) with the Cancer Prevention and Research Institute of Texas (“CPRIT”), pursuant to which CPRIT awarded a grant of approximately $16.9 million to the Company to fund development of BPX-501 for hematologic cancer (the “Award”). The Award is contingent upon funds being available during the term of the Agreement and subject to CPRIT’s ability to perform its obligations under the Agreement.

The Company and CPRIT will retain joint ownership over any intellectual property developed under the Agreement. With respect to non-commercial use of any intellectual property developed under the Agreement (the “Project Results”), the Company agreed to grant to CPRIT a sublicensable, nonexclusive, irrevocable, royalty-free, perpetual worldwide license to any intellectual property of the Company that is necessary to exploit the Project Results. The Agreement permits the Company to license any Project Results, subject to the Company retaining an exclusive sublicensable license to exploit the Project Results for non-commercial purposes.

The Company is obligated to make revenue-sharing payments to CPRIT with respect to net sales of any product covered by the Agreement, up to a maximum repayment of 400% of the aggregate amount paid to the Company by CPRIT under the Agreement. The payments are determined as a percentage of net sales ranging from the low to mid-single digits, which may be reduced if the Company is required to obtain a license from a third party to sell any such product. In addition, upon meeting the foregoing limitation on revenue-sharing payments, the Company agreed to make continued revenue-sharing payments to CPRIT of less than 1% of net sales.

The Agreement will expire on February 29, 2020 unless terminated earlier by: mutual consent of the parties; CPRIT upon an event of default by the Company as specified in the Agreement; CPRIT if allocated funds become unavailable or CPRIT is unable to obtain additional funds; or the Company in its sole discretion.

As of September 30, 2017, the Company incurred expenses and accrued revenue of $126,000 for work performed under the CPRIT grant.

NOTE 11 - SHARE-BASED COMPENSATION PLANS

At September 30, 2017, the Company had share-based awards outstanding under four share-based compensation plans, as follows:

2006 Stock Option Plan

The 2006 Stock Option Plan (the "2006 Plan") provided for the issuance of incentive and non-qualified stock options to employees, including officers, non-employee directors and consultants to the Company. As of September 30, 2017, there were 141,210 shares of common stock reserved for issuance pursuant to outstanding options granted under the 2006 Plan. The 2006 Plan was terminated by the Board in October 2014.

2011 Stock Option Plan

The 2011 Stock Option Plan (the "2011 Plan") provided for the issuance of incentive and non-qualified stock options to employees, including officers, non-employee directors and consultants to the Company. As of September 30, 2017, there were 1,657,621 shares of common stock reserved for issuance pursuant to outstanding options granted under the 2011 Plan. The 2011 Plan terminated upon the effectiveness of the 2014 Plan described below.

2014 Equity Incentive Plan

The 2014 Equity Incentive Plan (the "2014 Plan") became effective in December 2014, upon the closing of the Company's initial public offering. The 2014 Plan provides for the issuance of equity awards, including incentive and non-qualified stock options and restricted stock awards to employees, including officers, non-employee directors and consultants to the Company or its affiliates. The 2014 Plan also provides for the grant of performance cash awards and performance-based stock awards.

On June 14, 2017, the stockholders approved an amendment to the 2014 Plan to, among other things, increase the number of shares of common stock authorized for issuance under the 2014 Plan by 3,100,000 shares and eliminate the prior provision in the 2014 Plan that allowed the Company's Board of Directors to reprice stock options without stockholder approval.

The aggregate number of shares of common stock that are authorized for issuance under the 2014 Plan is 6,090,354 shares, plus any shares subject to outstanding options that were granted under the 2011 Plan or 2006 Plan that are forfeited, terminated, expired or are otherwise not issued. As of September 30, 2017, there were 5,299,158 options, 44,119 shares of unvested restricted stock, and 96,250 unvested restricted stock units outstanding, and there were 3,115,339 shares available for issuance under the 2014 Plan.

2014 Employee Stock Purchase Plan

The 2014 Employee Stock Purchase Plan (the "ESPP") provides for eligible Company employees, as defined by the ESPP, to be given an opportunity to purchase the Company's common stock at a discount, through payroll deductions, with stock purchases being made upon defined purchase dates. The ESPP authorizes the issuance of up to 550,000 shares of common stock to participating employees, and allows eligible employees to purchase shares of common stock at a 15% discount from the grant date fair market value. During the nine months ended September 30, 2017 and 2016, 19,204 and 17,115 shares were purchased under the ESPP. As of September 30, 2017, there were 475,477 shares available for issuance under the ESPP.

A summary of activity within the ESPP follows:

	Nine months ended September 30,	
	2017	2016
	(amounts in thousands)	
Deductions from employees	$ 226	$ 290
Share-based compensation expense recognized	$ 183	$ 208
Remaining share-based compensation expense	$ 311	$ 58

Share-Based Compensation Expense

The valuation of the share-based compensation awards is a significant accounting estimate that requires the use of judgments and assumptions that are likely to have a material impact on the financial statements. The fair value of option grants is determined using the Black-Scholes option-pricing model. Expected volatilities utilized in the model are based on implied volatilities from

traded stocks of peer companies. Similarly, the dividend yield is based on historical experience and the estimate of future dividend yields. The risk-free interest rate is derived from the U.S. Treasury yield curve in effect at the time of grant. The expected term of the options is based on the average period the stock options are expected to remain outstanding. As the Company does not have sufficient historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior, the expected term is calculated as the midpoint between the weighted-average vesting term and the contractual expiration period also known as the simplified method.

At September 30, 2017, total compensation cost not yet recognized was $23.9 million and the weighted-average period over which this amount is expected to be recognized is 2.2 years.

The fair value of the option grants has been estimated, with the following weighted-average assumptions:

	Nine months ended September 30,	
	2017	2016
Risk-free interest rate	2.06%	1.78%
Volatility	71.7%	71.9%
Expected life (years)	6.08	6.08
Expected dividend yield	—%	—%

During the three and nine months ended September 30, 2017, the Company received cash proceeds from the exercise of stock options of approximately $0.2 million and $1.5 million, respectively. The aggregate intrinsic value of options exercised during the three and nine months ended September 30, 2017 was $0.6 million and $2.5 million.

Share-based compensation expense by classification for the three and nine months ended September 30, 2017 and 2016 are as follows:

	Three Months Ended Sept 30,		Nine Months Ended Sept 30,	
	2017	2016	2017	2016
	(in thousands)		(in thousands)	
Research and development	$ 1,802	$ 1,420	$ 4,870	$ 4,180
General and administrative	1,861	1,640	5,347	5,063
Total	$ 3,663	$ 3,060	$ 10,217	$ 9,243

The following table summarizes the stock option activity for all stock plans during the nine months ended September 30, 2017:

	Options and Inducement awards	Weighted-Average Exercise Price Per Share	(in years) Weighted-Average Contractual Life	Aggregate Intrinsic Value (1) (in thousands)
Outstanding at December 31, 2016	4,521,810	$ 12.37	7.58	$ 20,446
Granted(2)	1,410,625	$ 11.78		
Exercised	(327,284)	$ 4.44		
Forfeited	(305,993)	$ 16.12		
Outstanding at September 30, 2017	5,299,158	$ 12.48	7.55	$ 13,586
Exercisable at September 30, 2017	2,752,484	$ 10.92	6.46	$ 11,946

(1) The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying options and the estimated fair value of the common stock for the options that were in the money at September 30, 2017.

(2) Includes 630,000 of inducement option awards granted in 2017.

The following table summarizes the stock award activity for all stock plans during the nine months ended September 30, 2017:

	Restricted Stock Awards and Units	Aggregate Intrinsic Value (1) (in thousands)
December 31, 2016(2)	58,825	$ 801
Granted(3)	102,500	
Vested	(14,706)	
Forfeited	(6,250)	
Outstanding at September 30, 2017	140,369	$ 1,621

(1) The aggregate intrinsic value is calculated as the fair value of restricted stock and restricted stock units at September 30, 2017.

(2) At September 30, 2017 and December 31, 2016, there were 44,119 and 58,825 shares of unvested restricted common stock outstanding, respectively.

(3) Includes 15,000 of inducement restricted stock units granted during 2017.

NOTE 12 - COMMITMENTS AND CONTINGENCIES

Litigation

None.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 13, 2017, or our Annual Report, as well as our unaudited consolidated financial statements and related notes included in this Quarterly Report on Form 10-Q, or this Quarterly Report.

Forward-Looking Statements

This report contains forward-looking statements and information within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, which are subject to the "safe harbor" created by those sections. These forward-looking statements include, but are not limited to, statements concerning our strategy, future operations, future financial position, future revenues, projected costs, prospects and plans and objectives of management. The words "anticipate," "believe," "could," "designed," "estimate," "expect," "intend," "may," "plan," "potential," "project," "will," "would," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part II, Item 1A, "Risk Factors" in our Quarterly Report on Form 10-Q, filed May 8, 2017, Part I, Item 1A, "Risk Factors" in our Annual Report and in our other filings with the SEC. The forward-looking statements are applicable only as of the date on which they are made, and we do not assume any obligation to update any forward-looking statements.

Overview

We are a clinical stage biopharmaceutical company focused on discovering and developing novel cellular immunotherapies for various forms of cancer, including both hematological cancers and solid tumors, as well as orphan inherited blood disorders. We are using our proprietary Chemical Induction of Dimerization, or CID technology platform to engineer our product candidates with switch technologies that are designed to control components of the immune system in real time. By incorporating our CID platform, our product candidates may offer better safety and efficacy outcomes than are seen with current cellular immunotherapies.

We are developing next-generation product candidates in some of the most important areas of cellular immunotherapy, including hematopoietic stem cell transplantation, or HSCT, chimeric antigen receptor T cell therapy, or CAR T, and T cell receptors, or TCRs. HSCT, also known as bone marrow transplantation, has for decades been curative for many patients with hematological cancers or orphan inherited blood disorders. However, adoption of HSCT to date has been limited by the risks of transplant-related morbidity and mortality from graft-versus-host-disease, or GvHD, and the potential for serious infections due to the lack of an effective immune system following a transplant. CAR T and TCR cell therapies are an innovative approach in which a patient's T cells are genetically modified to carry chimeric antigen receptors, or CARs, or TCRs which redirect the T cells against cancer cells. While high objective response rates have been reported in some hematological malignancies, serious and sometimes fatal toxicities have arisen in patients treated with CAR T cell therapies. These toxicities include instances in which the CAR T cells have caused high levels of cytokines due to over-activation, referred to as "cytokine release syndrome," or CRS, neurologic toxicities and cases in which they have attacked healthy organs. In each case, these toxicities have sometimes resulted in death. In solid tumors, where the behavior of CAR T cells is particularly unpredictable and results have been inconsistent, enhanced CAR T cell approaches are being developed that raise even greater safety concerns.

Our proprietary CID platform is designed to address these challenges. Events inside a cell are controlled by cascades of specialized signaling proteins. CID consists of molecular switches, modified forms of these signaling proteins, which are triggered inside the patient by infusion of a small molecule, rimiducid, instead of by natural upstream signals. We include these molecular switches in the appropriate immune cells and deliver the cells to the patient in the manner of conventional cellular immunotherapy. We have developed two such switches: a "safety switch," designed to initiate programmed cell death, or apoptosis, of the immunotherapy cells, and an "activation switch," designed to stimulate activation and in some cases proliferation and/or persistence of the immunotherapy cells. Each of our product candidates incorporates one of these switches, for enhanced, real time control of safety and efficacy:

- CaspaCIDe is our safety switch, incorporated into our HSCT and TCR product candidates, where it is inactive unless the patient experiences a serious side effect. In that event, rimiducid is administered to induce Caspase-9,

or iCaspase, switch activation to fully or partially eliminate the cells, with the goal of terminating or attenuating the therapy and resolving the serious side effect.

- Our "Go" switch incorporated into our GoCAR-T product candidates contains our proprietary inducible MyD88/CD40 or iMC activation switch and is designed to allow control of the activation and proliferation of the T cells through the scheduled administration of a course of rimiducid infusions that may continue until the desired patient outcome is achieved. In the event of emergence of side effects, the level of activation of the GoCAR-T cells is designed to be attenuated by extending the interval between rimiducid doses, reducing the dosage per infusion, or suspending further rimiducid administration.

In addition, we have an active research effort to develop other advanced molecular switch approaches, including a "dual-switch" that is designed to provide a system for managing persistence and safety of tumor antigen-specific CAR T cells.

By incorporating our novel switch technologies, we are developing product candidates with the potential to elicit positive clinical outcomes and ultimately change the treatment paradigm in various areas of cellular immunotherapy. Our lead clinical product candidate is described below.

- **BPX-501** is a CaspaCIDe product candidate designed as an adjunct T cell therapy administered after allogeneic HSCT. BPX-501 is designed to improve transplant outcomes by enhancing the recovery of the immune system following an HSCT procedure. BPX-501 addresses the risk of infusing donor T cells by enabling the elimination of donor T cells through the activation of the CaspaCIDe safety switch if there is an emergence of uncontrolled GvHD.

The European Commission has granted orphan drug designations to BPX-501 for treatment in HSCT, and for activator agent rimiducid for the treatment of GvHD. Additionally, BPX-501 and rimiducid have received orphan drug status from the U.S. Food and Drug Administration, or the FDA, as a combination replacement T-cell therapy for the treatment of immunodeficiency and GvHD after allogeneic HSCT.

During 2016, we discussed with the European Medicines Agency, or the EMA, clinical and regulatory plans to support the filing of Marketing Authorization Applications, or MAAs, for BPX-501 and rimiducid in Europe, initially for pediatric patients with certain orphan inherited blood disorders or treatment-refractory hematological cancers. Based on the regulatory discussions, we believe that data from the European arm of our BP-004 trial, expanded to enroll additional patients, with a primary endpoint of event-free survival, (with events defined as transplant-related or non-relapse mortality, severe GvHD, and serious infection) at six months, could form the basis of MAAs for BPX-501 and rimiducid. In addition, the EMA's Committee for Medicinal Products for Human Use, or the CHMP, has agreed that review and approval under "exceptional circumstances" may be suitable, recognizing that a randomized trial may not be feasible in the pediatric haploidentical hematopoietic stem cell transplant setting. Exceptional circumstances may be granted for medicines that treat very rare diseases, or where controlled studies are impractical or not consistent with accepted principles of medical ethics. In place of a randomized trial, we are collecting data from a concurrent observational study in the pediatric matched unrelated donor hematopoietic stem cell transplant setting, which will include both retrospective patients and prospective patients.

We are working on plans and assessing feasibility for future U.S. clinical trials of BPX-501. We expect to pursue one or more clinical trials with the intent of an eventual filing for regulatory approval in the U.S., partially supported by a $16.9 million award from the Cancer Prevention and Research Institute of Texas, or CPRIT.

In addition to BPX-501, our clinical stage product candidates which are designed to overcome limitations of CAR T and TCR therapies, include the following:

- **BPX-701** is a CaspaCIDe-enabled natural high affinity TCR product candidate designed to target malignant cells expressing the preferentially-expressed antigen in melanoma, or PRAME. Initial planned indications for BPX-701 development are refractory or relapsed acute myeloid leukemia, or AML, and myelodysplastic syndromes, or MDS, and are considering studies in additional indications. Each of these is an orphan indication where PRAME is highly expressed and for which current treatment options are limited. A Phase 1 dose finding clinical trial in patients with relapsed or refractory myeloid neoplasms is being conducted at the Oregon Health & Science University Hospital in Portland, Oregon.

- **BPX-601** is a GoCAR-T product candidate designed to treat solid tumors expressing prostate stem cell antigen, or PSCA. Preclinical data shows enhanced T cell proliferation, persistence and *in vivo* anti-tumor activity

compared to traditional CAR T therapies. A Phase 1 clinical trial in patients with non-resectable pancreatic cancer is being conducted at the Baylor Sammons Cancer Center in Dallas, Texas.

- **CD19 CAR-T Program** - We are working with academic collaborators to establish clinical proof of concept for CaspaCIDe® in the CD19 setting. We believe that this strategy allows a cost-effective approach for clinical evaluation of differentiated product candidates in the highly competitive landscape of CD19-targeted therapies. As part of this strategy, in November 2016 we announced an expanded collaboration with Ospedale Pediatrico Bambino Gesù, a leading European pediatric research center and hospital, and expect a CaspaCIDe-enabled CD19 CAR-T cell therapy to enter clinical development in the fourth quarter of 2017.

We have developed an efficient and scalable process to manufacture genetically modified T cells of high quality, which T cells are currently being manufactured in-house and by third-party contract manufacturers in Europe to produce BPX-501 for our clinical trials. We are leveraging this process, as well as our resources, capabilities and expertise for the manufacture of our CAR T and TCR product candidates.

Critical Accounting Policies and Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires us to make judgments, estimates and assumptions in the preparation of our consolidated financial statements and accompanying notes. Actual results could differ from those estimates. We believe there have been no material changes in our critical accounting policies as discussed in our Annual Report.

Financial Operations Overview

Revenue

To date, we have only recognized revenue from government grants and we have not generated any product revenue. Grant funds are received based on the progress of the program being funded. In cases when the grant money is not received until expenses for the program are incurred, we accrue the revenue based on the costs incurred for the programs associated with the grant.

In the future, we may generate revenue from a combination of product sales, government or other third-party grants, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements or a combination of these approaches. We expect that any revenue we generate will fluctuate as a result of the timing and amount of license fees, milestone and other payments, and the amount and timing of payments that we receive upon the sale of our products, to the extent we obtain regulatory approval for any and that they are successfully commercialized. If we fail to complete the development of our product candidates in a timely manner or obtain regulatory approval of them, our ability to generate future revenue, and our results of operations and financial position, would be materially adversely affected. Our policy is to recognize revenue in accordance with ASC 605. See the discussion of "Collaboration Agreements" contained within Note 3 to the unaudited condensed consolidated financial statements contained herein.

NIH Grant

During 2013, we entered into a grant agreement with the NIH. The grant was a modular five year grant with funds being awarded each year based on the progress of the program being funded. Grant money is not received until expenses for the program are incurred. We have been awarded approximately $1.4 million to date. The grant expired March 31, 2017.

CPRIT Grant

On August 9, 2017, we entered into a grant agreement with CPRIT. CPRIT awarded a grant of approximately $16.9 million to fund research of a cancer therapy involving BPX-501. We incurred expenses of $0.1 million during the three and nine months ended September 30, 2017 for work performed under the CPRIT Grant. For additional information about the CPRIT grant, see Note 10 to the unaudited condensed consolidated financial statements included herein.

Research and Development Expenses

To date, our research and development expenses have related primarily to the development of our CID platform and the identification and development of our product candidates. Research and development expenses consist of expenses incurred in performing research and development activities, including compensation, share-based compensation expense and benefits for research and development employees and consultants, facilities expenses, overhead expenses, cost of laboratory supplies, manufacturing expenses, fees paid to third parties and other outside expenses.

Research and development costs are expensed as incurred. Clinical trial and other development costs incurred by third parties are expensed as the contracted work is performed. We accrue for costs incurred as the services are being provided by monitoring the status of the clinical trial or project and the invoices received from our external service providers. We adjust our accrual as actual costs become known. Where contingent milestone payments are due to third parties under research and development arrangements, the milestone payment obligations are expensed when the milestone events are achieved. See the discussion of "Research and Development" expenses in Note 3 to the unaudited condensed consolidated financial statements included herein.

We utilize our research and development personnel and infrastructure resources across several programs, and many of our costs are not specifically attributable to a single program. Accordingly, we cannot state precisely our total costs incurred on a program-by-program basis.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. Thus, it is difficult to determine with certainty the duration and completion costs of our current or future preclinical programs and clinical trials of our product candidates.

The duration, costs and timing of clinical trials and development of our product candidates will depend on a variety of factors that include, but are not limited to, the following:

- per patient clinical trial costs;
- the number of patients that participate in the clinical trials;
- the number of sites included in the clinical trials;
- the process of collection, differentiation, selection and expansion of immune cells for our cellular immuno-therapies;
- the countries in which the clinical trials are conducted;
- the outcomes of our clinical trials;
- the length of time required to enroll eligible patients;
- the number of doses that patients receive;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring or other studies requested by regulatory agencies;
- the duration of patient follow-up;
- the efficacy and safety profile of the product candidates; and
- the ability to successfully manufacture patient doses

In addition, the potential for success of each product candidate will depend on numerous factors, including clinical trial outcomes, acceptance by regulatory authorities, competition, manufacturing capability and commercial viability. We determine which programs to pursue and how much to fund each program in response to ongoing scientific assessments, competitive developments, clinical trial results, as well as an assessment of each product candidate's commercial potential.

We expect our research and development expenses to increase over the next several years as we progress our business plan which includes conducting ongoing and new clinical trials for BPX-501, BPX-601 and BPX-701, and advancing additional product candidates into clinical development, manufacturing clinical trial and preclinical study materials, expanding our research and development and process development and optimization efforts, seeking regulatory approvals for our product candidates that successfully complete clinical trials, and hiring additional personnel.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and other related costs, including share-based compensation, for personnel in executive, finance, accounting, business development, legal and human resources functions. Other significant costs include facility costs not otherwise included in research and development expenses, legal fees relating to patent and corporate matters, insurance costs and professional fees for consultancy, accounting, audit and investor relations.

As our research and development activities continue to expand, we also expect general and administrative expenses to increase due to the anticipated need for additional supporting infrastructure, primarily personnel costs. We also expect general and administrative expenses to increase as we prepare for commercialization of BPX-501, continue to evaluate the commercial opportunities for BPX-601 and BPX 701, and as we begin operations in our European subsidiary.

Income Taxes

We did not recognize any income tax expense for the three and nine months ended September 30, 2017.

Results of Operations

Comparison of the Three and Nine Months Ended September 30, 2017 and 2016

The following table sets forth our results of operations for the three and nine months ended September 30, 2017 and 2016:

	Three Months Ended Sept 30,			Nine Months Ended Sept 30,		
	2017	2016	Change	2017	2016	Change
	(in thousands)			(in thousands)		
Total revenues	$ 126	$ 114	$ 12	$ 254	$ 307	$ (53)
Operating expenses:						
Research and development	18,101	13,290	4,811	51,355	36,179	15,176
License fees	151	—	151	849	280	569
General and administrative	4,579	4,252	327	15,992	12,715	3,277
Total operating expenses	22,831	17,542	5,289	68,196	49,174	19,022
Loss from operations	(22,705)	(17,428)	(5,277)	(67,942)	(48,867)	(19,075)
Other income (expense):						
Interest income	284	224	60	788	687	101
Interest expense	(1,010)	(515)	(495)	(2,707)	(1,123)	(1,584)
Total other expense	(726)	(291)	(435)	(1,919)	(436)	(1,483)
Net loss	$ (23,431)	$ (17,719)	$ (5,712)	$ (69,861)	$ (49,303)	$ (20,558)

Research and Development Expenses

Research and development expenses were $18.1 million and $13.3 million for the three months ended September 30, 2017 and 2016, respectively. The $4.8 million increase in research and development expenses for the three months ended September 30, 2017, was due to an increase in clinical and manufacturing costs of $2.7 million related to BPX-501, primarily due to increased patient enrollment in our clinical trials. Increased research and development expenses in the three months ended September 30, 2017 also includes $0.1 million under collaboration agreements, and $2.5 million in increased personnel, overhead charges and manufacturing start-up expenses. Expenses related to BPX-601 and BPX-701 were approximately $0.2 million and $0.3 million higher, respectively in the 2016 period, as we were performing pre-clinical, process development and regulatory work in preparation for clinical trials.

Research and development expenses were $51.4 million and $36.2 million for the nine months ended September 30, 2017 and 2016, respectively. The $15.2 million increase in research and development expenses for the nine months ended September 30, 2017, included an increase in clinical and manufacturing costs of $8.1 million related to BPX-501, primarily due to increased patient enrollment in our clinical trials. The increase in research and development expenses is also due to increased expenses of approximately $0.9 million under collaboration agreements, increased clinical and manufacturing costs of $0.6 million related to BPX-701 and $6.6 million for increased personnel, overhead charges and manufacturing facility start-up costs. Expenses related to BPX-601 were approximately $1 million higher in the 2016 period, as we were performing pre-clinical, process development and regulatory work in preparation for clinical trials.

The following table presents our research and development expense by project/category for the three and nine months ended September 30, 2017 and 2016:

Product Candidates	Three Months Ended Sept 30,			Nine Months Ended Sept 30,		
	2017	2016	Change	2017	2016	Change
	(in thousands)			(in thousands)		
BPX-501	$ 9,559	$ 6,856	$ 2,703	$ 27,305	$ 19,211	$ 8,094
BPX-601	454	627	(173)	1,571	2,526	(955)
BPX-701	323	603	(280)	1,481	883	598
General	7,765	5,204	2,561	20,998	13,559	7,439
Total	$ 18,101	$ 13,290	$ 4,811	$ 51,355	$ 36,179	$ 15,176

License Fees

We incurred license fees of $0.2 million and $- in the three month periods ended September 30, 2017 and 2016, respectively, under the terms of our various license agreements for intellectual property. In the nine month periods ended September 30, 2017 and 2016, license fees incurred were $0.8 million and $0.3 million, respectively. See “Contractual Obligations and Commitments” below and Note 12 to the audited financial statements in our Annual Report for additional information about our license agreements.

General and Administrative Expenses

General and administrative, or G&A, expenses were $4.6 million and $16.0 million for the three and nine months ended September 30, 2017, respectively, and $4.3 million and $12.7 million for the three and nine months ended September 30, 2016, respectively. The increase in G&A expenses of $0.3 million and $3.3 million for the three and nine months ended September 30, 2017, respectively, was primarily due to our overall growth, including an increase in personnel related costs, primarily due to hiring additional employees and severance costs, higher facility costs and increased legal, accounting and travel expenses. We believe our future general and administrative expenses will continue to increase as the Company continues to grow and expand its operations.

Liquidity and Capital Resources

Sources of Liquidity

We are a clinical stage biopharmaceutical company with a limited operating history. To date, we have financed our operations primarily through equity and debt financings and grants. We have not generated any revenue from the sale of any products. As of September 30, 2017, and December 31, 2016, we had cash, cash equivalents, restricted cash and investment securities of $118.6 million and $113.4 million, respectively. Cash in excess of immediate requirements is invested in accordance with our investment policy, primarily with a view to liquidity and capital preservation.

On June 28, 2017, we filed a registration statement on Form S-3 for the offer and sale by the Company of its securities in one or more offerings for up to an aggregate maximum offering price of $150,000,000.

On March 29, 2017, we completed an underwritten public offering of 5,750,000 shares of our common stock at a price of $12.00 per share, for an aggregate offering size of $69.0 million, pursuant to a registration statement on Form S-3. The net proceeds to us, after deducting underwriting discounts and commissions and offering expenses, was approximately $64.6 million.

On March 10, 2016, we entered into a term loan arrangement with Hercules Capital, as agent and lender and borrowed $15.0 million on the closing date. We borrowed an additional $5.0 million on September 15, 2016 and the remaining $10.0 million on March 8, 2017. We used the proceeds to complete the build-out of our manufacturing facilities, and for general corporate purposes. As a result of the additional borrowing on March 8, 2017, the interest only period was extended for an additional six months through March 2018. Thereafter, we are required to repay the loan over the remaining term, through its final maturity date of March 1, 2020. We incurred issuance costs of $0.3 million and facility charges of $2.1 million. The facility charges are payable at the earlier of the repayment of the loan in full or the final maturity date. The $2.4 million debt issuance costs are being recognized over the term of the loan as additional interest expense. We will pay interest on the loan at the greater of either (i) 9.35% plus the prime rate as reported in the Wall Street Journal minus 3.5% and (ii) 9.35%. The interest rate on the loan was 9.35% and 10.1% at September 30, 2016 and 2017, respectively. For additional information about the loan, see Note 8 to the unaudited consolidated condensed financial statements included herein.

C***ash Flows***

The following table sets forth a summary of our cash flows for the nine months ended September 30, 2017 and 2016:

	Nine Months Ended September 30,		
	2017	2016	Change
	(in thousands)		
Net cash used in operating activities	$ (60,161)	$ (35,952)	$ (24,209)
Net cash used in investing activities	(1,301)	(6,136)	4,835
Net cash provided by financing activities	76,097	20,541	55,556
Net change in cash, cash equivalents, and restricted cash	$ 14,635	$ (21,547)	$ 36,182

Operating Activities

Net cash used in operating activities for the nine months ended September 30, 2017 was comprised of a net loss of $69.9 million, which included share-based compensation expense of $10.2 million, and depreciation expense of $2.5 million and amortization of deferred financing costs of $0.6 million. Net cash used in operating activities also included an increase in prepaid expenses and other assets of $0.6 million, a decrease in accounts payable and other liabilities of $3.0 million, primarily due to completion of the first phase of construction of our manufacturing facility.

Net cash used in operating activities for the nine months ended September 30, 2016 was comprised of a net loss of $49.3 million, which included share-based compensation expense of $1.6 million and depreciation expense of $9.2 million and amortization of deferred financing costs of $0.3 million. Net cash used in operating activities was also primarily comprised of the following primary components: a decrease in receivables of $0.1 million, a decrease in prepaid expenses and other assets of $0.5 million and a decrease in accounts payable and other liabilities of $1.2 million.

Investing Activities

Net cash provided by investing activities for the nine months ended September 30, 2017 was $1.3 million, consisting of the proceeds from sale of investment securities of $45.5 million and the purchase of property and equipment of $10.6 million, offset by the purchases of investment securities totaling $36.3 million.

Net cash used in investing activities for the nine months ended September 30, 2016 was $6.1 million, consisting of the purchase of investment securities of $26.1 million and the purchase of property and equipment of $5.8 million, offset by the proceeds from sale of investment securities totaling $25.8 million.

Financing Activities

Net cash provided by financing activities for the nine months ended September 30, 2017 was $76.1 million, which was derived from $64.6 million in net proceeds from our public offering in the first quarter, borrowings on long-term debt of $10.0 million, proceeds from the exercise of stock options of $1.5 million, proceeds from the issuance of stock under the employee stock purchase plan of $0.2 million, reduced by the payment of debt issuance costs of $0.1 million.

Net cash provided by financing activities for the nine months ended September 30, 2016 was $20.5 million, which was derived primarily from borrowings of long-term debt of $20.0 million and proceeds from the issuance of stock under the employee stock purchase plan of $0.2 million and proceeds of stock option exercises of $0.6 million, partially offset by payment of debt issuance costs of $0.2 million.

Funding Requirements

Our primary uses of capital are, and we expect will continue to be, compensation and related expenses, third-party clinical research and development services, laboratory and related supplies, clinical costs, legal and other regulatory expenses, facility costs and general overhead costs. In addition, we expect to use capital to expand our manufacturing capabilities.

The successful development of any of our product candidates is highly uncertain. As such, at this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the development of BPX-501 or our other current and future product candidates. We are also unable to predict when, if ever, material net cash inflows will commence from the sale of product candidates. This is due to the numerous risks and uncertainties associated with developing medical treatments, including, but not limited to, the uncertainty of:

- successful enrollment in, and successful completion of, clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;
- making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity;
- launching commercial sales of our products, if and when approved, whether alone or in collaboration with others;
- market acceptance of our products, if and when approved; and
- successfully negotiating reimbursement for our products from various third-party payors;
- the ability to successfully manufacture patient doses

A change in the outcome of any of these variables with respect to the development of any of our product candidates would significantly change the costs and timing associated with the development of that product candidate.

Because all of our product candidates are in the early stages of clinical and preclinical development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of product candidates or whether, or when, we may achieve profitability. Until such time, if ever, that we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity or debt financings and collaboration arrangements.

We plan to continue to fund our operations and capital funding needs through equity and/or debt financing. We may also consider new collaborations or selectively partnering our technology. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our stockholders will be diluted, and the terms may include liquidation or other preferences that adversely affect the rights of our existing stockholders. The incurrence of indebtedness would result in increased fixed payment obligations and could involve certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms unfavorable to us. Any of these actions could harm our business, results of operations and future prospects.

Outlook

Based on our research and development plans and our timing expectations related to the progress of our programs, we expect that our cash and cash equivalents as of September 30, 2017 will enable us to fund our operating expenses and capital expenditure requirements through 2018. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Furthermore, our operating plan may change, and we may need additional funds to meet operational needs and capital requirements for product development and commercialization sooner than planned. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates and the extent to which we may enter into additional collaborations with third parties to participate in their development and commercialization, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials. Our future funding requirements will depend on many factors, as we:

- initiate or continue clinical trials of BPX-501, BPX-701 and BPX-601 and any other product candidates;
- continue the research and development of our product candidates; seek to discover additional product candidates; seek regulatory approvals for our product candidates if they successfully complete clinical trials;
- establish sales, marketing and distribution infrastructure and scale-up manufacturing capabilities to commercialize any product candidates that may receive regulatory approval;
- build out European operations to support our product development and commercialization plans for BPX-501 and potentially other product candidates; and
- enhance operational, financial and information management systems and hire additional personnel, including personnel to support development of our product candidates and, if a product candidate is approved, our commercialization efforts.

Contractual Obligations and Commitments

Our contractual obligations as of September 30, 2017 were as follows:

	(in thousands)				
	Commitment	**Less Than 1 Year**	**1 to 3 Years**	**3 to 5 Years**	**More Than 5 Years**
License agreements (1)	$ 67,179	$ 708	$ 8,300	$ 16,591	$ 41,580
Long-term debt obligations (2)	32,085	6,913	25,172	—	—
Operating lease agreements (3)	12,238	2,020	3,453	2,130	4,635
Manufacturing build-out obligation (4)	1,892	1,892	—	—	—
Research collaborations (5)	1,035	828	207	—	—
Manufacturing arrangements (6)	9,956	7,832	708	708	708
Sponsored research agreements (7)	2,434	1,217	1,217	—	—
Equipment capital lease agreements (8)	271	69	139	63	—
Total contractual obligations	$ 127,090	$ 21,479	$ 39,196	$ 19,492	$ 46,923

(1) License agreements - We have entered into several license agreements under which we obtained rights to certain intellectual property. Under the agreements, we could be obligated for payments upon successful completion of clinical and regulatory milestones regarding the products covered by the licenses. The obligations listed in the table above represent estimates of when the milestones will be achieved. The milestones may not be completed when estimated or at all.

(2) Long-term debt obligations - Obligations under our debt facility. See Note 8 to the unaudited condensed consolidated financial statements included herein.

(3) Operating lease agreements - The amounts above are comprised of one five-year lease agreement and one 11-year lease agreement. The first lease expires on January 31, 2020 and the second lease expires on August 31, 2026. See Note 12 to the financial statements included in our Annual Report.

(4) Manufacturing build-out obligation - We entered into a construction contract to build-out our manufacturing facilities. The obligation listed in the table above represents the remaining agreed upon costs.

(5) Research collaborations - We entered into a research collaboration with Ospedale Pediatrico Bambino Gesù (OPBG), a leading European pediatric research center and hospital, with commitments through 2018.

(6) Manufacturing arrangements - We have entered into multiple manufacturing service arrangements with various terms. The obligations listed in the table above represent estimates of when certain services will be performed.

(7) Sponsored research agreements - We have entered into multiple sponsored research agreements to undertake research which is of mutual interest to all parties. The commitments range from one to three years.

(8) Equipment capital lease agreements - We have entered into multiple office equipment lease agreements with various terms. The commitments include equipment, maintenance and supplies. See Note 12 to the financial statements included in our Annual Report.

We have entered and will enter into other contracts in the normal course of business with third-party manufacturers, contract research organizations for clinical trials and other vendors for other services and products for operating purposes. These agreements generally provide for termination or cancellation, and, other than for costs already incurred, are not included in the table above.

Recent Accounting Pronouncements

See Note 3 to the Notes to Unaudited Condensed Consolidated Financial Statements in “Item 1 - Financial Statements” in this Quarterly Report for discussion regarding recent accounting pronouncements.

Off-Balance Sheet Arrangements

During the periods presented, we did not have, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the Securities and Exchange Commission.

Item 3. Quantitative and Qualitative Disclosures about Market Risks

The primary objective of our investment activities is to preserve our capital and meet our liquidity needs to fund operations. We also seek to generate competitive rates of return from our investments without assuming significant risk. To achieve our objectives, we maintain a portfolio of cash equivalents and investments in a variety of securities that are of high credit quality based on ratings from commonly relied upon rating agencies. As of September 30, 2017, we had cash, cash equivalents, restricted cash and investment securities of $118.6 million. Our cash equivalents and investments in investment securities may be subject to interest rate risk and could fall in value if market interest rates increase. However, because our cash is invested in accounts with market interest rates and because our cash equivalents and investments in investment securities are traded in active markets, we believe that our exposure to interest rate risk is not significant and estimate that an immediate and uniform 10% increase in market interest rates from levels as of September 30, 2017 would not have a material impact on the total fair value of our portfolio.

We sometimes contract for the conduct of clinical trials or other research and development and manufacturing activities with contract research organizations, clinical trial sites and contract manufacturers in Europe, and in the future potentially elsewhere outside of the United States. We may be subject to exposure to fluctuations in foreign currency exchange rates in connection with these agreements. If the average exchange rate between the currency of our payment obligations under any of these agreements and the U.S. dollar were to strengthen or weaken by 10% against the corresponding exchange rate as of September 30, 2017, we estimate that the impact on our financial position, results of operations and cash flows would not be material. We do not hedge our foreign currency exposures.

We have not used derivative financial instruments for speculation or trading purposes.

Item 4. Controls and Procedures

Management's Evaluation of our Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer (our principal executive officer and principal financial and accounting officer, respectively), evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of September 30, 2017. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure.

Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of September 30, 2017, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during our latest fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

Our business and results of operations are subject to a number of risks and uncertainties. You should carefully consider the risk factors described under the heading "Risk Factors" in our Annual Report , our Quarterly Report on Form 10-Q, filed May 8, 2017, and in other reports we file with the SEC. The occurrence of any of the risks described in our Annual Report or herein could harm our business, financial condition, results of operations and/or growth prospects or cause our actual results to differ materially from those contained in forward-looking statements we have made in this Quarterly Report and those we may make from time to time. You should consider all of the risk factors described in our Annual Report and our Quarterly Report on Form 10-Q, filed May 8, 2017, when evaluating our business. Other than risk factors included in Item 1A of our Quarterly Report on Form 10-Q filed on May 8, 2017, there have been no material changes to the risk factors included in Item 1A of our Annual Report.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Recent Sales of Unregistered Securities

None.

Use of Proceeds from Initial Public Offering of Common Stock

None.

Purchase of Equity Securities

We did not purchase any of our registered securities during the period covered by this Quarterly Report.

Item 5. Other Information

(a)

None.

Item 6. Exhibits

The exhibits filed as part of this Quarterly Report are set forth on the Exhibit Index, which is incorporated herein by reference.

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.

Bellicum Pharmaceuticals, Inc.

Date: November 7, 2017

By: /s/ Richard A. Fair

Richard A. Fair

President and Chief Executive Officer

Date: November 7, 2017

By: /s/ Alan A. Musso

Alan A. Musso

Chief Financial Officer and Treasurer
Principal Financial and Accounting Officer

EXHIBIT INDEX

Exhibit number	Description of exhibit
3.1(1)	Amended and Restated Certificate of Incorporation of the Registrant.
3.2(1)	Amended and Restated Bylaws of the Registrant.
4.1	Reference is made to Exhibits 3.1 and 3.2.
4.2(2)	Form of Common Stock Certificate of the Registrant.
4.3(2)	Second Amended and Restated Investor Rights Agreement by and among the Registrant and certain of its stockholders, dated August 22, 2014.
4.4(3)	Registration Rights Agreement by and among the Registrant and Baker Brothers Life Sciences, LP, and two of its affiliated funds, dated January 15, 2016.
10.1	Letter agreement by and between the registrant and Alan A. Musso, effective August 3, 2017.
10.2#	Cancer Research Grant Contract with the Cancer Prevention and Research Institute of Texas, dated August 9, 2017.
10.3	Employment Agreement by and between registrant and Gregory Naeve, effective July 27, 2017.
10.4(4)	Bellicum Pharmaceuticals, Inc. 2014 Equity Incentive Plan, as amended.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
#	Certain provisions of this exhibit have been omitted pursuant to a request for confidential treatment.
(1)	Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on December 23, 2014.
(2)	Incorporated by reference to the Registrant's Registration Statement on Form S-1 (File No. 333-200328), as amended, originally filed with the SEC on November 18, 2014.

(3) Incorporated by reference to the Registrant's Annual Report on Form 10-K, filed with the SEC on March 14, 2016.

(4) Incorporated by reference to the Registrant’s Registration Statement on Form S-8 (File No. 333-220170), filed with the SEC on August 25, 2017.

Exhibit 10.1

August 3, 2017

Mr. Alan Musso
3838 N. Braeswood, Unit 337
Houston, Texas 77025

Re: Retention Bonus

Dear Alan,

On behalf of Bellicum Pharmaceuticals, Inc. (the "Company"), this letter is an offer to you of a one-time lump sum cash bonus equivalent to six months of your current base salary ($192,500.00), less required withholdings, as set forth below (the "Service Date Bonus"). You may accept this proposal by signing in the space provided below and returning the signed letter to me. This letter agreement will be effective on the date you sign below where indicated.

You will be eligible to receive the Service Date Bonus, provided that the following conditions are met: (i) you remain in the continuous employment of the Company through April 30, 2018 (the "Service Date"); and (ii) you have not given the Company notice of your intent to resign your employment prior to the Service Date. You shall also be eligible to receive the Service Date Bonus in the event that the Company provides you notice of the termination of your employment (or notice of its intent to terminate your employment) on or before the Service Date for reasons other than Cause as defined in section 6(c) of your Employment Agreement (as defined below). For the avoidance of doubt, termination by the Company for Cause prior to the Service Date will disqualify you from earning the Service Date Bonus. You shall be required to provide the Release specified in the Section 7(d) of your Employment Agreement with the Company, dated as of December 4, 2014 (the "Employment Agreement"), in order to be eligible for a Service Date Bonus based upon a Termination without Cause.

The Service Date Bonus shall be paid to you on the applicable of the following dates: (i) the Company's first regularly scheduled payroll date following the Service Date; or (ii) if payable as a consequence of a Termination without Cause, the Company's first regularly scheduled payroll date following the effective date of the Release. The Service Date Bonus shall be in addition to any other payment or benefit required under the Employment Agreement, if any.

The Service Date Bonus described herein does not affect any of the terms or provisions of your Employment Agreement, which shall remain in full force and effect.

Alan, I trust you are pleased by this offer and I want you to know that I, and the rest of your team, value your expertise and guidance.

Yours truly,

Bellicum Pharmaceuticals, Inc.

/s/ Richard A. Fair
Richard A. Fair,
President & Chief Executive Officer

Accepted and Agreed:

/s/ Alan A. Musso
Alan A. Musso

Dated: August 3, 2017

DP160057
Annemarie Moseley

CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

STATE OF TEXAS
COUNTY OF TRAVIS

This **CANCER RESEARCH GRANT CONTRACT** ("**Contract**") is by and between the Cancer Prevention and Research Institute of Texas ("**CPRIT**"), hereinafter referred to as the "**INSTITUTE**", acting through its Chief Executive Officer, and Bellicum Pharmaceuticals, Inc., hereinafter referred to as the "**RECIPIENT**", acting through its authorized signing official.

RECITALS

WHEREAS, pursuant to TEX. HEALTH & SAFETY CODE, Ch. 102, the INSTITUTE may make grants to public and private persons in this state for research into the causes and cures for all types of cancer in humans; facilities for use in research into the causes and cures for cancer; research to develop therapies, protocols, medical pharmaceuticals, or procedures for the cure or substantial mitigation of all types of cancer; and cancer prevention and control programs.

WHEREAS, Article III, Section 67 of the Texas Constitution expressly authorizes the State of Texas to sell general obligation bonds on behalf of the INSTITUTE and for the INSTITUTE to use the proceeds from the sale of the bonds for the purposes of cancer research and prevention programs in this state.

WHEREAS, the INSTITUTE issued a request for applications for RFA P-16-TXCO-2: Texas Company Product Development Research Awards on or about January 2016.

WHEREAS, pursuant to TEX. HEALTH & SAFETY CODE § 102.251, and after a review by the INSTITUTE's scientific research and prevention program committees, the INSTITUTE has approved a Grant (defined below) to be awarded to the RECIPIENT.

WHEREAS, to ensure that the Grant provided to the RECIPIENT pursuant to this Contract is utilized in a manner consistent with Tex. Const. Article III, Section 67 and other laws, and in exchange for receiving such Grant, the RECIPIENT agrees to comply with certain conditions and deliver certain performance.

WHEREAS, the RECIPIENT and the INSTITUTE desire to set forth herein the provisions relating to the awarding of such monies and the disbursement thereof to the RECIPIENT.

IN CONSIDERATION of the Grant and the premises, covenants, agreements, and provisions contained in this Contract, the parties agree to the following terms and conditions:

Article I

DEFINITIONS

The following terms shall have the following meaning throughout this Contract and any Attachments and amendments. Other terms may be defined elsewhere in this Contract.

(1) **Collaborator** - any entity other than the RECIPIENT having one or more personnel participating in the Project and (a) designated as a collaborator in the application submitted by the RECIPIENT requesting the Grant funds awarded by the INSTITUTE, or (b) otherwise approved in writing as a collaborator by the INSTITUTE.

(2) **Contractor** - any person or entity, other than a Collaborator or the RECIPIENT (or their respective personnel), who is contracted by the RECIPIENT to perform activities for the Project.

(3) **Equipment** - an article of tangible, nonexpendable personal property having a useful life of more than one year and an acquisition cost of $5,000 or more per unit.

(4) **Grant** - the funding assistance authorized by TEX. HEALTH & SAFETY CODE, Ch. 102 in the amount specified in Section 2.01 and awarded by the INSTITUTE to the RECIPIENT to carry out the Project pursuant to the terms and conditions of this Contract.

(5) **Indirect Costs** - the expenses of doing business that are not readily identified with a particular grant, contract, project, function or activity, but are necessary for the general operation of the organization or the performance of the organization's activities.

(6) **Institute-Funded Activity** - all aspects of work conducted on or as part of the Project.

(7) **Non-Profit Organization** - a university or other institution of higher education or an organization of the type described in 501(c)(3) of the Internal Revenue Code of 1986, as amended (26 U.S.C. 501 (c)(3)) and exempt from taxation under 501 (a) of the Internal Revenue Code (26 U.S.C. 501 (a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

(8) **Principal Investigator/Program Director** - the individual designated by the RECIPIENT to direct the Project who is principally responsible and accountable to the RECIPIENT and the INSTITUTE for the proper conduct of the Project. References herein to "Principal Investigator/Program Director" include Co-Principal Investigators or Co-Program Directors as well. The Principal Investigator/Program Director and Co-Principal Investigators or Co-Program Directors are set forth on Attachment A.

(9) **Project** - the activities specified or generally described in the Scope of Work or otherwise in this Contract (including without limitation any of the Attachments to the Contract) that are approved by the INSTITUTE for funding, regardless of whether the INSTITUTE funding constitutes all or only a portion of the financial support necessary to carry them out.

(10) **Recipient Personnel** - The RECIPIENT's Principal Investigator/Program Director and RECIPIENT's employees and consultants working on the Project.

Article II

GRANT AWARD

Section 2.01 Award of Monies. In accordance with the provisions of this Contract and any applicable agency administrative rules, the INSTITUTE shall disburse the proceeds of the Grant to the RECIPIENT in an amount not to exceed **$ 16,946,716** to be used solely for the Project. This award is subject to compliance with the Scope of Work and demonstration of progress towards achievement of the milestones set forth in Section 2.02. This Grant is not intended to be a loan of money.

Section 2.02 Scope of Work and Milestones. The RECIPIENT shall perform the Project in accordance with this Agreement and as outlined in Application **DP160057** submitted by the RECIPIENT and approved by the INSTITUTE. The RECIPIENT shall conduct the Project within the State of Texas with Texas-based employees, Contractors and/or Collaborators unless otherwise specified in the Scope of Work or the Approved Budget. The INSTITUTE and the RECIPIENT hereby adopt the terms of Attachment A in their entirety, incorporate them as if fully set forth herein, and agree that the Project description, goals, timeline and milestones included as Attachment A accurately reflect the Scope of Work of the Project to be undertaken by the RECIPIENT (the "**Scope of Work**") and the milestones expected to be achieved. RECIPIENT and the INSTITUTE mutually agree that the outcome of scientific research is unpredictable and cannot be guaranteed. The RECIPIENT shall use commercially reasonable efforts to complete the goals of the Project pursuant to the timeline reflected in Attachment A and shall timely notify the INSTITUTE if circumstances occur that materially and adversely affect completion thereof. Modifications, if any, to the Scope of Work must be agreed to in writing by both parties as set forth in Section 2.06 "Amendments and Modifications" herein. Material changes to the Scope of Work include, but are not limited to, changes in key personnel involved with the Project, the site of the Project, and the milestones expected to be achieved.

Section 2.03 Contract Term. The Contract shall be effective as of **March 01, 2017** (the "**Effective Date**") and terminate on **February 29, 2020** or in accordance with the Contract termination provisions set forth in Article VIII herein, whichever shall occur first (the "**Termination Date**"). Unless otherwise approved by the INSTITUTE as evidenced by written communication from the INSTITUTE to the RECIPIENT and appended to the Contract, Grant funds distributed pursuant to the Contract shall be expended no earlier than the Effective Date or subsequent to the Termination Date. If, as of the Termination Date, the RECIPIENT has not used Grant money awarded by the INSTITUTE for permissible services, expenses, or costs related to the Project and has not received approval from the INSTITUTE for a no cost extension to the contract term pursuant to Section 3.11 "Carry Forward of Unspent Funds and No Cost Extension" herein, then the RECIPIENT shall not be entitled to retain such unused Grant funds from the INSTITUTE. Certain obligations as set forth in Section 9.09 of this Contract shall extend beyond the Termination Date.

Section 2.04 Contract Documentation. The Contract between the INSTITUTE and the RECIPIENT shall consist of this final, executed Contract, including the following Attachments to the Contract, all of which are hereby incorporated by reference:

(a) Attachment A – Project Description, Goals and Timeline

(b) Attachment B – Approved Budget, including changes approved by the INSTITUTE subsequent to execution of the Contract.

(c) Attachment C – Assurances and Certifications

(d) Attachment D – Intellectual Property and Revenue Sharing

(e) Attachment E – Reporting Requirements

(f) Attachment F – Approved Amendments to Contract, excluding budget amendments reflected in Attachment B.

Section 2.05 Entire Agreement. All agreements, covenants, representations, certifications and understandings between the parties hereto concerning this Contract have been merged into this written Contract. No prior contemporaneous representation, agreement or understanding, express or implied, oral or otherwise, of the parties or their agents that may have related to the subject matter hereof in any way shall be valid or enforceable unless embodied in this Contract.

Section 2.06 Amendments and Modifications. Requested amendments and modifications to the Contract must be submitted in writing to the INSTITUTE for review and approval (such approval shall not be unreasonably withheld.) Amendments and modifications (including alterations, additions, deletions, assignments and extensions) to the terms of this Contract shall be made solely in writing and shall be executed by both parties. The approved amendment shall be reflected in Attachment A if it is change to the Scope of Work, or as part of Attachment B if it is a budget amendment, or as part of Attachment F for all other changes.

Section 2.07 Relationship of the Parties The RECIPIENT shall be responsible for the conduct of the Project that is the subject of this Contract and shall direct the activities and at all times be responsible for the performance of Recipient Personnel, Collaborators, Contractors and other agents. The INSTITUTE does not assume responsibility for the conduct of the Project or any Institute-Funded Activity that is the subject of this Contract. The INSTITUTE and the RECIPIENT shall perform their respective obligations under this Contract as independent contractors and not as agents, employees, partners, joint venturers, or representatives of the other party. Neither party is permitted to make representations or commitments that bind the other party.

Section 2.08 Subcontracting. Any and all subcontracts entered into by the RECIPIENT in relation to the performance of activities under the Project shall be in writing and shall be subject to the requirements of this Contract. Without in any way limiting the foregoing, the RECIPIENT shall enter into and maintain a written agreement with each such permitted Contractor with terms and conditions sufficient to ensure the RECIPIENT fully complies with the terms of this Contract, including without limitation the terms set forth in Attachments C, D, and E. The RECIPIENT agrees that it shall be responsible to the INSTITUTE for the performance of and payment to any Contractor. Any reimbursements made by the RECIPIENT to a Contractor shall be made in accordance with the applicable provisions of TEX. GOV'T. CODE, Ch. 2251.

Section 2.09 Transfer or Assignment by the Recipient. This Contract is not transferable or otherwise assignable by the RECIPIENT, whether by operation of law or otherwise, without the prior written consent of the INSTITUTE, except as provided in this Section 2.09. Any such attempted transfer or assignment without the prior written consent of the INSTITUTE (except as provided in this Section 2.09) shall be null, void and of no effect. For purposes of this section, an assignment or transfer of this Contract by the RECIPIENT in connection with a merger, transfer or sale of all or substantially all of the RECIPIENT's assets or business related to this Contract or a consolidation, change of control or similar transaction involving the RECIPIENT shall not be deemed to constitute a transfer or assignment, so long as such action does not impair or otherwise negatively impact the revenue sharing terms in Attachment D. Nothing herein shall be interpreted as superseding the requirement that the Project be undertaken in Texas with Texas-based employees.

If the Principal Investigator leaves the employment of the RECIPIENT or is replaced by the RECIPIENT for any reason during the course of the Grant with someone who is not already designated a co-Principal

Investigator in the Application, the RECIPIENT shall notify the INSTITUTE prior to replacing the Principal Investigator. Written approval by the INSTITUTE is required for the replacement of the Principal Investigator with someone who is not already a co-Principal Investigator in the Application, which approval shall not be unreasonably withheld, conditioned or delayed.

Section 2.10 Representations and Certifications. The RECIPIENT represents and certifies to the best of its knowledge and belief to the INSTITUTE as follows:

(a) It has legal authority to enter into, execute, and deliver this Contract, and all documents referred to herein, and it has taken all actions necessary to its execution and delivery of such documents;

(b) It will comply with all of the terms, conditions, provisions, covenants, requirements, and certifications in this Contract, applicable statutory provisions, agency administrative rules, and all other documents incorporated herein by reference;

(c) It has made no material false statement or misstatement of fact in connection with this Contract and its receipt of the Grant, and all of the information it previously submitted to the INSTITUTE or that it is required under this Contract to submit to the INSTITUTE relating to the Grant or the disbursement of any of the Grant is and will be true and correct at the time such statement is made;

(d) It is in compliance in all material respects with provisions of its charter and of the laws of the State of Texas, and of the laws of the jurisdiction in which it was formed, and (i) there are no actions, suits, or proceedings pending, or threatened, before any judicial body or governmental authority against or affecting its ability to enter into this Contract, or any document referred to herein, or to perform any of the material acts required of it in such documents and (ii) it is not in default with respect to any order, writ, injunction, decree, or demand of any court or any governmental authority which would impair its ability to enter into this Contract, or any document referred to herein, or to perform any of the material acts required of it in such documents;

(e) Neither the execution and delivery of this Contract or any document referred to herein, nor compliance with any of the terms, conditions, requirements, or provisions contained in this Contract or any documents referred to herein, is prevented by, is a breach of, or will result in a breach of, any term, condition, or provision of any agreement or document to which it is now a party or by which it is bound; and

(f) It shall furnish such satisfactory evidence regarding the representations and certifications described herein as may be required and requested by the INSTITUTE from time to time.

Section 2.11 Reliance upon Representations. By awarding the Grant and executing this Contract, the INSTITUTE is relying, and will continue to rely throughout the term of this Contract, upon the truthfulness, accuracy, and completeness of the RECIPIENT's written assurances, certifications and representations. Moreover, the INSTITUTE would not have entered into this Contract with the RECIPIENT but for such written assurances, certifications and representations. The RECIPIENT acknowledges that the INSTITUTE is relying upon such assurances, certifications and representations and acknowledges their materiality and significance.

Section 2.12 Contingent upon Availability of Grant Funds. This Contract is contingent upon funding being available for the term of the Contract and the RECIPIENT shall have no right of action against the

INSTITUTE in the event that the INSTITUTE is unable to perform its obligations under this Contract as a

result of the suspension, termination, withdrawal, or failure of funding to the INSTITUTE or lack of sufficient funding of the INSTITUTE for this Contract. If funds become unavailable to the INSTITUTE during the term of the Contract, Section 8.01(c) shall apply. For the sake of clarity, and except as otherwise provided by this Contract, if this Contract is not funded, then both parties are relieved of all of their obligations under this Contract. The INSTITUTE acknowledges and agrees that the Project is a multiyear project subject to Tex. Health & Safety Code, Ch. 102, Section 102.257.

Section 2.13 Confidentiality of Documents and Information. In connection with work contemplated for the Project or pursuant to complying with various provisions of this Contract, the RECIPIENT may disclose its confidential business, financial, technical, scientific information and other information to the INSTITUTE ("Confidential Information"). To assist the INSTITUTE in identifying such information, the RECIPIENT shall mark or designate the information as "confidential**,**" provided however that the failure to so designate does not operate as a waiver to protections provided by applicable law or this Contract. The INSTITUTE shall use no less than reasonable care to protect the confidentiality of the Confidential Information to the fullest extent permissible under the Texas Public Information Act, Texas Government Code, Chapter 552 (the "**TPIA**"), and, except as otherwise provided in the TPIA to prevent the disclosure of the Confidential Information to third parties for a period of time equal to three (3) years from the termination of the contract, unless the INSTITUTE and the RECIPIENT agree in writing to extend such time period, provided that this obligation shall not apply to information that:

(a) was in the public domain at the time of disclosure or later became part of the public domain through no act or omission of the INSTITUTE in breach of this Contract;

(b) was lawfully disclosed to the INSTITUTE by a third party having the right to disclose it without an obligation of confidentiality;

(c) was already lawfully known to the INSTITUTE without an obligation of confidentiality at the time of disclosure;

(d) was independently developed by the INSTITUTE without using or referring to the RECIPIENT's Confidential Information; or

(e) is required by law or regulation to be disclosed.

The INSTITUTE shall hold the Confidential Information in confidence, shall not use such Confidential Information except as provided by the terms of this Contract, and shall not disclose such Confidential Information to third parties without the prior written approval of the RECIPIENT or as otherwise allowed by the terms of the Contract. Subject in all respects to the terms of this Contract and the TPIA, the INSTITUTE has the right to use and disclose the Confidential Information reasonably in connection with the exercise of its rights under the Contract.

In the event that the INSTITUTE is requested or required (by oral questions, interrogatories, requests for information or documents in legal proceedings, subpoena, civil investigative demand or other similar process by a court of competent jurisdiction or by any administrative, legislative, regulatory or self-regulatory authority or entity) to disclose any Confidential Information, the INSTITUTE shall provide the RECIPIENT with prompt written notice of any such request or requirement so that the RECIPIENT may seek a protective order or other appropriate remedy. If, in the absence of a protective order or other remedy, the INSTITUTE is nonetheless legally compelled to make any such disclosure of Confidential Information to any person, the INSTITUTE may, without liability hereunder, disclose only that portion of the Confidential Information that is legally required to be disclosed, provided that the INSTITUTE will use reasonable efforts to assist the RECIPIENT, at the RECIPIENT's expense, in obtaining an appropriate protective order or other reliable

assurance that confidential treatment will be accorded the Confidential Information. To the extent that such Confidential Information does not become part of the public domain by virtue of such disclosure, it shall remain Confidential Information hereunder.

Article III

DISBURSEMENT OF GRANT AWARD PROCEEDS

Section 3.01 Payment of Grant Award Proceeds. The INSTITUTE will advance Grant award proceeds upon request by the RECIPIENT, consistent with the amounts and schedule as provided in Attachment B. If the RECIPIENT does not request or the Oversight Committee does not authorize advancement of funds for some or the entire Grant award proceeds, disbursement of Grant award proceeds for services performed and allowable expenses and costs incurred pursuant to the Scope of Work will be on a reimbursement basis. To the extent that completion of certain milestones is associated with a specific tranche of funding as reflected in the Scope of Work, those milestones shall be accomplished before funding may be provided for next tranche of funding. The INSTITUTE reserves the right to terminate the Contract should a key milestone not be met.

Section 3.02 Requests for Reimbursement and Quarterly Financial Status Reports. If the RECIPIENT does not receive an advance disbursement of Grant proceeds, the RECIPIENT's requests for reimbursement shall be made on INSTITUTE Form 269a (Financial Status Report). If the RECIPIENT has elected to receive an advance disbursement of Grant proceeds, RECIPIENT shall submit INSTITUTE Form 269a (Financial Status Report) to document all costs and allowable expenses paid with Grant proceeds. The RECIPIENT shall submit the INSTITUTE Form 269a quarterly to the INSTITUTE within […***…] following the end of the quarter covered by the bill. A final INSTITUTE Form 269a shall be submitted by RECIPIENT not later than […***…] after the Termination Date. An extension of time for submission deadlines specified herein must be expressly authorized in writing by the INSTITUTE.

Section 3.03 Actual Costs and Allowable Expenses. Because the Approved budget for the Project(s) as set forth in Attachment B is only an estimate, the parties agree that the RECIPIENT's billings under this Contract will reflect the actual costs and expenses incurred in performing the Project(s), regardless of the Approved Budget, up to the total contracted amount specified in Section 2.01 "Award of Monies." The RECIPIENT shall use Grant proceeds only for allowable expenses consistent with state law and agency administrative rules. Allowable expenses for the Project(s) shall be only as outlined in the Approved Budget and any modifications to same.

Section 3.04 Travel Expenses. Reimbursement for travel expenditures shall be in accordance with the Approved Budget. Prior written approval from the INSTITUTE must be obtained before travel that exceeds the amount included in the Approved Budget commences. Failure to obtain such prior written approval shall result in such excess travel costs constituting expenses that may not be taken into account for the purposes of calculating expenditure of Grant funds under this Contract.

Section 3.05 Budget Modifications. The total Approved Budget and the assignment of costs may be adjusted based on implementation of the Scope of Work, spending patterns, and unexpended funds, but only by an amendment to the Approved Budget. In no event shall an amendment to the Approved Budget result in payments in excess of the aggregate amount specified in Section 2.01 "Award of Monies" or in approved supplemental funding for the Project, if any. The RECIPIENT may make transfers between or among lines within budget categories without prior written approval provided that:

(a) The total dollar amount of all changes of any single line item within budget categories (individually and in the aggregate) is less than […***…] of the total Approved Budget;

(b) The transfer will not increase or decrease the total Approved Budget;

(c) The transfer will not materially change the nature, performance level, or Scope of Work of the Project; and

(d) The RECIPIENT submits a revised copy of the Approved Budget including a narrative justification of the changes prior to incurring costs in the new category.

All other budget changes or transfers require the INSTITUTE's express prior written approval. Transfer of funds between categories in the Project's Approved Budget may be allowed if requests are in writing, fit within the Scope of Work and the total Approved Budget, are beneficial to the achievement of the objectives of the Project, and appear to be an efficient, effective use of the INSTITUTE's funds.

Section 3.06 Withholding Payment. The INSTITUTE may withhold Grant award proceeds from RECIPIENT if required Financial Status Reports (Form 269a) are not on file for previous quarters or for the final period, if material program requirements are not met and remain uncured after a reasonable time period to cure, if the RECIPIENT is in breach of any material term of this Contract, or in accordance with provisions of this Contract as well as applicable state or federal laws, regulations or administrative rules, and the breach remains uncured after a reasonable time period to cure. The INSTITUTE shall have the right to withhold all or part of any future payments to the RECIPIENT to offset any prior advance payments made to the RECIPIENT for ineligible expenditures that have not been refunded to the INSTITUTE by the RECIPIENT.

Section 3.07 Grant Funds as Supplement to Budget. The RECIPIENT shall use the Grant proceeds awarded pursuant to this Contract to supplement its overall budget. These funds will in no event supplant existing funds currently available to the RECIPIENT that have been previously budgeted and set aside for the Project. The RECIPIENT will not bill the INSTITUTE for any costs under this Contract that also have been billed or should have been billed to any other funding source.

Section 3.08 Buy Texas. The RECIPIENT shall apply good faith efforts to purchase goods and services from suppliers in Texas to the extent reasonably possible, to achieve a goal of more than 50 percent of such purchases from suppliers in Texas.

Section 3.09 Historically Underutilized Businesses. The RECIPIENT shall use reasonable efforts to purchase materials, supplies or services from a Historically Underutilized Business (HUB). The Texas Procurement and Support Services website will assist in finding HUB vendors (http://www.window.state.tx.us/procurement.) The RECIPIENT shall complete a HUB report with each annual report submitted to the INSTITUTE in accordance with Attachment E.

Section 3.10 Limitation on Use of Grant Award Proceeds to Pay Indirect Costs. The RECIPIENT shall not spend more than five percent of the Grant award proceeds for Indirect Costs.

Section 3.11 Carry Forward of Unspent Funds and No Cost Extension. RECIPIENT may request to carry forward unspent funds into the budget for the next year. Carryover of unspent funds must be specifically approved by the INSTITUTE. The INSTITUTE may approve a no cost extension for the Contract for a period not to exceed six (6) months after the Termination Date if additional time beyond the Termination date is required to ensure adequate completion of the approved project. The Contract must be in good fiscal and programmatic standing. All terms and conditions of the Contract shall continue during any extension period and if such extension is approved, notwithstanding Section 2.03, all references to the "Termination Date" shall be deemed to mean the date of expiration of such extension period.

Article IV

AUDITS AND INSPECTIONS

Section 4.01 Record Keeping. The RECIPIENT, each Collaborator whose costs are funded in all or in part by the Grant shall maintain or cause to be maintained books, records, documents and other evidence (electronic or otherwise) pertaining in any way to its performance under and compliance with the terms and conditions of this Contract ("**Records**"). The RECIPIENT, each Collaborator and each Contractor shall use, or shall cause the entity which is maintaining such Records to use generally accepted accounting principles in the maintenance of such Records, and shall retain or require to be retained all of such Records for a period of […***…] from the Termination Date of the Contract.

Section 4.02 Audits. Upon request and with reasonable notice, the RECIPIENT, each Collaborator and each Contractor whose costs are charged to the Project shall allow, or shall cause the entity which is maintaining such items to allow, the INSTITUTE, or auditors working on behalf of the INSTITUTE, including the State Auditor and/or the Comptroller of Public Accounts for the State of Texas, to review, inspect, audit, copy or abstract all of its Records during regular working hours. Acceptance of funds directly under the Contract or indirectly through a subcontract under the Contract constitutes acceptance of the authority of the INSTITUTE, or auditors working on behalf of the INSTITUTE, including the State Auditor and/or the Comptroller of Public Accounts, to conduct an audit or investigation in connection with those funds for a period of […***...] from the Termination Date of the Contract.

Notwithstanding the foregoing, any RECIPIENT expending […***…] or more in federal or state awards during its fiscal year shall obtain either an annual single audit or a program specific audit. A RECIPIENT expending funds from only one state program may elect to obtain a program specific audit in accordance with Office of Management and Budget (OMB) Circular A-133 or with the State of Texas Uniform Grant Management Standards (UGMS). A single audit is required if funds from more than one federal or state program are spent by the RECIPIENT. The audited time period is the RECIPIENT's fiscal year, not the INSTITUTE funding period.

Section 4.03 Inspections. In addition to the audit rights specified in Section 4.02 "Audits", the INSTITUTE shall have the right to conduct periodic onsite inspections within normal working hours and on a day and a time mutually agreed to by the parties, to evaluate the Institute-Funded Activity. The RECIPIENT shall fully participate and cooperate in any such evaluation efforts.

Section 4.04 On-going Obligation to Submit Requested Information. The RECIPIENT shall, submit other information related to the Grant to the INSTITUTE as may be reasonably requested from time-to-time by the INSTITUTE, by the Legislature or by any other funding or regulatory bodies covering the RECIPIENT's activities under this Contract.

Section 4.05 Duty to Resolve Deficiencies. If an audit and/or inspection under this Article IV finds there are deficiencies that should be remedied, then the RECIPIENT shall resolve and/or cure such deficiencies within a reasonable time frame specified by the INSTITUTE. Failure to do so shall constitute an Event of Default pursuant to Section 8.03 "Event of Default." Upon the RECIPIENT'S request, the parties agree to negotiate in good faith, specific extensions so that the RECIPIENT can cure such deficiencies.

Section 4.06 Repayment of Grant Proceeds for Improper Use. In no event shall RECIPIENT retain Grant funds that have not been used by the RECIPIENT for purposes for which the Grant was intended or in violation of the terms of this Contract. The RECIPIENT shall repay any portion of Grant proceeds used by the RECIPIENT for purposes for which the Grant was not intended, as determined by the final results of an audit conducted pursuant to the provisions of this Contract. Unless otherwise expressly provided for in writing and appended to this Contract, the repayment shall be made to the INSTITUTE no

later than […***…] upon a written request by the INSTITUTE specifying the amount to be repaid and detailing the basis upon which such request is being made and the amount shall include interest calculated at an amount not to exceed […***…] annually. The RECIPIENT may request that the INSTITUTE waive the interest, subject in all cases to the INSTITUTE'S sole discretion.

Section 4.07 Repayment of Grant Proceeds for Relocation Outside of Texas. Unless waived by a vote of the Oversight Committee, the RECIPIENT shall repay the INSTITUTE all Grant proceeds disbursed to RECIPIENT in the event that RECIPIENT relocates its principal place of business outside of the State during the Contract term or within 3 years after the final payment of the Grant funds is made by the INSTITUTE.

Article V

ASSURANCES AND CERTIFICATIONS

Adoption of Attachment C. The INSTITUTE and the RECIPIENT hereby adopt the terms of Attachment C in their entirety, incorporate them as if fully set forth herein, and agree to perform and be bound by all such terms.

Article VI

INTELLECTUAL PROPERTY AND REVENUE SHARING

Adoption of Attachment D. The INSTITUTE and the RECIPIENT hereby adopt the terms of Attachment D in their entirety, incorporate them as if fully set forth herein, and agree to perform and be bound by all such terms.

Article VII

REPORTING

Adoption of Attachment E. The INSTITUTE and the RECIPIENT hereby adopt the terms of Attachment E in their entirety, incorporate them as if fully set forth herein, and agree to perform and be bound by all such terms.

Article VIII

EARLY TERMINATION AND EVENT OF DEFAULT

Section 8.01 Early Termination of Contract. This Contract may be terminated prior to the Termination Date specified in Section 2.03 "Contract Term" by:

(a) Mutual written consent of all parties to this Contract; or

(b) The INSTITUTE for an Event of Default (defined in Section 8.03) by the RECIPIENT; or

(c) The INSTITUTE if allocated funds should become legally unavailable during the Contract period and the INSTITUTE is unable to obtain additional funds for such purposes; or

(d) The RECIPIENT for convenience.

Section 8.02 Repayment of Grant Proceeds upon Early Termination. The INSTITUTE may require the RECIPIENT to repay some or all of the disbursed Grant proceeds in the event of early termination under 8.01 (d) above or under Section 8.01(b) above, to the extent such Event of Default resulted from Grant funds being expended in violation of this Contract. To the extent that the INSTITUTE exercises this option, the INSTITUTE shall provide written notice to the RECIPIENT stating the amount to be repaid, applicable interest calculated not to exceed […***…] annually, and the schedule for such repayment. The RECIPIENT may request that the INSTITUTE waive the interest, subject in all cases to the INSTITUTE'S sole discretion. In no event shall the RECIPIENT retain Grant funds that have not been used by the RECIPIENT for purposes for which the Grant was intended.

Section 8.03 Event of Default. The following events shall, unless expressly waived in writing by the INSTITUTE or fully cured by the RECIPIENT pursuant to the provisions herein, constitute an event of default (each, an "**Event of Default**"):

(a) The RECIPIENT's failure, in any material respect, to conduct the Project in accordance with the approved Scope of Work and to demonstrate progress towards achieving the milestones set forth in Section 2.02;

(b) The RECIPIENT's failure to conduct the Project within the State of Texas to the extent required under this Contract unless as otherwise specified in the application, Scope of Work or Approved Budget;

(c) The RECIPIENT's failure to fully comply, in any material respect, with any provision, term, condition, covenant, representation, certification, or warranty contained in this Contract or any other document incorporated herein by reference;

(d) The RECIPIENT's failure to comply with any applicable federal or state law, administrative rule, regulation or policy with regard to the conduct of the Project;

(e) The RECIPIENT's material misrepresentation or false covenant, representation, certification, or warranty made by RECIPIENT herein, in the Grant application, or in any other document furnished by RECIPIENT pursuant to this Contract that was misleading at the time that it was made; or

(f) The RECIPIENT ceases its business operations, has a receiver appointed for all or substantially all of its assets, makes a general assignment for the benefit of creditors, is declared insolvent by a court of competent jurisdiction or becomes the subject, as a debtor, of a proceeding under the federal bankruptcy code, which such proceedings are not dismissed within ninety (90) days after filing.

Section 8.04 Notice Required. If the RECIPIENT intends to terminate pursuant to Section 8.01(d) "Early Termination of Contract", it shall provide written notice to the INSTITUTE pursuant to the notice provisions of Section 9.21 "Notices" no later than thirty (30) days prior to the intended date of termination.

If the INSTITUTE intends to terminate for an Event of Default under Section 8.01(b) by the RECIPIENT, as described in Section 8.03 "Event of Default", the INSTITUTE shall provide written notice to the RECIPIENT pursuant to Section 9.21 "Notices" and shall include a reasonable description of the Event of Default and, if applicable, the steps necessary to cure such Event of Default. Upon receiving notice from the INSTITUTE,

the RECIPIENT shall have thirty (30) days beginning on the day following the receipt of notice to cure the Event of Default. Upon request, the INSTITUTE may provide an extension of time to cure the Event of Default(s) beyond the thirty (30) day period specified herein so long as the RECIPIENT is using reasonable efforts to cure and is making reasonable progress in curing such Event(s) of Default. The extension shall be in writing and appended to the Contract. If the RECIPIENT is unable or fails to timely cure an Event of Default, unless expressly waived in writing by the INSTITUTE, this Contract shall immediately terminate as of the close of business on the final day of the allotted cure period without any further notice or action by the INSTITUTE required. **In addition, and notwithstanding the foregoing, the INSTITUTE and the RECIPIENT agree that certain events that cannot be cured shall, unless expressly waived in writing by the INSTITUTE, constitute a final Event of Default under this Contract and this Contract shall terminate immediately upon the INSTITUTE giving the RECIPIENT written "Notice of Event of Default and FINAL TERMINATION."**

In the event that the INSTITUTE terminates the Contract under Section 8.01(c) above because allocated funds become legally unavailable during the Contract period, the INSTITUTE shall immediately provide written notification to the RECIPIENT of such fact pursuant to Section 9.21 "Notices." The Contract is terminated upon the RECIPIENT's receipt of that notification, subject to Section 9.09 "Survival of Terms."

Section 8.05 Duty to Report Event of Default. The RECIPIENT shall notify the INSTITUTE in writing pursuant to Section 9.21 "**Notices**", promptly and in no event more than […***…] after it obtains knowledge of the occurrence of any Event of Default. The RECIPIENT shall include a statement setting forth reasonable details of each Event of Default and the action which the RECIPIENT proposes to take with respect thereto.

Section 8.06 Obligations/Liabilities Affected by Early Termination. The RECIPIENT shall not incur new obligations that otherwise would have been paid for using Grant funds after the receipt of notice as provided by Section 8.04 "Notice Required", unless expressly permitted by the INSTITUTE in writing, and shall cancel as many outstanding obligations as possible. The INSTITUTE shall not owe any fee, penalty or other amount for exercising its right to terminate the Contract in accordance with Section 8.01. In no event shall the INSTITUTE be liable for any services performed, or costs or expenses incurred, after the Termination Date of the Contract. Early termination by either party shall not nullify obligations already incurred, including the RECIPIENT's revenue sharing obligations as set forth in Attachment D, or the performance or failure to perform obligations prior to the Termination Date.

Section 8.07 Interim Remedies. Upon receipt by the RECIPIENT of a notice of Event of Default, and at any time thereafter until such Event of Default is cured to the satisfaction of the INSTITUTE or this Contract is terminated, the INSTITUTE may enforce any or all of the following remedies (such rights and remedies being in addition to and not in lieu of any rights or remedies set forth herein):

(a) The INSTITUTE may refrain from disbursing any amount of the Grant funds not previously disbursed; provided, however, the INSTITUTE may make such a disbursement after the occurrence of an Event of Default without thereby waiving its rights and remedies hereunder;

(b) The INSTITUTE may enforce any additional remedies it has in law or equity.

The rights and remedies herein specified are cumulative and not exclusive of any rights or remedies that the INSTITUTE would otherwise possess.

Article IX

MISCELLANEOUS

Section 9.01 Uniform Grant Management Standards. Unless otherwise provided herein, the RECIPIENT agrees that the Uniform Grant Management Standards (UGMS), developed by the Governor's Budget and Planning Office as directed under the Uniform Grant Management Act of 1981, TEX. GOVT. CODE, Ch. 783, apply as additional terms and conditions of this Contract and that the standards are adopted by reference in their entirety. If there is a conflict between the provisions of this Contract and UGMS, the provisions of this Contract will prevail unless expressly stated otherwise.

Section 9.02 Management and Disposition of Equipment. During the term of this Contract, the RECIPIENT may use Grant funds to purchase Equipment to be used for the authorized purpose of the Project, subject to the conditions set forth below. Unless otherwise provided herein, title to Equipment shall vest in the RECIPIENT upon termination of the Contract.

(a) The INSTITUTE must authorize the acquisition in advance and in writing but an acquisition is deemed authorized if included in the Approved Budget for the Project;

(b) Equipment purchased with Grant funds must stay within the State of Texas;

(c) Equipment purchased with Grant funds must be materially deployed to the uses and purposes related to the Project;

(d) In the event the RECIPIENT is indemnified, reimbursed or otherwise compensated for any loss of, destruction of, or damage to the Equipment purchased using Grant funds, it shall use the proceeds to repair or replace said Equipment;

(e) Equipment may be exchanged (trade-in) or sold without the prior written approval of the INSTITUTE if the proceeds thereof shall be applied to the acquisition cost of replacement Equipment;

(f) The RECIPIENT may use its own property management standards and procedures provided that it observes the terms of UGMS, A-102, in all material respects;

(g) The title or ownership of the Equipment shall not be encumbered for purposes other than the Project nor or transferred other than to a permitted assignee of this Contract, without the prior written approval of the INSTITUTE;

(h) If the original or replacement Equipment is no longer needed for the originally authorized purpose or for other activities supported by the INSTITUTE, the RECIPIENT shall request disposition instructions from the INSTITUTE and, upon receipt, shall fully comply therewith; and

(i) If this Contract is terminated early pursuant to Section 8.01(b), (d), (e), or (f) above, the INSTITUTE shall determine the final disposition of Equipment purchased with Grant award money.

Section 9.03 Supplies and Other Expendable Property. The RECIPIENT shall classify as materials, supplies and other expendable property the allowable unit acquisition cost of such property under $5,000 necessary to carry out the Project. Title to supplies and other expendable property shall vest in the RECIPIENT upon acquisition.

Section 9.04 Acknowledgement of Grant Funding and Publicity. The parties agree to the following terms and conditions regarding acknowledging Grant funding and publicity:

(a) The parties agree to fully cooperate and coordinate with each other in connection with all press releases and publications regarding the award of the Grant, the execution of the Contract and the Institute-Funded Activities.

(b) The RECIPIENT shall notify the INSTITUTE's Information Specialist or similar personnel at least three business days prior to any press releases, advertising, publicity, use of CPRIT logo, or other promotional activities that pertain to the Project or any Institute-Funded Activity. In the event that the INSTITUTE wishes to participate in a joint press release, the RECIPIENT shall coordinate and cooperate with the INSTITUTE's Information Specialist or similar personnel to develop a mutually agreeable joint press release.

(c) Consistent with the goal of encouraging development of scientific breakthroughs and dissemination of knowledge, publication or presentation of scholarly materials is expected and encouraged. The RECIPIENT may publish in scholarly journals or other peer-reviewed journals (including graduate theses and dissertations) and may make presentations at scientific meetings without prior notice to or consent of the INSTITUTE, except as may otherwise be set forth in this Contract. The RECIPIENT shall promptly notify the INSTITUTE when any scholarly presentations or publications have been accepted for public disclosure and shall provide the INSTITUTE with final copies of all such accepted presentations and publications. The RECIPIENT shall acknowledge receipt of the INSTITUTE funding in all publications, presentations, press releases and other materials regarding the work associated with the Institute-Funded Activities. The RECIPIENT shall promptly submit an electronic version of all published manuscripts to PubMed Central in accordance with Section 9.05 "Public Access to Research Results."

(d) When grant funds are used to prepare print or visual materials for educational or promotional purposes for the general public (e.g., patients), and excluding presentations and publications discussed above in subsection (c), the RECIPIENT shall provide a copy of such materials to the INSTITUTE at least […***…] prior to printing. The RECIPIENT shall also acknowledge receipt of the INSTITUTE funding on all such materials including, but not limited to, brochures, pamphlets, booklets, training fliers, project websites, videos and DVDs, manuals and reports, as well as on the labels and cases for audiovisual or videotape/DVD presentations.

Section 9.05 Public Access to Results of Institute-Funded Activities. The RECIPIENT shall submit an electronic version of its final peer-reviewed journal manuscripts that arise from Grant funds to the digital archive National Library of Medicine's PubMed Central upon acceptance for publication. These papers must be accessible to the public on PubMed no later than […***…] after publication. This policy is subject to the terms of Attachment D and does not supplant applicable copyright law. For clarity, this policy is not intended to require the RECIPIENT to make a disclosure at a time or in any manner that would cause the RECIPIENT to abandon, waive or disclaim any intellectual property rights that it is obligated to protect pursuant to the terms of Attachment D.

Section 9.06 Work to be Conducted in State. The RECIPIENT agrees that it will use reasonable efforts to direct that any new or expanded preclinical testing, clinical trials, commercialization or manufacturing that is part of or relating to any Institute-Funded Activities take place in the State of Texas, including the establishment of facilities to meet this purpose. If the RECIPIENT decides not to conduct such work in the State of Texas, the RECIPIENT shall provide a prior written explanation to the

INSTITUTE detailing the RECIPIENT's reasons for conducting the work outside of the State of Texas and the RECIPIENT's efforts made to conduct the work in the State of Texas.

Section 9.07 Duty to Notify. During the term of this Contract and for a period of […***…] thereafter, the RECIPIENT is under a continuing obligation to notify the INSTITUTE's Chief Executive Officer at the same time it is required to notify any Federal or State entity of any unexpected adverse event or condition that materially impacts the performance or general public perception of the conduct or results of the Project and Institute-Funded Activities, including any impact to the Scope of Work included in the Contract and events or results that have a serious adverse impact on human health, safety or welfare. By way of example only, if clinical testing of the results of Institute-Funded Activities reveal an unexpected risk of developing serious health conditions or death, then the RECIPIENT shall, at the same time it notifies any Federal or State entity, promptly so notify the INSTITUTE's Chief Executive Officer even if such results are not available until after the term of this Contract. Notice required under this section shall be made as promptly as reasonably possible and shall follow the procedures set forth in Section 9.21 "Notices."

Section 9.08 Severability. If any provision of this Contract is construed to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or enforceability shall not affect any other provisions hereof. The invalid, illegal or unenforceable provision shall be deemed stricken and deleted to the same extent and effect as if never incorporated herein. All other provisions shall continue as provided in this Contract.

Section 9.09 Survival of Terms. Termination or expiration of this Contract for any reason will not release either party from any liabilities or obligations set forth in this Contract that: (1) the Parties have expressly agreed shall survive any such termination or expiration; or (2) remain to be performed or by their nature would be intended to be applicable following any such termination or expiration. Such surviving terms include, but are not limited to, Sections 2.13, 4.01, 4.02, 4.05, 4.06, 8.02, 8.06, 9.04, 9.05, 9.06, 9.07, 9.09, 9.14, 9.15, 9.16, 9.17, 9.18, and Attachment D.

Section 9.10 Binding Effect and Assignment or Modification. This Contract and all terms, provisions and obligations set forth herein shall be binding upon and shall inure to the benefit of the parties and their successors and permitted assigns, including all other state agencies and any other agencies, departments, divisions, governmental entities, public corporations or other entities which shall be successors to either of the parties or which shall succeed to or become obligated to perform or become bound by any of the covenants, agreements or obligations hereunder of either of the parties hereto. Upon a permitted assignment of this Contract by RECIPIENT, all references to "the RECIPIENT" herein shall be deemed to refer to such permitted assignee.

Section 9.11 No Waiver of Contract Terms. Neither the failure by the RECIPIENT or the INSTITUTE, in any one or more instances, to insist upon the complete and total observance or performance of any term or provision hereof, nor the failure of the RECIPIENT or the INSTITUTE to exercise any right, privilege or remedy conferred hereunder or afforded by law, shall be construed as waiving any breach of such term or provision or the right to exercise such right, privilege or remedy thereafter. In addition, no delay on the part of either the RECIPIENT or the INSTITUTE, in exercising any right or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right or remedy preclude other or further exercise thereof or the exercise of any other right or remedy.

Section 9.12 No Waiver of Sovereign Immunity. No provision of this Contract is in any way intended to constitute a waiver by the INSTITUTE, the RECIPIENT (if applicable), or the State of Texas of any immunities from suit or from liability that the INSTITUTE, the RECIPIENT, or the State of Texas may have by operation of law.

Section 9.13 Force Majeure. Neither the INSTITUTE nor the RECIPIENT will be liable for any failure or delay in performing its obligations under the Contract if such failure or delay is due to any cause beyond

the reasonable control of such party, including, but not limited to, unusually severe weather, strikes, natural disasters, fire, civil disturbance, epidemic, war, court order or acts of God. The existence of such causes of delay or failure will extend the period of performance in the exercise of reasonable diligence until after the causes of delay or failure have been removed. Each party must inform the other in accordance with Section 9.21 “Notices” within […***…], or as soon as it is practical, of the existence of a force majeure event or otherwise waive this right as a defense.

Section 9.14 Disclaimer of Damages. IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, SPECIAL, PUNITIVE, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES. THIS LIMITATION WILL APPLY REGARDLESS OF WHETHER OR NOT THE OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Section 9.15 Indemnification and Hold Harmless. Except as provided herein, the RECIPIENT agrees to fully indemnify and hold the INSTITUTE and the State of Texas harmless from and against any and all claims, demands, costs, expenses, liabilities, causes of action and damages of every kind and character (including reasonable attorneys fees) which may be asserted by any third party in any way related or incident to, arising out of, or in connection with (1) the RECIPIENT’s negligent, intentional or wrongful performance or failure to perform under this Contract, (2) the RECIPIENT’s receipt or use of Grant funds, or (3) any negligent, intentional or wrongful act or omission committed by the RECIPIENT as part of an Institute-Funded Activity or during the Project. In addition, the RECIPIENT agrees to fully indemnify and hold the INSTITUTE and the State of Texas harmless from and against any and all costs and expenses of every kind and character (including reasonable attorneys fees, costs of court and expert fees) that are incurred by the INSTITUTE or the State of Texas arising out of or related to a third party claim of the type specified in the preceding sentence. Notwithstanding the preceding, such indemnification shall not apply in the event of the sole or gross negligence of the INSTITUTE. If the RECIPIENT is a State of Texas agency or institution of higher education, then this Section 9.15 is subject to the extent authorized by the Texas Constitution and the laws of the State of Texas.

The RECIPIENT acknowledges and agrees that this indemnification shall apply to, but is not limited to, employment matters, taxes, personal injury, and negligence.

It is understood and agreed that it is not the intent of the parties to expand or increase the liability of the State of Texas under this Article. This provision is intended to prevent the RECIPIENT, the INSTITUTE and the State of Texas from attempting or appearing to assume liability it does not have the statutory or legal power to assume.

Section 9.16 Alternative Dispute Resolution. If applicable, the dispute resolution process provided for in TEX. GOVT. CODE, Ch. 2260 shall be used, as further described herein, to resolve any claim for breach of contract made against the INSTITUTE (excluding any uncured Event of Default). The submission, processing and resolution of a party’s claim are governed by the published rules adopted by the Attorney General pursuant to TEX. GOVT. CODE, Ch. 2260, as currently effective, hereafter enacted or subsequently amended.

Section 9.17 Applicable Law and Venue. This Contract shall be construed and all disputes shall be considered in accordance with the laws of the State of Texas, without regard to its principles governing the conflict of laws. Provided that the RECIPIENT first complies with procedures set forth in Section 9.16 “Alternative Dispute Resolution,” exclusive venue and jurisdiction for the resolution of claims arising from or related to this Contract shall be in the federal and state courts in Travis County, Texas.

Section 9.18 Attorneys’ Fees. In the event of any litigation, appeal or other legal action to enforce any provision of the Contract, the RECIPIENT shall pay all expenses of such action, including attorneys’ fees

and costs, if the INSTITUTE is the prevailing party. If the RECIPIENT is a State of Texas agency or institution of higher education, then this Section 9.18 is subject to the extent authorized by the Texas Constitution and the laws of the State of Texas.

Section 9.19 Counterparts. This Contract may be executed in any number of counterparts, each of which when so executed and delivered shall be an original, but such counterparts shall together constitute one and the same instrument.

Section 9.20 Construction of Terms The headings used in this Contract are inserted only as a matter of convenience and for reference and shall not affect the construction or interpretation of this Contract. Where context so indicates, a word in the singular form shall include the plural, a word in the masculine form the feminine, and vice-versa. The word “including” and similar constructions (such as “includes”, “included”, “for example”, “such as”, and “e.g.”) shall mean “including, without limitation” throughout this Contract. The words “and” and “or” are not intended to convey exclusivity or nonexclusivity except where expressly indicated or where the context so indicates in order to give effect to the intent of the parties.

Section 9.21 Notices. All notices, requests, demands and other communications will be in writing and will be deemed given on the date received as demonstrated by (i) a courier’s receipt or registered or certified mail return receipt signed by the party to whom such notice was sent, provided that such notice was sent to the Authorized Signing Official (ASO) at the address provided in the CPRIT Grants Management System, (ii) a fax confirmation page showing that such fax was successfully transmitted to the fax number provided in the CPRIT Grants Management System, or (iii) via correspondence in the CPRIT Grants Management System.

DP160057, Contract Attachment A

Abstract and Significance

Abstract and Problem: […***…].
Specific Aims: […***…]

[…***…].
Impact: […***…].

Layperson’s Summary

Many patients with leukemia are cured by a stem cell transplant after intense chemotherapy. However, cancer relapse, infection, and graft versus host (GvHD) are common in the months after a transplant. The problem is that harmful T cells in the transplant cannot be separated from essential, helpful T cells that kill residual cancer and help stem cells become established. Harmful T cells attack the skin, intestines, and the liver, which they see as foreign. For these reasons, many cancer patients without a matched donor cannot receive a transplant, and those that do risk severe, often fatal complications.

Bellicum Pharmaceuticals has developed a revolutionary new T-cell therapy (BPX-501) to solve the critical problems associated with non-matched transplants. Bellicum inserts a “safety switch” into donor T-cells, which allows the physician to kill harmful T cells while preserving those helpful T-cells that protect from infection, assist the new stem cells, and kill residual cancer. This project will test a new combination therapy consisting of BPX-501 along with donor stem cells that have been specially prepared to maintain certain beneficial cells that can work together with BPX-501. Bellicum will treat adults and children with a very serious form of leukemia called AML, who have failed conventional therapy and have little chance for cure. The results of this trial could revolutionize cancer treatment and provide hope to many patients with no current alternatives.

Timelines: **EDITED** project_timeline.pdf

Goal 1: […***…]
ADDED

Objective 1: […***…]
ADDED

Objective 2: […***…]
ADDED

Objective 3: […***…]
ADDED

Objective 4: […***…]
ADDED

Objective 5: […***…]
ADDED

Goal 2: […***…]
ADDED

Objective 1: […***…]
ADDED

Objective 2: […***…]
ADDED

Objective 3: […***…]
ADDED

Objective 4: […***…]
ADDED

Goal 3: […***…]
ADDED

Objective 1: […***…]
ADDED

Objective 2: […***…]
ADDED

Objective 3: […***…]
ADDED

Objective 4: […***…]
ADDED

Objective 5: […***…]
ADDED

CPRIT Study - Projected Timeline -US

[…***…]

*****Confidential Treatment Requested**

Grant ID: DP160057
Principal Investigator/Program Director: Annemarie Moseley

ATTACHMENT B - Detailed Budget Form

Budget	Budget Year 1	Budget Year 2	Budget Year 3	Total Budget
a. Personnel	[…***…]	[…***…]	[…***…]	[…***…]
b. Fringe Benefits	[…***…]	[…***…]	[…***…]	[…***…]
c. Travel	[…***…]	[…***…]	[…***…]	[…***…]
d. Equipment	[…***…]	[…***…]	[…***…]	[…***…]
e. Supplies	[…***…]	[…***…]	[…***…]	[…***…]
f. Contractual	[…***…]	[…***…]	[…***…]	[…***…]
g. Other	[…***…]	[…***…]	[…***…]	[…***…]
h. Total Direct Charges	[…***…]	[…***…]	[…***…]	[…***…]
i. Indirect Charges (doesn't apply to prevention grants awarded prior to 01 Sep 2016)	[…***…]	[…***…]	[…***…]	[…***…]
j. Total Charges	[…***…]	[…***…]	[…***…]	$16,946,716.00

* Note:

For purposes of contract initiation only:

Federal ID#:	
Vendor ID#:	12014502004000
ASO Contact:	Musso, Alan
Address:	2130 West Holcombe Boulevard
Address 2:	Suite 800
City, State, ZIP	Houston, TX 77030
Phone:	832-384-1116
Fax:	832-384-1150
Email:	[…***…]

ATTACHMENT C

ASSURANCES AND CERTIFICATIONS

This Attachment C is hereby incorporated into and made a part of that certain **CANCER RESEARCH GRANT CONTRACT** ("**Contract**") by and between the Cancer Prevention and Research Institute of Texas ("**CPRIT**" or the "**INSTITUTE**") and the RECIPIENT. A capitalized term used in this Attachment shall have the meaning given to term in the Contract or in the Attachments to the Contract, unless otherwise defined herein. In the event of a conflict between the provisions of this Attachment and the provisions of the Contract, this Attachment shall control.

By signing this Contract, RECIPIENT certifies compliance with the following assurances and certifications required by the INSTITUTE (listed below). RECIPIENT further acknowledges that its obligations pursuant to the following assurances and certifications are ongoing.

Section C1.01 Demonstration of Matching Funds. Pursuant to TEX. HEALTH & SAFETY CODE § 102.255(d) and T.A.C. 25 § 703.11, RECIPIENT has an amount of funds equal to one-half of the amount of the Grant to be disbursed each fiscal year of the Contract term dedicated to the research that is the subject of the Grant as demonstrated by the form incorporated herein to Attachment C. The RECIPIENT shall update
the matching funds certification and verficiation annually for each fiscal year that Grant funds are
disbursed.

Section C1.02 Payment of Taxes. RECIPIENT's payment of franchise taxes is current or, if the RECIPIENT is exempt from payment of franchise taxes, that it is not subject to the State of Texas franchise tax. If franchise tax payments become delinquent during the Contract term, payments under this Contract will be withheld until the RECIPIENT's delinquent franchise tax is paid in full. The RECIPIENT also acknowledges that it is not otherwise exempt from state sales or occupancy tax as a result of this Contract.

Section C1.03 Compliance with Confidentiality Guidelines Relating to Personal and Medical Information. RECIPIENT complies with all applicable laws, rules and regulations relating to personal
and medical information. Without in any way limiting the foregoing, RECIPIENT maintains and enforces appropriate facility and information technology access rules and procedures to protect against
inappropriate disclosure of patient records and all other documents deemed confidential by law, which
are maintained in connection with the Project and Institute-Funded Activities, including provisions that comply with the requirements of the INSTITUTE's rules, 25 T.A.C. Section 703.14. Upon request from the INSTITUTE, RECIPIENT will timely furnish a copy of the RECIPIENT's facility and information technology access rules and procedures, as well as any other applicable confidentiality guidelines.

If RECIPIENT, including any Collaborators or Contractors, works directly with patients or otherwise has access to or maintains patient personal and medical information, RECIPIENT specifically addresses Health Insurance Portability and Accountability Act of 1996 regulations concerning confidentiality of personal and medical information. Any disclosure of confidential information in any way related to the Project (including information that may be required by reports and inspections) must be in accordance with all applicable laws.

Section C1.04 Conduct of Research or Service Provided. RECIPIENT understands that the Project must be conducted with full consideration for the ethical and medical implications of the research

performed or services delivered and comply with all federal and state laws regarding the conduct of the research or service.

Section C1.05 Regulatory Certificates, Licenses and Permits. All personnel, facilities and equipment involved or to be involved in the Project are certified, licensed, permitted, registered or approved by the appropriate regulating agency, where applicable. Any revocation, surrender, expiration, non-renewal, inactivation or suspension of any such certification, license, permit, registration or approval shall constitute grounds for Contract termination.

Section C1.06 Assurances and Certifications in Accordance with the NIH *Grants Policy Statement*:

(a) Civil Rights. Compliance with Title VI of the Civil Rights Act of 1964.

(b) Handicapped Individuals. Compliance with Section 504 of the Rehabilitation Act of 1973 as amended.

(c) Sex Discrimination. Compliance with Section 901 of Title IX of the Education Amendments of 1972 as amended.

(d) Age Discrimination. Compliance with the Age Discrimination Act of 1975, as amended.

(e) Patents, Licenses and Inventions. Compliance with the Standard Patent Rights clauses as specified in 37 CFR, Part 401 or 35 U.S.C. 203, if appropriate and applicable, in a manner that adequately protects the INSTITUTE'S rights in the Project Results.

(f) Human Subjects. Compliance with the requirements of federal policy concerning the safeguarding of the rights and welfare of human subjects who are involved in activities supported by federal funds. Before any funding may be released for any Project involving human subjects, RECIPIENT must receive approval from RECIPIENT's Institutional Review Board (IRB). Upon request, a copy of RECIPIENT's IRB approval must be provided to the INSTITUTE.

(g) Human Biological/Anatomical Material. Compliance with the recommendations of the NIH Office of Human Subject Research Medical Administrative Series (MAS) #MO1-2 entitled "Procurement and Use of Human Biological Materials for Research," and any other federal or state requirements.

(h) Use of Animals. Compliance with applicable portions of the Animal Welfare Act (PL 89-544 as amended) and appropriate Public Health Service Policy on Humane Care and Use of Laboratory Animals regulations. Before any funding may be released for any Project involving animal subjects, RECIPIENT must receive approval from RECIPIENT's Institutional Animal Care and Use Committee (IACUC). Upon request, a copy of RECIPIENT's IACUC approval must be provided to the INSTITUTE.

(i) Debarment and Suspension. RECIPIENT certifies that neither it nor the Principal Investigator/Project Director or any other Recipient Personnel or personnel of any Collaborator or Contractor assigned to work on the Project are debarred, suspended, proposed for debarment, declared ineligible or otherwise excluded from participation in the Project by any federal or state department or agency.

(j) Non-Delinquency on Federal or State Debt. RECIPIENT certifies that neither it, nor any person to be paid from funds under this Contract, is delinquent in repaying any Federal debt as defined by
OMB Circular A-129 or any debt to the State of Texas.

(k) Eligibility to Receive Payments on State Contracts. RECIPIENT certifies that it and the Principal Investigator/Project Director are not ineligible to receive the Grant award under this Contract
pursuant to Tex. Fam. Code Ann. Section 231.006 and acknowledges that this Contract may be terminated and payment may be withheld if this certification is inaccurate.

(l) Drug-Free Workplace. Compliance with the Drug-Free Workplace Act of 1988 (45 CFR 82).

(m) Misconduct in Science. Compliance with 42 CFR Part 50, Subpart A, and Final Rule as published at 54 CFR 32446, August 8, 1989.

(n) Objectivity of Research/Conflict of Interest. Compliance with the NIH requirement to maintain a written standard of conduct and comply with 42 CFR Part 50, Subpart F, Responsibility of Applicants for Promoting Objectivity in Research. RECIPIENT must notify the INSTITUTE of any conflicting financial interests and assure that the interest has been managed, reduced or eliminated.

(o) Trafficking in Persons. Compliance with the NIH regulations on trafficking in persons as
published at http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-055.html.

(p) Criminal Misconduct. RECIPIENT shall promptly report issues to the INSTITUTE involving potential civil or criminal fraud related in any way to the Project, the Institute-Funded Activity or this Contract, such as false claims or misappropriation of federal or state funds.

Section C1.07 Tobacco Free Workplace Policy. Pursuant to T.A.C. 25 § 703.20, RECIPIENT certifies that its board of directors, governing body, or similar has adopted and enforces a Tobacco-Free Workplace Policy that meets or exceeds all of the following minimum standards:

(a) Prohibits the use of all forms of tobacco products, including but not limited to cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff and chewing tobacco;

(b) Designates the property to which the policy applies (“designated area”). The designated area(s) must at least comprise all buildings and structures where the CPRIT project is taking place, as well as the sidewalks, parking lots, walkways, and attached parking structures immediately adjacent but only to the extent the CPRIT Grant Recipient owns, leases as the sole tenant, or controls the building, sidewalks, parking lots and/or parking structures. In the event that the RECIPIENT does not own, lease as the sole tenant, or control the building, sidewalks, parking lots and/or parking structures, then the designated area(s) must include all areas under the RECIPIENT’s control;

(c) Applies to all employees and visitors in the designated area(s); and

(d) Provides for or refers employees to tobacco use cessation services.

If RECIPIENT cannot meet the minimum standards as set forth in this section, RECIPIENT certifies that it has received an approved waiver from the INSTITUTE's CEO for the current fiscal year.

Section C1.08 No Donations to the Institute or a Foundation Established to Support Institute. RECIPIENT certifies that as of June 14, 2013, it has not made and will not make a contribution, during the term of the Contract, to the INSTITUTE or to any foundation established specifically to support the INSTITUTE.

DP160057 - Product Development Research Contract Attachment C Part 2 Matching Compliance Certification (MCC) - Initial

For Public or Private Institutions of Higher Education ONLY (all other entities proceed to the table below): The grant recipient may credit toward the matching funds requirement the dollar equivalent to the difference between the institution's federally approved indirect cost rate for research projects and CPRIT's five percent (5%) indirect cost allowance. If a Public or Private Institution of Higher Education intends to fulfill its match requirement using expended funds only (no federally approved indirect cost rate credit), then choose "No" on the first question and proceed to the table below.

If the grant recipient's Federally Approved Indirect Cost Rate is greater than or equal to 55% (the 50% matching funds requirement and the 5% CPRIT Indirect Cost Rate), then no further action is required once the appropriate information has been entered in lines "a" through "d" below.

If the combined Federally Approved Indirect Cost Rate and the CPRIT Indirect Cost Rate calculated for the Project is less than 55%, then the grant recipient must use the table below to demonstrate that it has encumbered funds available and not yet expended that are dedicated to the CPRIT-funded project for the portion of the match requirement not met by the Federally Approved Indirect Cost Rate credit.

Public or Private Institution of Higher Education:
(Choose 'No' if You Are Using Encumbered Funds) No

	Award Year #1			Award Year #2			Award Year #3			Current Year
	Total Award Amount for Award Year #1	Remaining Dollar Amount to Fulfill Match Requirement	Actual "Non CPRIT" Funds Expended **	Total Award Amount for Award Year #2	Remaining Dollar Amount to Fulfill Match Requirement	Actual "Non CPRIT" Funds Expended **	Total Award Amount for Award Year #3	Remaining Dollar Amount to Fulfill Match Requirement	Actual "Non CPRIT" Funds Expended **	Match Credit/Deficiency (if any)
Public or Private Institutions of Higher Education	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
All Other Entities	$[…***…]	$[…***…]	$[…***…]	$[…***…]	$[…***…]	$[…***…]	$[…***…]	$[…***…]	$[…***…]	$[…***…]
Total Non-State Funds Leveraged as a Match for Award			$0.00			$0.00			$0.00	

The information above is the entity/Institution's demonstration of encumbered available funds pursuant to its certification in Attachment C. The information in the certification shall be updated annually. **By approving this form the grant recipient certifies that it has the matching funds available as reflected on the form.**

Matching Fund Deficiencies (DEF) and Credits (CR)

The amount that appears in the "Remaining Dollar Amount to Fulfill Match Requirement" column is calculated to meet the matching funds requirement (50%). This is the amount that is certified at the beginning of the grant. The grantee will complete the third column at the end of the project year. It is possible for the grant recipient to actually expend more or less than the amount that is certified. In that event, the surplus/deficiency may be carried forward as a credit (CR) or deficiency (DEF).

If the grant recipient fails to expend its matching funds requirement for the year, the deficiency may be carried forward and added to the matching fund requirement for the next project year so long as: 1.) the deficiency is equal to or less than 20% of the total matching funds required for the same period; and 2.) the grant recipient has not previously had a matching funds deficiency. For a second deficiency of any amount, or for a deficiency greater than 20% of the total matching funds required for the same period, distribution of grant funds will be suspended. Depending upon the amount of the matching fund deficiency, CPRIT may declare the grant contract in default.

If the grant recipient actually expends more than its matching funds requirement for the year, the surplus may be carried forward to reduce the matching fund requirement for the next project year(s).

* Appropriate sources for encumbered funds dedicated to the CPRIT project may include but are not necessarily limited to: (1) Federal funds (including American Recovery and Reinvestment Act of 2009 funds, and the fair market value of drug development support provided to the

recipient by the National Cancer Institute (NCI) or other similar programs); (2) State of Texas funds (Non-CPRIT); (3) Other States' funds; (4) Non-governmental funds (including private funds, foundation grants, gifts and donations); (5) Unrecovered indirect costs not to exceed 10 percent of the grant award amount, subject to the following conditions: (A) These costs are not otherwise charged against the grant as the five percent indirect funds (B) The Institution or recipient must have a documented federal indirect cost rate or an indirect cost rate certified by an independent accounting firm; and (C) Is not allowed if the grant recipient is a public or private institution of higher education; and (6) Funds contributed by a subcontractor or subawardee and spent on the Grant Project (use of a subcontractor's/subawardee's federal indirect cost rate does not apply), so long as the subcontractor's or subawardee's portion of otherwise allowable Matching Funds for a Project Year may not exceed the percentage of the total Grant Funds paid to the subcontractor or subawardee for the same Project Year.

The following items do not qualify as encumbered funds:

(1) In-kind costs; (2) Volunteer services furnished to the grant recipient; (3) Noncash contributions; (4) Income earned not available at the time of award; (5) Pre-existing real estate including building, facilities and land, (6) Deferred giving such as a charitable remainder annuity trust, a charitable remainder unitrust, or a pooled income fund; or (7) Other items as may be determined by the Oversight Committee.

** All supporting documentation for non-CPRIT funds expended are subject to compliance review.

ATTACHMENT D

INTELLECTUAL PROPERTY AND REVENUE SHARING

This Attachment D is hereby incorporated into and made a part of that certain **CANCER RESEARCH GRANT CONTRACT** ("**Contract**") by and between the Cancer Prevention and Research Institute of Texas ("**CPRIT**" or the "**INSTITUTE**") and the RECIPIENT. A capitalized term used in this Attachment shall have the meaning given the term in the Contract or in the Attachments to the Contract, unless otherwise defined herein. In the event of a conflict between the provisions of this Attachment and the provisions of the Contract, this Attachment shall control.

PART 1
OWNERSHIP AND INTELLECTUAL PROPERTY PROTECTION

Section D1.01 Ownership of Project Results. RECIPIENT and its Collaborators, and (to the extent applicable) any third party participating in the development of the Project Results, shall retain ownership of the Institute-Funded Technology and the Institute-Funded IPR, subject to the terms of the Contract. A Collaborator as defined in the Contract is not a third party that engages with RECIPIENT as a licensing partner.

Section D1.02 Transfer or Assignment of Rights to a Third Party. RECIPIENT shall notify the INSTITUTE of any proposed transfer or assignment of rights in any Project Results to a third party and provide to INSTITUTE a copy of the agreement under which the proposed transfer or assignment is to occur. RECIPIENT shall ensure that, in any assignment or transfer of Project Results, the transferee or assignee agrees in writing to: (i) recognize that the Institute-Funded IPR and Institute-Funded Technology, as applicable, is transferred or assigned subject to the licenses, interests and other rights in such Project Results provided to the INSTITUTE in the Contract and any applicable law or regulation, (ii) take all actions necessary to protect all such licenses, interests and other rights, and (iii) be responsible for and pay all amounts required under Part 4 of this Attachment D. Any attempted transfer or assignment of rights in
any Project Results to a third party without written agreement to the conditions in (i) – (iii) above shall be
null, void and of no effect.

Section D1.03 Protection of Institute-Funded IPR. Subject to Section D5.01, RECIPIENT shall use commercially reasonable efforts to appropriately protect the Institute-Funded IPR, including without limitation, diligently seeking registration and maintenance of patents and copyrights covering the
Institute-Funded Technology, as appropriate. If RECIPIENT elects to abandon any patent applications filed or patents issued covering any Institute-Funded Technology in any Major Market Country, RECIPIENT shall provide the INSTITUTE with prior written notice of such election, with sufficient time (but no less than 60 days) for the INSTITUTE to exercise its rights under this Section D1.03 with respect thereto. Upon notice
of the aforesaid, the INSTITUTE shall have the right, but not the obligation, to pursue protection of the applicable Institute-Funded Technology on its own behalf in such Major Market Country, including
directing the filing, prosecution and maintenance of patent applications or patents covering the applicable Institute-Funded Inventions in any of such Major Market Countries for which the INSTITUTE exercises its rights under this Section D1.03. In the Major Market Countries where the INSTITUTE pursues protection
of the Institute-Funded Technology under this Section D1.03, RECIPIENT agrees to grant, and does hereby grant, to the INSTITUTE a non-exclusive, irrevocable, royalty-free, perpetual license with right to
sublicense in the applicable Major Market Countries to the applicable Instituted-Funded Technology and

any applicable Project Results. For clarification, a determination by RECIPIENT to (i) abandon a patent application in favor of a continuation or divisional application or the like, or (ii) narrow the scope of the
claimed subject matter, shall not be deemed an election to abandon such Institute-Funded IPR.

Section D1.04 Cost of Protection. The INSTITUTE shall not be responsible for, and no Grant funds may be used to pay for, any costs or expenses associated with RECIPIENT's efforts to protect the Institute-Funded IPR.

Section D1.05 Inventions.

(a) Disclosures and Patent Applications. RECIPIENT shall notify INSTITUTE of each Institute-Funded Invention by delivering to INSTITUTE a copy of the invention disclosure within […***…] after RECIPIENT receives or generates it. In the event that a patent application is filed on the invention disclosure, RECIPIENT shall provide the INSTITUTE with a complete copy of such patent application and associated filing documents within […***…] of its filing.

(b) Patent Prosecution and Maintenance. For all Institute-Funded Inventions for which patent protection is pursued, RECIPIENT shall provide an annual written report to the INSTITUTE regarding
the status of pending applications and issued patents that are Institute-Funded IPR.

Section D1.06 Required Agreements with Recipient Personnel and Contractors. The RECIPIENT shall have, maintain and enforce written policies or agreements applicable to Recipient Personnel and
Contractors with terms sufficient to enable RECIPIENT to fully comply with all terms and conditions of this Contract, including that Recipient Personnel and Contractors agree to and hereby assign any Institute-Funded Inventions to RECIPIENT. RECIPIENT shall promptly report to INSTITUTE any material breach of such policies or agreements relating to or affecting any of the provisions of this Contract.

Section D1.07 Agreements with Collaborators. All agreements between RECIPIENT and a Collaborator, or a third party participating in the development of the Project Results, relating to or affecting joint
ownership of any Project Result shall recognize the licenses, interests and other rights provided to the INSTITUTE in the Contract. RECIPIENT shall provide to the INSTITUTE a copy of each such agreement affecting joint ownership of any Project Result.

PART 2
NON-COMMERCIAL LICENSES

Section D2.01 RECIPIENT License. In granting an Exclusive License to any Project Results, RECIPIENT shall retain the right to Exploit all Project Results (including material embodiments thereof) for education, research and other non-commercial purposes, and the right to grant the licenses pursuant to Section D2.02 below.

Section D2.02 INSTITUTE License. RECIPIENT agrees to grant, and does hereby grant, to the INSTITUTE a non-exclusive, irrevocable, royalty-free, perpetual, worldwide license with right to sublicense under the Project Results and, subject to any existing third party rights, any Necessary Additional IPR to Exploit all Project Results (including material embodiments of Project Results) by the INSTITUTE, other governmental entities and agencies of the State of Texas, and private or independent institutions of higher education (as defined by Texas law) located in Texas, for education, research and other non-commercial purposes only pursuant to industry-standard confidentiality and/or material transfer agreements to be entered into between the parties, as applicable. RECIPIENT shall make the Institute-Funded Technology available by reasonable means to the INSTITUTE in order for the INSTITUTE to exercise its rights under this Section D2.02, at no cost to RECIPIENT. A copy of any written license granted by INSTITUTE under this Section D2.02 will be provided to RECIPIENT by INSTITUTE within […***…] of the effective date of such license.

Section D2.03 No Implied Licenses. No implied licenses are granted under this Agreement including without limitation any license to any Intellectual Property Rights owned or controlled by RECIPIENT

outside of the Institute-Funded IPR. Nothing in this Agreement shall be construed to impose an obligation on RECIPIENT to license or otherwise make available any of its Intellectual Property Rights or other resources owned or controlled by it except as expressly provided in this Agreement.

PART 3
COMMERCIALIZATION OF PROJECT RESULTS

Section D3.01 Commercialization Strategy. RECIPIENT shall be under a continuing obligation throughout the term of this Contract to enhance and improve the commercial development plan submitted with the Application and to provide an annual written report to the INSTITUTE regarding the RECIPIENT's and its licensee's efforts to commercialize or otherwise bring to practical application Project Results. The INSTITUTE may, at its option and at any time, provide RECIPIENT with comments regarding the RECIPIENT's commercial development plan and strategy, in which case RECIPIENT shall consider in good faith and, if appropriate, use reasonable efforts to account for and incorporate the INSTITUTE's input into such commercial development plan and strategy.

Section D3.02 Commercialization Efforts. The RECIPIENT shall, including whether through its own efforts or the efforts of a licensee under a License Agreement allowed by the terms of this Attachment, use
diligent and commercially reasonable efforts to commercialize at least one Commercial Product or Commercial Service or otherwise bring to practical application the Project Results in accordance with the commercial development plan submitted with the Application and including any changes to such
commercial development plan in accordance with Section D3.01. For the avoidance of doubt, partnering
or licensing activities shall be considered to be efforts to commercialize.

Section D3.03 Licensing of Project Results. Each License Agreement entered into by the RECIPIENT shall include an acknowledgement by the licensee that (i) such License Agreement is subject to the INSTITUTE's licenses, interests and other rights under this Contract, and (ii) to the extent that there is a conflict between the terms of the License Agreement and the terms of this Contract, the terms of this Contract shall prevail. In addition, all License Agreements shall include terms obligating the licensee to report to
the RECIPIENT such information as is required for the RECIPIENT to fully comply with the terms of the Contract, including without limitation the reporting obligations set forth in Attachment E, and to allow RECIPIENT to make the grants specified in Sections D2.02. The RECIPIENT shall monitor the performance of its licensees and such licensees' compliance with the terms of the License Agreements and shall take commercially reasonable actions to enforce the terms of all License Agreements. The RECIPIENT shall promptly report to the INSTITUTE any material breach of a License Agreement relating to or affecting any
of the material provisions of this Contract.

Section D3.04 Cost of Licensing Activities. The INSTITUTE shall not be responsible for, and no Grant funds may be used to pay for, any costs or expenses associated with the RECIPIENT's Licensing Activities.

Section D3.05 Survival. The licenses, rights and obligations set forth in this Attachment D, except Section D3.01, shall survive any termination of this Contract, including any termination for convenience by RECIPIENT.

Section D3.06 Recipient Opt-Out. In the event RECIPIENT determines, after diligently attempting to comply with the terms of Section D3.02, to cease its efforts, either directly or through a licensee, to commercialize or otherwise bring to practical application the Project Results, it will so notify the INSTITUTE in writing promptly thereafter. Such written notice must identify the Project Results and provide a
reasonable explanation of the reasons for the RECIPIENT's election. Upon receipt of such notice, the INSTITUTE and RECIPIENT shall meet within […***…] to review the Project Results and rationale for the RECIPIENT's election. Provided that RECIPIENT's determination to cease its efforts was not based on material safety concerns related to the Project Results, the INSTITUTE and RECIPIENT shall engage in good faith negotiations regarding an alternative commercialization strategy and/or revenue sharing approach.

The INSTITUTE and RECIPIENT may consider, among other options, an award of equity in the RECIPIENT, expansion or modification of the Institute Funded Activity to cover other commercial products or commercial services being advanced by the RECIPIENT, or some combination thereof. Unless otherwise agreed, if the INSTITUTE and RECIPIENT are unable to achieve an alternative strategy or agreement within […***…] of the RECIPIENT's initial notice of election, and provided that RECIPIENT's determination to cease its efforts was not based on material safety concerns related to the Project Results, the INSTITUTE shall have the right, but not the obligation, to exercise its rights in Section D5.01 in relation to the Project Results at the INSTITUTE's expense. If the INSTITUTE elects to exercise its rights under Section D5.01 in relation to the Project Results, the INSTITUTE shall notify the RECIPIENT in writing within the later of […***…] or […***…] following a declaration by one of the Parties that good faith negotiations have failed. In the event that the INSTITUTE exercises its option under this Section D3.06, the RECIPIENT shall cooperate with the INSTITUTE's efforts and provide to INSTITUTE sufficient information such as relevant feasibility studies, trial results, regulatory summaries, and pertinent schedules or deadlines in relation to the Project Results, in commercializing or otherwise bringing to practical application the applicable Project Results at the INSTITUTE's cost. For clarity, so long as the RECIPIENT is making efforts to commercialize at least one Commercial Product or Commercial Service, RECIPIENT shall have no obligation to provide the written notice as described in this Section D3.06.

PART 4
REVENUE SHARING

Section D4.01 Revenue Sharing Percentages. In consideration for the Grant Award Proceeds paid to the RECIPIENT by the INSTITUTE under the Contract:

a. RECIPIENT shall pay to the INSTITUTE during the Revenue Term the following payments until the INSTITUTE receives the aggregate amount of four hundred percent (400%) of the Grant Award Proceeds:

(i) a revenue sharing percentage of […***…] percent ([…***…]%) of Revenue for Cumulative Revenue greater than […***…] U.S. dollars (USD$ […***…]) and less than or equal to […***…]
U.S. dollars (USD$ […***…]);

(ii) a revenue sharing percentage of […***…] percent ([…***…]%) of Revenue for Cumulative Revenue greater than […***…] U.S. dollars (USD$ […***…]) and less than or equal to […***…] U.S. dollars (USD $[…***…]); and

(iii) a revenue sharing percentage of […***…] percent ([…***…]%) of Revenue for Cumulative Revenue greater than […***…] U.S. dollars (USD $[…***…]).

For clarity, no payments will be made by the RECIPIENT to the INSTITUTE under this Section D4.01(a) until the Cumulative Revenue of the Recipient is greater than […***…] U.S. dollars (USD
$[…***…]).

b. In the event the RECIPIENT and/or its licensee is required to obtain a license under Intellectual Property Rights of one or more Third Parties in order to make Sales of Commercial Products and/or Commercial Services in any given country ("**Participating License Sources**"), then the revenue sharing percentages set forth under Section D4.01(a)(i)-(iii) may be reduced by […***…] percent ([…***…]%) for every […***…] percent ([…***…]%) royalty paid to such Third Parties on Commercial Products and/or Commercial Services in such country, as applicable, provided that in no event will the payments otherwise due to the INSTITUTE under Section D4.01(a) be less than […***…] percent ([…***…]%) of the payments that would be

payable to the INSTITUTE absent the effects of this Section D4.01(b). By way of example, if the RECIPIENT is required to obtain such a license from a Third Party in a country wherein the RECIPIENT pays a […***…] percent ([…***…]%) royalty for Intellectual Property Rights that cover Commercial Products and Commercial Services in such country, the revenue sharing percentages under Section D4.01(a)(i), (ii), and (iii) would be reduced to […***…] percent ([…***…]%), […***…] percent ([…***…]%), and […***…] percent ([…***…]%) in such country, respectively.

Section D4.02 Continued Revenue Sharing. In the event the INSTITUTE receives during the Revenue Term the aggregate amount of […***…] percent ([…***…]%) of the Grant Award Proceeds from the RECIPIENT, the RECIPIENT will continue to pay the INSTITUTE a revenue sharing percentage of […***…] percent ([…***…]%) of Revenue for all Revenue generated during the remainder of the Revenue Term. For

clarity, this revenue sharing percentage cannot be reduced as set forth in Section D4.01(b).

Section D4.03 Equity. Nothing herein prohibits the INSTITUTE from negotiating with the RECIPIENT for an equity share in the RECIPIENT in addition to or in lieu of the revenue sharing set forth in Sections D4.01 and D4.02, when mutually agreed to by the INSTITUTE and the RECIPIENT. But under no circumstances is the INSTITUTE obligated to negotiate for an equity share in the RECIPIENT in lieu of the revenue sharing set forth herein.

Section D4.04 Statements and Timing of Payments. All payments owed pursuant to this Part 4 shall be made to the Cancer Prevention and Research Institute of Texas, and are payable on or before the thirtieth day following the end of the calendar quarter in which the Revenue is received or, in the case of Section D4.05, the monetary recovery is received. For each payment specified in Sections D4.01 and D4.02, the payment shall be accompanied by a statement specifying for such calendar quarter: (i) the Contract to
which the payment relates, (ii) the identities of, royalty percentages, and amounts actually paid to any Participating License Sources, (iii) the License Agreements, if any, to which the payment relates, (iv) the quantity of all Sales of each Commercial Product and Commercial Service since the last payment, if Sales are applicable to the current payment, (v) the gross consideration from all such Sales, if Sales are
applicable to the current payment, and (vi) a calculation of the amount of the payment to the Cancer Prevention and Research Institute of Texas.

Section D4.05 Recoveries in Enforcement Actions. In the event that the RECIPIENT receives any monetary recovery from its enforcement of Institute-Funded IPR against infringement by a third party,
then it shall pay to the State of Texas a share of such monetary recovery, including any punitive damages, less the documented fees and expenses that are directly associated with such enforcement and are paid
by RECIPIENT to third parties, at the same rate and in the same manner as it shares Revenue pursuant to Sections D4.01 and D4.02 (including any adjustments allowed by Section D4.01(b)). For clarity, if the enforcement action is resolved by way of the execution of a License Agreement with the allegedly
infringing third party and such License Agreement is consistent with this Part 4, then this Section D4.05 is not intended to apply to such License Agreement or the consideration specified therein.

Section D4.06 Revenue-Related Records. In addition to satisfying the requirements of Article IV of the Contract and Section E1.03 of Attachment E, the RECIPIENT shall keep complete and accurate Revenue-related records until the fourth anniversary of the date of the payment of the last payment owed
hereunder, in sufficient detail to permit the INSTITUTE to confirm the accuracy of the statements
delivered to the INSTITUTE under Section D4.04 and the calculation of the payments owed hereunder.

Section D4.07 Audit of Revenue-Related Records. Upon at least […***…] advance written notice, the RECIPIENT shall permit the INSTITUTE or its representatives or agents, at the INSTITUTE's expense, to examine the Revenue-related records of the RECIPIENT pursuant to Section D4.06 once per calendar year during regular business hours for the purpose of and to the extent necessary to verify the RECIPIENT's compliance with this Part 4. The rights of the INSTITUTE under this Section D4.07 shall

terminate on the […***…] anniversary of the date of the payment of the last payment owed hereunder. In the event that any such examination reveals an underpayment to the INSTITUTE of greater than […***…] percent ([…***…]%) of the amounts previously paid by the RECIPIENT to the INSTITUTE, then the RECIPIENT shall reimburse the INSTITUTE for the cost of such examination.

PART 5
OPT-OUT AND DEFAULT

Section D5.01 RECIPIENT Opt-Out. If the INSTITUTE elects to exercise its rights in relation to the Project Results under Section D3.06, the INSTITUTE shall have the right, but not the obligation, to pursue
protection of the Applicable Institute-Funded IPR on its own behalf, including directing the filing,
prosecution and maintenance of patents covering the applicable Institute-Funded Inventions and/or to commercialize or otherwise bring to practical application Project Results covered by the Applicable
Institute-Funded IPR, at its own cost, either directly or through one or more licensees. For the purposes
of this Part 5, "Applicable Institute-Funded IPR" shall mean all Project Results. If the INSTITUTE elects to exercise any such rights under this Section D5.01, it shall notify RECIPIENT in writing pursuant to the notification requirements in Section D3.06 and RECIPIENT shall thereafter comply with the terms of
Section D5.03 with regard to the Applicable Institute-Funded IPR.

Section D5.02 RECIPIENT Default. In the event that the INSTITUTE notifies RECIPIENT in writing of RECIPIENT's failure to materially comply with its obligations under Section D3.02, and RECIPIENT fails within […***…] of such notice either: (a) to cure such failure, or in the event that such failure cannot
be reasonably cured within such 60-day period, to provide to INSTITUTE a plan to cure such failure that INSTITUTE deems acceptable, (b) to provide written notice to the INSTITUTE that such failure was due to material safety concerns, or (c) to provide proper notice pursuant to Section 3.06, then without further
action on the part of the RECIPIENT or INSTITUTE, the RECIPIENT shall be deemed to have provided the INSTITUTE the complete, written notice of its cessation of efforts as described in Section 3.06, and the INSTITUTE shall be free to exercise its rights under Section 3.06.

Section D5.03 RECIPIENT Cooperation upon Opt-Out or Default. In the event that the INSTITUTE exercises any of its rights under Section D5.01, the RECIPIENT shall:

(1) subject to any existing third party rights, transfer and assign, and does hereby assign, all of its right, title and interest in and to the applicable Project Results to the INSTITUTE or the INSTITUTE's designee, to the maximum extent allowed by law, including where relevant and necessary to
facilitate the foregoing transfer, requesting and diligently attempting to obtain any approvals
required by law or otherwise in relation to such transfer, and subject to any existing third party
rights, hereby grants to the INSTITUTE a non-exclusive, royalty-free, perpetual, fully transferable and sublicensable license under any Institute-Funded Technology and Necessary Additional IPR to Exploit the Project Results for the development, manufacture and sale of Commercial Products
and Commercial Services and for all other purposes reasonably related thereto;
(2) to the extent that RECIPIENT is unable to transfer all of its right, title and interest in and to the applicable Project Results to the INSTITUTE as specified in Section D5.03(1), and subject to any existing third party rights, RECIPIENT hereby grants to the INSTITUTE an exclusive, royalty-free, perpetual, fully transferable and sublicensable license under the Applicable Institute-Funded IPR to Exploit the Project Results for the development, manufacture and sale of Commercial Products and Commercial Services and for all other purposes reasonably related thereto, provided that the INSTITUTE may exercise the foregoing rights only after exercising its right under Section D5.01;
(3) cooperate with the INSTITUTE's efforts, and at the INSTITUTE's cost, in protecting Applicable Institute-Funded IPR and Institute-Funded Technology, and in commercializing or otherwise bringing to practical application the applicable Project Results, including making relevant Recipient Personnel (to the extent still obligated to RECIPIENT), Contractors, Collaborators,

records (including without limitation, laboratory notebooks, electronic records and data), papers, information, samples, specimens and other materials related to the applicable Project Results reasonably available for such purposes and executing any documents and taking any further action reasonably necessary to effectuate the intent of this Section D5.03; and

(4) subject to applicable law, not take any action that would oppose or impede the INSTITUTE's ability to protect the applicable Project Results.

If the INSTITUTE exercises its rights under Sections D5.01, the RECIPIENT shall have no further claim to or interest in the applicable Project Results, except as set forth in Section D2.01 of this Attachment and shall not be entitled to any share of Revenue or any other compensation with respect to such Project Results, except to the minimum extent required by law, if any. To the extent that the INSTITUTE has exercised its rights under Section D5.01 and RECIPIENT is unable to transfer all of its right, title and interest in and to the applicable Project Results to the INSTITUTE as specified in D5.03(1), then the INSTITUTE's license set forth in D5.03(2) includes the right, but not the obligation, for the INSTITUTE at its cost to: (i) direct the filing, prosecution and maintenance of patents covering the applicable Project Results, and (ii) enforce all Applicable Institute-Funded IPR relevant to the Project Results against any infringement by a third party. Subject to the statutory duties of the Texas Attorney General, if any, RECIPIENT shall cooperate fully with the INSTITUTE in any action brought by the INSTITUTE to enforce the Institute-Funded IPR in the applicable Project Results, at the INSTITUTE's cost, including without limitation, joining the enforcement action in name as a party plaintiff after all required approvals are obtained; provided that the INSTITUTE or its designee shall have full control over such enforcement action and shall receive and retain all monetary and other recoveries resulting from such enforcement actions, including any punitive damages.

PART 6
DEFINITIONS

Throughout this Attachment D, the following underlined terms shall have the meanings given below.

(1) **Commercial Product** means anything that is based on, utilizes or is developed from, or materially incorporates, the Project Results and that is capable of being sold, licensed, transferred or conveyed to another party or is capable of otherwise being Exploited or disposed of, whether in exchange for consideration or not.

(2) **Commercial Service** means any service performed that is based on, utilizes or is developed from, or materially incorporates, the Project Results. For clarity, Commercial Service does not include non-commercial research and development performed by RECIPIENT or its Collaborators or licensees.

(3) **Cumulative Revenue** means after the First Commercial Sale worldwide of a Commercial Product or Commercial Service, the sum of all Revenue in all years and calendar quarters up to the calendar quarter
in which the applicable revenue sharing percentage in Section D4.01 is being paid.

(4) **Exclusive License** means a License Agreement under which the specific rights granted to the licensee with respect to the Project Results, including without limitation scope of use and territorial rights, are
granted on an exclusive basis.

(5) **Exclusivity** means any exclusivities granted by the government in a country to provide an entity with protection from competitors in the commercial market for a defined period of time, including but not
limited to patent-based exclusivities (and any patent term extensions, supplementary protection
certificates or patent term adjustments thereof, and the like), and market-based "data" exclusivities (e.g., orphan drugs, new chemical entities, biologics, new formulations or combinations, and pediatric, and the like). For the avoidance of doubt, Exclusivity shall not mean any protection gained solely from either trade secrets or trademarks.

(6) **Exploit** or **Exploitation** means make, have made, use, sell, offer to sell, import, export, or otherwise commercialize, dispose of, practice, copy, distribute, create derivative works of, publicly perform or publicly display.

(7) **First Commercial Sale** means the first bona fide arm's length Sale of a Commercial Product or Commercial Service to a Third Party by or on behalf of RECIPIENT or its licensees for monetary value, for use or consumption by the end user of such Commercial Product or Commercial Service. For clarity, Sales of a Commercial Product or Commercial Service for registration samples, clinical trial purposes or compassionate use sales, named patient use, test marketing, sampling and promotional uses, inter-company transfers to affiliates of RECIPIENT or its licensees, shall not constitute a First Commercial Sale.

(8) **Grant Award Proceeds** means the sum of all monies paid by INSTITUTE to RECIPIENT under the Contract. For clarity, Grant Award Proceeds will not be diminished by the amount of any funds repaid to INSTITUTE by RECIPIENT under Section 4.07 of the Contract.

(9) **Institute-Funded IPR** means any and all Intellectual Property Rights in and to Institute-Funded Technology. In no event shall Institute-Funded IPR include any intellectual property rights and/or technology in existence and owned/controlled by the RECIPIENT prior to the receipt of funds from the INSTITUTE or arising from activities conducted independently of the Project or acquired independently of the Project.

(10) **Institute-Funded Invention** means an Invention conceived or first reduced to practice by or on behalf of RECIPIENT, including by Recipient Personnel, Contractor(s) and/or Collaborator(s) in the performance of Institute-Funded Activity.

(11) **Institute-Funded Technology** means any and all of the following resulting or arising, in whole or in part, from Institute-Funded Activity during the Contract term: (a) proprietary and confidential information, including but not limited to data, trade secrets, materials and know-how; (b) databases, compilations and collections of data; (c) tools, methods and processes; and (d) works of authorship, excluding all scholarly works, but including, without limitation, computer programs, source code and executable code, whether embodied in software, firmware or otherwise, documentation, files, records, data and mask works; and all instantiations of the foregoing in any form and embodied in any form, including but not limited to therapeutics, drugs, drug delivery systems, drug formulations, devices, diagnostics, biomarkers, reagents, methodologies and research tools. Institute-Funded Technology includes Institute-Funded Inventions. Institute-Funded Technology shall not include items that were conceived of, in existence, or owned/controlled by RECIPIENT prior to receipt of funds from the INSTITUTE or arising from activities conducted independently of the Project or acquired independently of the Project, such as: (a) proprietary and confidential information, including but not limited to data, trade secrets, materials and know-how; (b) databases, compilations and collections of data; (c) tools, methods and processes; and (d) works of authorship, excluding all scholarly works, but including, without limitation, computer programs, source code and executable code, whether embodied in software, firmware or otherwise, documentation, files, records, data and mask works; and all instantiations of the foregoing in any form and embodied in any form, including but not limited to therapeutics, drugs, drug delivery systems, drug formulations, devices, diagnostics, biomarkers, reagents, methodologies and research tools.

(12) **Intellectual Property Rights** or **IPR** means any and all of the following and all rights in, arising out of, or associated therewith: (a) all United States and foreign patents and utility models and applications therefor, and all reissues, re-examinations, divisionals, renewals, substitutions, extensions, provisionals, continuations and continuations-in part thereof, and equivalent or similar rights anywhere in the world in inventions and discoveries; (b) all trade secrets and rights in know-how, materials and proprietary information; (c) all copyrights, copyright registrations and applications therefor, and all other rights corresponding thereto throughout the world; (d) all mask works, mask work registrations and applications

therefor, and any equivalent or similar rights in semiconductor masks, layouts, architectures or topology; and (e) any similar, corresponding or equivalent rights to any of the foregoing anywhere in the world.

(13) **Invention** means any idea, composition of matter, method, device, process or discovery that is conceived and/or reduced to practice, whether patentable or not.

(14) **License Agreement** means an agreement by which an owner of a Project Result grants any right to Exploit such Project Result to a Third Party in exchange for consideration.

(15) **Licensing Activities** means the efforts of RECIPIENT or its Collaborator to negotiate, execute or enforce a License Agreement.

(16) **Major Market Country** means one or more of the following: Canada, France, Germany, Italy, Japan, Spain, Switzerland, United Kingdom, and United States of America.

(17) **Necessary Additional IPR** means any Intellectual Property Rights (a) owned by RECIPIENT, and (b) identified by the Institute and agreed to in writing by RECIPIENT, that are not Project Results but are necessary to Exploit the Project Results for the specific purposes set forth in the applicable Section of this Attachment D.

(18) **Project Results** means any and all Institute-Funded Technology and Institute-Funded IPR.

(19) **Revenue** means […***…].

(20) **Revenue Term** means the period commencing on the date of […***…] and ending, on […***…] for the Commercial Product or Commercial Service […***…]. If there is […***…] for a Commercial Product or Commercial Service in any […***…], the Revenue Term shall mean the period commencing on the date of […***…] of such Commercial Product or Commercial Service and ending […***…] later.

(21) **Sale** or **Sale**s means any sale, license, lease, transfer, conveyance or other Exploitation or disposition of a Commercial Product or Commercial Service for which consideration from a first Third Party is received. For clarity, transfer or assignment of a Commercial Product or Commercial Service in connection with a merger, consolidation, transfer or sale of all, or substantially all, of RECIPIENT's business or assets, or change of control or similar transaction involving the RECIPIENT will not constitute a Sale.

(22) **Third Party** means a party other than (a) the RECIPIENT, (b) any affiliate or licensee of the RECIPIENT, either directly or through any sublicenses, or (c) an entity that enjoys any special course of dealing with any of (a) or (b) above.

Other terms may be defined elsewhere in this Attachment or in the Contract.

ATTACHMENT E

REPORTING REQUIREMENTS

[…***…]

Grant ID: DP160057
PI/PD/CR: Annemarie Moseley
Organization: Bellicum Pharmaceuticals, Inc.

CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Approved Contract Documents

Title	Approved By	Approved Date
Product Development Base Contract	Musso, Alan	22 Mar 2017
Attachment A - Goals and Objectives	Nelson, Lisa	02 May 2017
Attachment B - Verification Request of Contract Document	Musso, Alan	27 Apr 2017
Attachment C Part 1 - Assurances and Certifications	Musso, Alan	22 Mar 2017
Attachment C Part 2 - Matching Compliance Certification	Limas, Daniel	10 Apr 2017
Attachment D - Intellectual Property and Revenue Sharing	Musso, Alan	22 Mar 2017
Attachment E - Reporting Requirements	Musso, Alan	22 Mar 2017
Chief Executive Officer Approval	Roberts, Wayne	09 Aug 2017

BELLICUM PHARMACEUTICALS, INC.

EMPLOYMENT AGREEMENT

This EMPLOYMENT AGREEMENT, dated as of July 27, 2017, is by and between Bellicum Pharmaceuticals, Inc. a Delaware corporation (the "**Company**"), having an office at 2130 West Holcombe Boulevard, Suite 800, Houston, Texas 77030 and Greg Naeve (the "**Executive**").

WHEREAS, the Company wishes to employ Executive as its Senior Vice President and Chief Business Officer and provide Executive with certain compensation and benefits in return for Executive's services, and Executive agrees to be employed by the Company in such capacity and to receive the compensation and benefits on the terms and conditions set forth herein;

WHEREAS, the Company and Executive desire to enter into this Employment Agreement (the "**Agreement**") to become effective, subject to Executive's signature below, upon the date set forth above (the "**Effective Date**") in order to memorialize the terms and conditions of Executive's employment by the Company; and

WHEREAS, Executive's agreement to and compliance with the provisions in Sections 9 through 11 of this Agreement are a material factor, material inducement and material condition to the Company's entering into this Agreement. Moreover, Executive acknowledges that a substantial portion of the value of the employment of Executive is Executive's promises to refrain from competing with the Company as identified in Sections 9 through 11 of this Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein and for other good and valuable consideration, the parties agree as follows:

1.**At-Will Employment**. The Company and Executive acknowledge that either party has the right to terminate Executive's employment with the Company at any time for any reason whatsoever, with or without cause, subject to the provisions of Section 6 and 7 herein. This at-will employment relationship cannot be changed except in a writing signed by both Executive and the Board of Directors of the Company (or a duly authorized committee thereof, if applicable) (the "**Board**"). Any rights of Executive to additional payments or other benefits from the Company upon any such termination of employment shall be governed by Section 7 of this Agreement.

2. **Position and Location**. Upon commencement of Executive's employment with the Company, which is expected to occur on August 21, 2017 (such actual date of commencement of employment, the "**Start Date**"), Executive shall serve as the Senior Vice President ("**SVP**") and Chief Business Officer ("**CBO**") of the Company. Executive's duties under this Agreement shall be to serve as SVP and CBO with the responsibilities, rights, authority and duties pertaining to such offices as are established from time to time by the Chief Executive Officer of the Company ("**CEO**"), and Executive shall report to the CEO. Executive shall also act as an officer and/or director and/or manager of such Affiliates of the Company as may be designated by the CEO from time to time, commensurate with Executive's office, all without further compensation, other than as provided in this Agreement. As used herein, "**Affiliate**" means any entity that directly or indirectly controls, is controlled by, or is under common control with, the Company. Executive's principal place of

business for performance of services to the Company under this Agreement shall be in the San Francisco Bay area. The Company is anticipating establishing an office location in the San Francisco Bay area and upon such establishment, such location shall be Executive's primary office location. The Company may from time to time reasonably require Executive to travel temporarily to other locations, including Houston, Texas in connection with the Company's business.

3. **Commitment**. Executive will devote substantially all of his business time and best efforts to the performance of his duties hereunder; provided, however, that Executive shall be allowed, to the extent that such activities do not interfere in any material respect with the performance of his duties and responsibilities hereunder and do not conflict with the financial, fiduciary or other interests of the Company (or its Affiliates), as determined in the sole discretion of the CEO, to manage his passive personal investments and to serve on corporate, civic, charitable and industry boards or committees. Notwithstanding the foregoing, Executive agrees that he shall only serve on for-profit boards of directors or for-profit advisory committees if such service is approved in advance in the sole discretion of the CEO.

4. **Compensation**.

(a) Base Salary. During Executive's employment with the Company, the Company shall pay Executive a base salary at the annual rate of three hundred forty thousand dollars ($340,000.00), less payroll deductions and withholdings, which shall be payable in accordance with the standard payroll practices of the Company. Executive's base salary shall be subject to periodic review and adjustment by the Board from time to time in the discretion of the Board.

(b) Annual Performance Bonus. For each calendar year, Executive shall be eligible to receive an annual performance bonus ("**Annual Performance Bonus**") from the Company, with the target amount of such bonus equal to thirty-five percent (35%) of Executive's annual base salary. The Annual Performance Bonus will be based on achievement of individual and/or Company goals which are established by the Board in its sole discretion at the beginning of each calendar year. Following the close of each calendar year, the Board will determine whether Executive has earned an Annual Performance Bonus, and the amount of any such bonus. Payment of the Annual Performance Bonus shall be expressly conditioned upon Executive's employment with the Company on the date that the Annual Performance Bonus is paid, except as provided in Section 7(b) and Section 7(c) below. The Annual Performance Bonus shall be paid within ninety (90) days after the end of the calendar year for which it relates, except as provided in Section 7(b) and Section 7(c) below. Executive's target Annual Performance Bonus will be subject to periodic review and adjustment by the Board from time to time. For the avoidance of doubt, Executive shall be eligible to earn an Annual Performance Bonus as described above for 2017, pro rated for the period of time Executive was employed with the Company during 2017.

(c) Equity Awards. As an inducement material to Executive entering into employment with the Company, on the Start Date, the Company will grant Executive an (i) option to purchase up to one hundred thirty thousand (130,000) shares of the Company's common stock (the **"Option"**) and (ii) a restricted stock unit covering fifteen thousand (15,000) shares of the Company's common stock (the "**RSU**"). The Option and RSU will be granted under the Company's 2014 Equity Incentive Plan, as amended (the **"Plan"**), and pursuant to the "inducement grant" exception provided under

NASDAQ Listing Rule 5635(c)(4). The Option will be a nonstatutory stock option, have an exercise price per share equal to the Fair Market Value (as defined in the Plan) of the Company's common stock on the Start Date, and vest with respect to one-fourth ($1/4^{th}$) of the shares subject to the Option upon the one (1) year anniversary of the Start Date and the remainder of the shares will vest in equal monthly increments over the three year period following such one (1) year anniversary of the Start Date, subject to Executive's Continuous Services (as defined in the Plan) with the Company. 25% of the RSU shall vest on each of the one, two, three and four year anniversaries of the Start Date, subject to the Executive's s Continuous Service (as defined in the Plan) with the Company.

Executive will be eligible to participate in and receive additional stock option or equity award grants under the Company's equity incentive plans from time to time in the discretion of the Board, and in accordance with the terms and conditions of such plans.

(d) Reimbursement of Business Expenses. The Company shall reimburse Executive for reasonable travel and other business expenses incurred by Executive in the performance of his duties hereunder, in accordance with the Company's policies as in effect from time to time.

5. **Benefits.** Subject to applicable eligibility requirements, Executive shall be entitled to participate in all benefit plans and arrangements and fringe benefits and programs that may be provided to senior executives of the Company from time to time, subject to plan terms and generally applicable Company policies. Executive is entitled to participate in personal time off and holiday benefits in accordance with Company policy from time to time for its senior executives.

6. **Termination**.

(a) Termination. The employment of Executive under this Agreement shall terminate upon the earliest to occur of any of the following events:

(i) the death of Executive;

(ii) the termination of Executive's employment by the Company due to Executive's Disability pursuant to Section 6(b) hereof;

(iii) the termination of Executive's employment by Executive other than for Good Reason (as hereinafter defined);

(iv) the termination of Executive's employment by the Company without Cause;

(v) the termination of Executive's employment by the Company for Cause pursuant to Section 6(c) after providing the Notice of Termination for Cause, if applicable, as described in Section 6(c) and Section 6(d);

(vi) the termination by Executive of Executive's employment for Good Reason (as hereinafter defined) pursuant to Section 6(e); or

(vii) the termination of Executive's employment upon mutual agreement in writing between the Company and Executive.

(b) Disability. For purposes of this Agreement, "**Disability**" means that Executive has been unable after taking into account and providing (as applicable) any reasonable accommodations that do not cause an undue burden on the Company, for ninety (90) consecutive days, or for periods aggregating one hundred and twenty (120) business days in any period of twelve consecutive months, to perform Executive's duties under this Agreement, as a result of physical or mental impairment, illness or injury, as reasonably determined in good faith by the Board. A termination of Executive's employment for Disability shall be communicated to Executive by written notice, and shall be effective on the 10th day after sending such notice to Executive (the "**Disability Effective Date**"), unless Executive returns to performance of Executive's duties before the Disability Effective Date.

(c) Cause. For purposes of this Agreement, the term "**Cause**" shall mean (i) Executive's willful misconduct which is demonstrably and materially injurious to the Company's reputation, financial condition, or business relationships; (ii) the failure of Executive to attempt in good faith to follow the legal written direction of the Board within thirty (30) days after a written direction is provided to Executive; (iii) the failure by Executive to attempt in good faith to perform the duties required of him hereunder (other than any such failure resulting from incapacity due to physical or mental illness) within thirty (30) days after a written demand for substantial performance is delivered to Executive by the Board which specifically identifies the manner in which it is believed that Executive has failed to attempt to perform his duties hereunder; (iv) Executive being convicted of, indicted for, or pleading guilty or nolo contendere to, a felony or any crime involving dishonesty, fraud or moral turpitude; (v) Executive's dishonesty with regard to the Company or in the performance of his duties hereunder, which in either case has a material adverse effect on the Company; (vi) Executive's material breach of this Agreement unless corrected by Executive within thirty (30) days of the Company's written notification to Executive of such breach, provided that notice and cure shall only apply if such breach is reasonably capable of being cured; or, (vii) Executive's failure to comply in any material respect with the Company's written policies and/or procedures, unless corrected by Executive within thirty (30) days of the Company's written notification to Executive of such breach, provided that notice and cure shall only apply if such breach is reasonably capable of being cured.

(d) Notice of Termination for Cause. Notice of Termination for Cause shall mean a notice to Executive that shall indicate the specific termination provision in Section 6(c) relied upon and shall set forth in reasonable detail the facts and circumstances which provide a basis for Termination for Cause.

(e) Termination by Executive for Good Reason. Executive may terminate Executive's employment with the Company by resigning from employment with the Company for Good Reason. The term "**Good Reason**" shall mean the occurrence, without Executive's prior written consent, of any one or more of the following: (i) a material reduction in Executive's base salary (unless pursuant to a salary reduction program applicable generally to the Company's similarly situated senior executives); (ii) a material reduction in Executive's authority, duties or responsibilities; (iii) a relocation of Executive's primary office of more than forty (40) miles away from San Francisco, California; or (iv) any other action or inaction that constitutes a material breach by the Company (or its successor, if applicable) of any material provision of this Agreement.

No resignation for Good Reason shall be effective unless (1) Executive provides written notice, within sixty (60) days after the first occurrence of the event giving rise to Good Reason, to the Chairman of the Board setting forth in reasonable detail the material facts constituting Good Reason and the reasonable steps Executive believes necessary to cure, (2) the Company has had thirty (30) business days from the date of such notice to cure any such occurrence otherwise constituting Good Reason, and (3) if such event is not reasonably cured within such period, Executive must resign from all positions Executive then holds with the Company effective not later than thirty (30) days after the expiration of the cure period.

7. **Consequences of Termination of Employment**.

(a) General. If Executive's employment is terminated for any reason or no reason, the Company shall pay to Executive or to Executive's legal representatives, if applicable: (i) any base salary and any Annual Performance Bonus earned, but unpaid as of the date of the termination of Executive's employment; and, (ii) any unreimbursed business expenses payable pursuant to Section 4 hereof and any accrued but unused personal time off benefits and any other payments or benefits required by applicable law (collectively "**Accrued Amounts**"), which amounts shall be promptly paid in a lump sum to Executive, or in the case of Executive's death to Executive's estate. Other than the Accrued Amounts and any continuing rights Executive may have to indemnification under the Indemnification Agreement, the Company's bylaws or certificate of incorporation, or applicable law, Executive or Executive's legal representatives shall not be entitled to any additional compensation or benefits if Executive's employment is terminated for any reason other than by reason of Executive's Involuntary Termination (as defined in Section 7(b) below). If Executive's employment terminates due to an Involuntary Termination, Executive will be eligible to receive the additional compensation and benefits described in Section 7(b) and 7(c), as applicable.

(b) Involuntary Termination. If (1) Executive's employment with the Company is terminated by the Company without Cause (and other than as a result of Executive's death or Disability) or (2) Executive terminates employment for Good Reason, and provided in any case such termination constitutes a "separation from service", as defined under Treasury Regulation Section 1.409A-1(h)) (a "**Separation from Service**") (such termination described in (i) or (ii), an "**Involuntary Termination**"), in addition to the Accrued Amounts, Executive shall be entitled to receive the severance benefits described below in this Section 7(b), subject in all events to Executive's compliance with Section 7(d) below:

(i) Executive shall receive continued payment of Executive's Base Salary (as defined below) for the first twelve (12) months after the date of such termination (the "**Severance Period**"), paid over the Company's regular payroll schedule.

(ii) Executive shall receive a lump sum amount equal to Executive's target Annual Performance Bonus for the year of termination, pro rated based on the ratio that the number of days from the beginning of the calendar year in which such termination occurs through the date of termination bears to 365 (the "**Bonus Payment**").

(iii) If Executive is eligible for and timely elects to continue the health insurance coverage under the Company's group health plans under the Consolidated Omnibus Budget

Reconciliation Act of 1985 or the state equivalent ("**COBRA**") following Executive's termination date, the Company will pay the COBRA group health insurance premiums for Executive and Executive's eligible dependents until the earliest of (A) the close of the Severance Period, (B) the expiration of Executive's eligibility for the continuation coverage under COBRA, or (C) the date when Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment. For purposes of this Section, references to COBRA premiums shall not include any amounts payable by Executive under a Section 125 health care reimbursement plan under the Internal Revenue Code of 1986, as amended and the treasury regulations thereunder (the "**Code**"). Notwithstanding the foregoing, if at any time the Company determines, in its sole discretion, that it cannot pay the COBRA premiums without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then regardless of whether Executive elects continued health coverage under COBRA, and in lieu of providing the COBRA premiums, the Company will instead pay Executive on the last day of each remaining month of the Severance Period, a fully taxable cash payment equal to the COBRA premiums for that month, subject to applicable tax withholdings (such amount, the "**Health Care Benefit Payment**"). The Health Care Benefit Payment shall be paid in monthly installments on the same schedule that the COBRA premiums would otherwise have been paid and shall be equal to the amount that the Company would have otherwise paid for COBRA premiums, and shall be paid until the earlier of (i) expiration of the Severance Period or (ii) the date Executive voluntarily enrolls in a group health insurance plan offered by another employer or entity.

(c) Involuntary Termination in Connection with a Change in Control. In the event that Executive's Involuntary Termination occurs immediately prior to, on or within the twelve (12) months following the consummation of a Change in Control (as defined below) and subject in all events to Executive's compliance with Section 7(d) below, then Executive shall be entitled to the benefits provided above in Section 7(b), except that:

(i) the Bonus Payment shall equal the Executive's full target Annual Performance Bonus for the year of termination, rather than the pro-rated target bonus; and

(ii) the vesting of all of Executive's outstanding stock options and other equity awards that are subject to time-based vesting requirements shall accelerate in full such that all such equity awards shall be deemed fully vested as of the date of Executive's Involuntary Termination.

For the avoidance of doubt, in no event shall Executive be entitled to benefits under both Section 7(b) and this Section 7(c). If Executive is eligible for benefits under both Section 7(b) and this Section 7(c), Executive shall receive the benefits set forth in this Section 7(c) and such benefits will be reduced by any benefits previously provided to Executive under Section 7(b).

(d) Conditions and Timing for Severance Benefits. The severance benefits set forth in Section 7(b) and Section 7(c) above are expressly conditioned upon: (i) Executive continuing to comply with Executive's obligations under this Agreement, including Sections 8 through 11; and (ii) Executive signing and not revoking a general release of legal claims in a form provided by the Company (the "**Release**") within the applicable deadline set forth therein and permitting the Release to become effective in accordance with its terms, which must occur no later than the Release Deadline

(as defined in Section 14 below). The salary continuation payments described in Sections 7(b) and 7(c) will be paid in substantially equal installments on the Company's regular payroll schedule and subject to standard deductions and withholdings over the Severance Period following termination; *provided, however,* that no payments will be made prior to the effectiveness of the Release. On the effective date of the Release, the Company will pay Executive the salary continuation payments that Executive would have received on or prior to such date in a lump sum under the original schedule but for the delay while waiting for the effectiveness of the Release, with the balance of the payments being paid as originally scheduled. Bonus Payments described in Section 7(b) and 7(c) will be paid in a lump sum cash payment on the first regular payroll date of the Company following the effective date of the Release, but in no event later than March 15 of the year following the year in which Executive's termination of employment occurred. All severance benefits described in this Section 7 will be subject to all applicable standard required deductions and withholdings.

(e) Definitions.

(i) **"Base Salary"** means Executive's annual base salary in effect immediately prior to Executive's termination, excluding any reduction which forms the basis for Executive's right to resign for Good Reason.

(ii) "**Change in Control**" means a "Change in Control" as defined in the Plan.

8. **Confidential Information**. "**Confidential Information**" as used in this Agreement, includes non-public confidential information provided by or on behalf of the Company to Executive, including but not limited to, specialized training; products already developed or that will be developed by the Company, including but not limited to, products in the field of cancer immunotherapy, including metastatic castrate resistant prostate cancer and graft versus host disease; research and development materials related to the manipulation of dendritic cell signaling pathways to enhance the immune response; research and development materials, electronic databases; computer programs and technologies; marketing and/or scientific studies and analysis; product and pricing knowledge; manufacturing methods; supplier lists and information; any and all information concerning past, present and future customers, referral sources or vendors; contracts and licenses; management structure, company ownership, personnel information (including the performance, skills, abilities and payment of employees); purchasing, accounting and business systems; short and long range business planning; data regarding the Company's past, current and future financial performance, sales performance, and current and/or future plans to increase the Company's market share by targeting specific medical issues, demographic and/or geographic markets; standard operating procedures; financial information; trade secrets, copyrights, derivative works, patents, inventions, know-how, and other intellectual property; business policies; submissions to government or regulatory agencies and related information; methods of operation; implementation strategies; promotional information and techniques; marketing presentations; price lists; files or other information; pricing strategies; computer files; samples; customer originals; or any other confidential information concerning the business and affairs of the Company. The Company's Confidential Information is also comprised of the personal information received from third parties and/or confidential and proprietary information regarding research, products, or clinical trials received from third parties, but only if such confidential information is reduced to writing and

marked “Confidential” by the third party. All such confidential information obtained by Executive, whether in writing, any other tangible form of expression or disclosed orally or through visual means or otherwise, and regardless of whether such information bears a confidential or proprietary legend, will be presumed to be Confidential Information. Executive acknowledges that the Confidential Information is vital, valuable, sensitive, confidential and proprietary to Company and provides Company with a competitive advantage. Executive further acknowledges that Company’s Confidential Information is dynamic, and constantly changes in nature and/or quantity, given that Company continues to refine its Confidential Information. The obligations specified in this Section 8 shall not apply, and Executive shall have no further obligations under this Agreement with respect to any Confidential Information that: a) is available to the public at the time of disclosure to Executive or becomes publicly known through no breach of the undertakings hereunder by Executive or to the knowledge of Executive, any third party; b) becomes known to Executive through disclosure by sources other than the Company and its Affiliates and in the course of Executive’s service to the Company, said sources being under no obligation of confidentiality to the Company with respect to such Confidential Information; c) is approved by the Company for release; or d) has been independently developed by Executive without benefit of the Confidential Information and on Executive’s own time and without use of Company resources.

9. **Non-Competition; Non-Solicitation, Etc**.

(a) Company Promises.

(i) This Agreement is entered into pursuant to Executive’s agreement to these non-compete and non-solicitation provisions. Executive’s agreement to the provisions in Sections 9 through 11 is a material condition of the Company’s entering into this Agreement and continued employment of Executive.

(b) Executive’s Promises. In exchange for the Company’s promises listed above and all other consideration provided pursuant to this Agreement, to which these promises are ancillary, Executive promises as follows:

(i) Executive will not, during or after Executive’s employment with the Company, use, copy, remove, disclose or disseminate to any person or entity, the Company’s Confidential Information, except (i) as required in the course of performing Executive’s duties with the Company, for the benefit of the Company, or (ii) when required to do so by a court of law, by any governmental agency having supervisory authority over the business of the Company or by any administrative or legislative body (including a committee thereof) with apparent jurisdiction to order Executive to divulge, disclose or make accessible such information, it being understood that Executive will promptly notify the Company of such requirement so that the Company may seek to obtain a protective order.

(ii) Following employment termination, Executive will immediately return to the Company all materials created, received or utilized in any way in conjunction with Executive’s work performed with the Company that in any way incorporates, reflects or constitutes Company’s Confidential Information.

(iii) Executive acknowledges that the market for the Company's products, services, and activities is global, and that the products, services and/or activities can be provided anywhere in the world. Executive recognizes that the Company draws its customers and/or clients from around the world because it will seek to file patents and run clinical trials in countries around the world, and sell its product to consumers around the world and/or pharmaceutical companies located around the world. Moreover, Executive recognizes that the Company's customers may be contacted by telephone, in person, or in writing (including e-mail via the Internet). Executive further acknowledges that due to the international scope of the Company's customer and client base, the following non-solicitation/non-competition restriction is necessary.

(iv) Executive agrees and acknowledges that Executive shall not provide to the Company, either directly or indirectly, access to Confidential Information, as defined in Section 8, from or belonging to a third party that Executive was exposed to or received from said third party prior to the execution date of this Agreement and that is the subject of any confidentiality requirement of any kind between Executive and said third party. **EXECUTIVE ALSO AGREES TO INDEMNIFY, REIMBURSE, AND HOLD HARMLESS THE COMPANY FOR ALL ATTORNEY FEES, EXPENSES, COSTS, HARM, OR RELATED COSTS TO COMPANY ARISING FROM OR AS A RESULT OF ANY ACTUAL CAUSE OF ACTION OR CLAIM BROUGHT AGAINST COMPANY OR EXECUTIVE RELATED TO ANY ACTUAL BREACH OF THIS SECTION BY EXECUTIVE.** Company agrees that: (A) Executive shall be allowed to participate fully in the defense of any such action against Company and in any settlement negotiations, and (B) any payment to Company by Executive under this Section shall be only after any settlement has been consummated or judicial action has become final and non-appealable.

(c) Non-Compete. Ancillary to the consideration reflected within this Agreement, the Company and Executive agree to the following non-competition provisions. Executive agrees that during Executive's employment with the Company and for a period of twelve (12) months following the termination of his employment with the Company ("**Non-Compete Period**"):

(i) Executive shall not, directly or indirectly, engage in or participate (including, without limitation, as an investor, officer, employee, director, agent, or consultant (any such capacity, being a "**Participant**")) in or on behalf of any entity engaging in the "**Company's Business**", said Company's Business being defined as: (A) genetically modified cell therapies for the treatment of cancer, including both hematological and solid tumors, graft-versus-host-disease and other blood disorders; and (B) other genetically modified cell therapies and immunotherapies for which the Company has an active development program during Executive's employment with the Company (the "**Non-Compete Obligations**"), provided, however, that nothing herein shall prevent him from investing as a less than 5% shareholder in securities of any company listed on a national securities exchange or quoted on an automated quotation system, and provided further that for purposes of this Agreement, an "active development program" shall be considered to be (x) any ongoing clinical trial against a specific biologic target, or (y) any Phase 2 or 3 clinical trial with registrational intent in any specific clinical indication.

(ii) Geographic Limitation. The geographic limitation for the Non-Compete Obligations is North America, Europe and Japan; and

(iii) During Executive's employment with the Company and for a period of twelve (12) months immediately thereafter, Executive will not directly or indirectly become employed or otherwise associated in a capacity that would compete with the Company's Business with any of the following entities, which are direct competitors of the Company, in any geographic region:

Adaptimmune Limited	101 Park Drive, Milton Park, Abingdon, Oxfordshire OX14 4RY UK
bluebird bio, Inc.	150 2nd Street Cambridge, MA 02141
Celgene Corporation	86 Morris Avenue Summit, NJ 07901
Cellectis	8 rue de la Croix Jarry 75013 Paris France
Cell Medica Limited	1 Canal Side Studios, 8-14 St Pancras Way London, NW1 0QG UK
Immune Design Corp.	1616 Eastlake Ave. E., Suite 310 Seattle, WA 98102
Intrexon Corporation	1872 Pratt Drive Blacksburg, VA 24060
Juno Therapeutics, Inc.	307 Westlake Avenue North Suite 300 Seattle, WA 98109
Kiadis Pharma B.V.	Entrada 231-234 1114 AA Amsterdam-Duivendrecht The Netherlands
Kite Pharma, Inc.	2225 Colorado Avenue Santa Monica, CA 90404
Lion Biotechnologies, Inc.	112 W. 34th Street, 18th Floor New York, NY 10120
Medigene AG	Lochhamer Str. 11 82152 Planegg/Martinsried Germany
MolMed S.p.A.	Via Olgettina, 58 20132 Milan Italy
Pfizer Inc.	235 East 42nd Street New York, NY 10017
Precision Biosciences, Inc.	302 East Pettigrew St., Suite A-100 Durham, NC 27701

Unum Therapeutics, Inc.	200 Cambridge Park Drive Suite 3100 Cambridge, MA 02140

Executive and the Company agree that with respect to the foregoing entities such names are the common names of such entities. Executive and the Company agree that the restrictions contained in this Agreement are binding whether or not Executive and the Company have used the correct legal name, address, affiliated entity, or new owner of such entity, however, if said new owner of such entity has other divisions that are not involved in carrying out the work of the acquired listed entity that competes with the Company's Business, then Executive may be employed or otherwise associated with these other divisions.

(iv) Executive agrees that Executive's work for any third party engaged in the Company's Business during the Non-Compete Period inevitably would lead to Executive's unauthorized use of Company's Confidential Information, even if such use is unintentional. Because it would be impossible, as a practical matter, to monitor, restrain, or police Executive's use of such Confidential Information other than by Executive's not working for such third party, and because the Company's Business is highly specialized, the competitors are identifiable, the market for the Company's product, services, and activities is global, and the Company's customers are located throughout the world, Executive agrees that restricting such employment as set forth in this Agreement is the narrowest way to protect Company's legitimate business interests, and the narrowest way of enforcing Executive's consideration for the receipt of Company's consideration (namely, Executive's promise not to use or disclose Confidential Information).

(d) Nonsolicitation of Employees. Executive agrees that during the Non-Compete Period, Executive will not, directly or indirectly, (i) induce or solicit any person who was an employee, consultant or independent contractor of the Company or any of its Affiliates, to terminate such individual's employment or service with the Company or any of its Affiliates or (ii) assist any other person or entity in such activities.

(e) Extension of Non-Solicitation/Non-Competition and Non-Recruitment Periods. If Executive is found by a court of competent jurisdiction to have breached any promise made in Section 9 of this Agreement, the periods specified in Section 9(c) of this Agreement shall be extended by one month for every month in which Executive was in breach so that the Company has the full benefit of the time period provided in Section 9(c).

10. **Injunction**. Executive recognizes that Executive's services hereunder are of a special, unique, unusual, extraordinary and intellectual character giving them a peculiar value, the loss of which cannot be reasonably or adequately compensated for in damages. Executive acknowledges that if Executive were to leave the employ of the Company for any reason and compete, directly or indirectly, with the Company, or solicit the Company's employees, or use or disclose, directly or indirectly, the Company's Confidential Information (whether in tangible form or memorized), that such competition, solicitation, use and/or disclosure would cause the Company irreparable harm and injury for which no adequate remedy at law exists. Executive agrees this Agreement is the narrowest way to protect the Company's interests. Therefore, in the event of the breach or threatened breach of the provisions of this Agreement by Executive, the Company shall be entitled to obtain

injunctive relief to enjoin such breach or threatened breach, in addition to all other remedies and alternatives that may be available at law or in equity. Executive acknowledges that the remedies contained in this Agreement for violation of this Agreement are not the exclusive remedies that the Company may pursue.

11. **Inventions**.

(a) Inventions Retained and Licensed. Executive has attached hereto as Exhibit A, a list describing all inventions, original works of authorship, derivative works, developments, improvements and trade secrets that (i) were made by Executive prior to his employment with the Company, (ii) belong to Executive, (iii) relate to the Company's proposed business, products or research and development and (iv) are not assigned to the Company hereunder (collectively, "**Prior Inventions**"); or, if no such list is attached, Executive represents that there are no such Prior Inventions. Executive agrees that Executive will not incorporate, or permit to be incorporated, any Prior Invention owned by Executive or in which Executive has an interest into a Company product, process or service without the Company's prior written consent. Nevertheless, if, in the course of Executive's employment with the Company, Executive incorporates into a Company product, process or service a Prior Invention owned by Executive or in which Executive has an interest, Executive hereby grants to the Company a nonexclusive, royalty-free, fully paid-up, irrevocable, perpetual, transferable, sublicensable, worldwide license to reproduce, make derivative works of, distribute, perform, display, import, make, have made, modify, use, sell, offer to sell, and exploit in any other way such Prior Invention as part of or in connection with such product, process or service, and to practice any method related thereto.

(b) Assignment of Inventions. Executive agrees that Executive will promptly make full written disclosure to the Company, will hold in trust for the sole right and benefit of the Company, and hereby assign to the Company, or its designee, all Executive's right, title, and interest in and to any and all inventions, original works of authorship, derivative works, developments, concepts, modifications, improvements (including improvements to Confidential Information), designs, discoveries, ideas, know-how, trademarks, trade dress, trade secrets or other intellectual property, whether or not patentable or registrable under copyright or similar laws, which Executive may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, whether or not reduced to drawings, written descriptions, documentation or other tangible form, as applicable, during the period of time Executive is employed by the Company (collectively, "**Inventions**"), except as provided in Section 11(f) below. Executive further acknowledges that all original works of authorship which are made by Executive (solely or jointly with others) within the scope of and during the period of Executive's employment with the Company and which are protectible by copyright are "works made for hire" as that term is defined in the United States Copyright Act. Executive understands and agrees that the decision whether or not to commercialize or market any Invention is within the Company's sole discretion and for the Company's sole benefit and that no royalty will be due to Executive as a result of the Company's efforts to commercialize or market any such Invention,

(c) Inventions Assigned to the United States. Executive agrees to assign to the United States government all Executive's right, title, and interest in and to any and all Inventions whenever

such full title is required to be in the United States by a contract between the Company and the United States or any of its agencies.

(d) Maintenance of Records. Executive agrees to keep and maintain adequate and current written records of all Inventions during the term of Executive's employment with the Company. The records will be in the form of notes, sketches, drawings and any other format that may be specified by the Board. The records will be available to and remain the Company's sole property at all times.

(e) Patent and Copyright Registrations. Executive agrees to assist the Company, or its designee, at the Company's expense, in every proper way to secure the Company's rights in any Inventions and any copyrights, patents, mask work rights or other intellectual property rights relating thereto in any and all countries, including, but not limited to, the disclosure to the Company of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, declarations, assignments and all other instruments that the Company deems necessary in order to apply for and obtain such rights and in order to assign and convey to the Company, its successors, assigns, and nominees the sole and exclusive rights, title and interest in and to such Inventions, and any copyrights, patents, mask work rights or other intellectual property rights relating thereto. Executive further agrees that Executive's obligations to execute or cause to be executed, when it is in Executive's power to do so, any such instrument or papers shall continue after the termination of this Agreement. If the Company is unable because of Executive's mental or physical incapacity or for any other reason to secure Executive's signature to apply for or to pursue any application for any United States or foreign patents or copyright registrations covering any Inventions or original works of authorship assigned to the Company as above, then Executive hereby irrevocably designates and appoints the Company and its duly authorized officers and agents as Executive's agent and attorney in fact, to act for and in Executive's behalf and stead to execute and file any such applications and to do all other lawfully permitted acts to further the prosecution and issuance of letters patent or copyright registrations thereon with the same legal force and effect as if executed by Executive.

(f) Exception to Assignments. Executive understands that the provisions of this Agreement requiring assignment of Inventions to the Company does not apply to any Invention that Executive has developed entirely on Executive's own time without using the Company's equipment, supplies, facilities, trade secret information or Confidential Information (an "**Other Invention**"), except for those Other Inventions that either (i) relate in any way at the time of conception or reduction to practice of such Other Invention to the Company's Business or (ii) result from any work that Executive performed for the Company. Executive will advise the Company promptly in writing, under a confidentiality agreement, of any Invention that Executive believes constitutes an Other Invention and is not otherwise disclosed on Exhibit A. Executive agrees that Executive will not incorporate, or permit to be incorporated, any Other Invention owned by Executive or in which Executive has an interest into a Company product, process or service without the Company's prior written consent. Notwithstanding the foregoing sentence, if, in the course of Executive's employment with the Company, Executive incorporates into a Company product, process or service an Other Invention owned by Executive or in which Executive has an interest, Executive hereby grants to the Company a nonexclusive, royalty-free, fully paid-up, irrevocable,

perpetual, transferable, sublicensable, worldwide license to reproduce, make derivative works of, distribute, perform, display, import, make, have made, modify, use, sell, offer to sell, and exploit in any other way such Other Invention as part of or in connection with such product, process or service, and to practice any method related thereto.

12. **Disputes**. Any dispute or controversy between the Company and Executive, arising out of or relating to this Agreement, the breach of this Agreement, the Company's employment of Executive, or otherwise, shall be settled by binding arbitration conducted by and before a single arbitrator in San Francisco, California who is licensed to practice law in Texas, administered by the American Arbitration Association in accordance with its Employment Arbitration Rules (the "**AAA Rules**") then in effect and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. Both Executive and the Company hereby waive the right to a trial by jury or judge, or by administrative proceeding, for any covered claim or dispute. To the extent the AAA Rules conflict with any provision or aspect of this Agreement, this Agreement shall control. The arbitrator shall have the authority to award any remedy or relief that a court of competent jurisdiction could order or grant, including, without limitation, the issuance of an injunction. However, either party may, without inconsistency with this arbitration provision, apply to any court having jurisdiction over such dispute or controversy and seek interim provisional, injunctive or other equitable relief until the arbitration award is rendered or the controversy is otherwise resolved. Except as necessary in court proceedings to enforce this arbitration provision or an award rendered hereunder, or to obtain interim relief, neither a party nor an arbitrator may disclose the existence, content or results of any arbitration hereunder without the prior written consent of the Company and Executive. All claims, disputes, or causes of action under this Agreement, whether by Executive or the Company, must be brought in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class or representative proceeding, nor joined or consolidated with the claims of any other person or entity. The arbitrator may not consolidate the claims of more than one person or entity, and may not preside over any form of representative or class proceeding. This Agreement is made under the provisions of the Federal Arbitration Act (9 U.S.C., Sections 1-14) ("**FAA**") and will be construed and governed accordingly. It is the parties' intention that both the procedural and the substantive provisions of the FAA shall apply. **Questions of arbitrability (that is whether an issue is subject to arbitration under this agreement) shall be decided by the arbitrator.** Likewise, procedural questions which grow out of the dispute and bear on the final disposition are also matters for the arbitrator. However, where a party already has initiated a judicial proceeding, a court may decide procedural questions that grow out of the dispute and bear on the final disposition of the matter. Each party shall bear its or his costs and expenses in any arbitration hereunder and one-half of the arbitrator's fees and costs; provided, however, that the arbitrator shall have the discretion to award the prevailing party reimbursement of its or his reasonable attorney's fees and costs to the extent provided by applicable law. Notwithstanding the foregoing, Executive and the Company shall each have the right to resolve any dispute or cause of action involving trade secrets, proprietary information, or intellectual property (including, without limitation, inventions assignment rights, and rights under patent, trademark, or copyright law) by court action instead of arbitration. Either party may seek provisional injunctive relief in a court of competent jurisdiction to ensure that the relief sought in any arbitration is not rendered ineffectual by interim harm.

13. **Notices**. All notices given under this Agreement shall be in writing and shall be deemed to have been duly given (a) when delivered personally, (b) three business days after being mailed by first class certified mail, return receipt requested, postage prepaid, (c) one business day after being sent by a reputable overnight delivery service, postage or delivery charges prepaid, or (d) on the date on which a facsimile is transmitted to the parties at their respective addresses stated below. Any party may change its address for notice and the address to which copies must be sent by giving notice of the new addresses to the other party in accordance with this Section 13, except that any such change of address notice shall not be effective unless and until received.

If to the Company:

2130 West Holcombe Boulevard, Suite 800
Houston, Texas 77030
Attention: Chairman of the Board of Directors

with a copy (which shall not constitute notice) to:

Cooley LLP
4401 Eastgate Mall
San Diego, California 92121
Attention: Julie Robinson

If to Executive, to Executive's address on file with the Company

14. **Tax Provisions**.

(a) Section 409A. Notwithstanding anything in this Agreement to the contrary, the following provisions apply to the extent severance benefits provided herein are subject to the provisions of Section 409A of the Code and the regulations and other guidance thereunder and any state law of similar effect (collectively **"Section 409A"**). Severance benefits shall not commence until Executive's Separation from Service. Each installment of severance benefits is a separate "payment" for purposes of Treasury Regulations Section 1.409A-2(b)(2)(i), and the severance benefits are intended to satisfy the exemptions from application of Section 409A provided under Treasury Regulations Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9). However, if such exemptions are not available and Executive is, upon Separation from Service, a "specified employee" for purposes of Section 409A, then, solely to the extent necessary to avoid adverse personal tax consequences under Section 409A, the timing of the severance benefits payments shall be delayed until the earlier of (i) six (6) months and one day after Executive's Separation from Service, or (ii) Executive's death. Executive shall receive severance benefits only if Executive executes and returns to the Company the Release within the applicable time period set forth therein and permits such Release to become effective in accordance with its terms, which date may not be later than sixty (60) days following the date of Executive's Separation from Service (such latest permitted date, the **"Release Deadline"**). If the severance benefits are not covered by one or more exemptions from the application of Section 409A and the Release could become effective in the calendar year following the calendar year in which Executive's Separation from Service occurs, the

Release will not be deemed effective any earlier than the Release Deadline. None of the severance benefits will be paid or otherwise delivered prior to the effective date of the Release. Except to the minimum extent that payments must be delayed because Executive is a "specified employee" or until the effectiveness of the Release, all amounts will be paid as soon as practicable in accordance with the schedule provided herein and in accordance with the Company's normal payroll practices. The severance benefits are intended to qualify for an exemption from application of Section 409A or comply with its requirements to the extent necessary to avoid adverse personal tax consequences under Section 409A, and any ambiguities herein shall be interpreted accordingly.

(b) Section 280G. If any payment or benefit Executive will or may receive from the Company or otherwise (a "**280G Payment**") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "**Excise Tax**"), then any such 280G Payment pursuant to this Agreement or otherwise (a "**Payment**") shall be equal to the Reduced Amount. The "**Reduced Amount**" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in Executive's receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the "**Reduction Method**") that results in the greatest economic benefit for Executive. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the "**Pro Rata Reduction Method**").

Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (A) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for Executive as determined on an after-tax basis; (B) as a second priority, Payments that are contingent on future events (e.g., being terminated without cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (C) as a third priority, Payments that are "deferred compensation" within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

Unless Executive and the Company agree on an alternative accounting firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the change of control transaction triggering the Payment shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the change in control transaction, the Company shall appoint a nationally recognized accounting firm to make the determinations required hereunder.

The Company shall bear all expenses with respect to the determinations by such accounting firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to Executive and the Company within fifteen (15) calendar days after the date on which Executive's right to a 280G Payment becomes reasonably likely to occur (if requested at that time by Executive or the Company) or such other time as requested by Executive or the Company.

If Executive receives a Payment for which the Reduced Amount was determined pursuant to clause (x) of the first paragraph of this Section 14(b) and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, Executive shall promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of the first paragraph of this Section 14(b) so that no portion of the remaining Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) in the first paragraph of this Section 14(b), Executive shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

15. **Indemnification**. The Company and Executive shall enter into the Indemnification Agreement attached hereto as Exhibit B, which the Company represents and warrants is the standard form of indemnification agreement provided to the Company's other senior executives.

16. **Miscellaneous**.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Texas without reference to principles of conflict of laws.

(b) Entire Agreement/Amendments. This Agreement and the instruments contemplated herein contain the entire understanding of the parties with respect to the employment of Executive by the Company from and after the Effective Date and supersede any prior written or oral agreements or promises between the Company and Executive. There are no restrictions, agreements, promises, warranties, covenants or undertakings between the parties with respect to the subject matter herein other than those expressly set forth herein and therein. This Agreement may not be altered, modified, or amended except by written instrument signed by the parties hereto.

(c) No Waiver. The failure of a party to insist upon strict adherence to any term of this Agreement on any occasion shall not be considered a waiver of such party's rights or deprive such party of the right thereafter to insist upon strict adherence to that term or any other term of this Agreement. Any such waiver must be in writing and signed by Executive or an authorized officer of the Company, as the case may be.

(d) Assignment. This Agreement shall not be assignable by Executive.

(e) Representation. Executive represents that Executive's employment by the Company and the performance by Executive of his obligations under this Agreement do not, and shall not, breach any agreement, including, but not limited to, any agreement that obligates him to keep in confidence any trade secrets or confidential or proprietary information of his or of any other party,

to perform services for any other party or to refrain from competing, directly or indirectly, with the business of any other party. Executive shall not disclose to the Company or use any trade secrets or confidential or proprietary information of any other party.

(f) Successors; Binding Agreement; Third Party Beneficiaries. This Agreement shall inure to the benefit of and be binding upon the personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees legatees and permitted assignees of the parties hereto.

(g) Withholding Taxes. The Company shall withhold from any and all compensation, severance and other amounts payable under this Agreement such Federal, state, local or other taxes as may be required to be withheld pursuant to any applicable law or regulation.

(h) Survivorship. The respective rights and obligations of the parties hereunder, including without limitation Sections 8 through 11 hereof, shall survive any termination of Executive's employment to the extent necessary to the agreed preservation of such rights and obligations.

(i) Counterparts. This Agreement may be signed in counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

(j) Headings. The headings of the sections contained in this Agreement are for convenience only and shall not be deemed to control or affect the meaning or construction of any provision of this Agreement.

Signature Page Follows

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

By: Bellicum Pharmaceuticals, Inc.

By: /s/ Richard A. Fair
Name: Richard A. Fair
Title: President and Chief Executive Officer

/s/ Gregory S. Naeve
Greg Naeve

EXHIBIT A

INVENTIONS

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULE 13a-14(a) and 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Richard A. Fair, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Bellicum 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 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;

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2017

By: /s/ Richard A. Fair

Richard A. Fair

President and Chief Executive Officer (Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULE 13a-14(a) and 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Alan A. Musso, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Bellicum 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 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;

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2017

By: /s/ Alan A. Musso

Alan A. Musso

Chief Financial Officer and Treasurer
(Principal Financial and Accounting Officer)

Exhibit 32.1

CERTIFICATIONS 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 on Form 10-Q for the quarter ended September 30, 2017 (the "Report") of Bellicum Pharmaceuticals, Inc. (the "Registrant"), as filed with the Securities and Exchange Commission on the date hereof, the undersigned, in their capacities as officers of the Registrant, do each hereby certify, that, to the best of such officer's knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

/s/ Richard A. Fair

Richard A. Fair
President and Chief Executive Officer
(Principal Executive Officer)
November 7, 2017

/s/ Alan A. Musso

Alan A. Musso
Chief Financial Officer and Treasurer
(Principal Financial and Accounting Officer)
November 7, 2017

This certification accompanies the Report to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the report), irrespective of any general incorporation language contained in such filing.