U. S. SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended **June 30, 2017**

☐ 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 001-36860

IOVANCE BIOTHERAPEUTICS, INC.

(Exact name of small business issuer as specified in its charter)

Delaware	75-3254381
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification number)

999 Skyway Road, Suite 150, San Carlos, CA 94070
(Address of principal executive offices and zip code)

(650) 260-7120
(Registrant's telephone number, including area code)

Lion Biotechnologies, Inc.
(Former name, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☑ No ☐

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

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

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

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

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

At August 1, 2017, the issuer had 62,686,535 shares of common stock, par value $0.000041666 per share, outstanding.

IOVANCE BIOTHERAPEUTICS, INC.
FORM 10-Q
For the Quarter Ended June 30, 2017

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

IOVANCE BIOTHERAPEUTICS, INC.
Condensed Consolidated Balance Sheets
(in thousands, except share information)

	June 30, 2017 (unaudited)	December 31, 2016
ASSETS		
Current Assets		
Cash and cash equivalents	$ 114,285	$ 106,717
Short-term investments	14,732	59,753
Prepaid expenses and other current assets	6,417	3,042
Total Current Assets	135,434	169,512
Property and equipment, net	2,578	2,374
Total Assets	$ 138,012	$ 171,886
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable	$ 3,695	$ 863
Accrued expenses	5,165	4,105
Total Current Liabilities	8,860	4,968
Commitments and contingencies (Note 9)		
Stockholders' Equity		
Series A Convertible Preferred stock, $0.001 par value; 17,000 shares authorized, 1,694 shares issued and outstanding, as of June 30, 2017 and December 31, 2016, respectively (aggregate liquidation value of $1,694)	-	-
Series B Convertible Preferred stock, $0.001 par value; 11,500,000 shares authorized, 7,946,673 shares issued and outstanding as of June 30, 2017 and December 31, 2016, respectively (aggregate liquidation value of $37,747)	8	8
Common stock, $0.000041666 par value; 150,000,000 shares authorized, 62,680,390 and 62,248,074 shares issued and outstanding as of June 30, 2017 and December 31, 2016, respectively	3	3
Additional paid-in capital	330,318	323,994
Accumulated other comprehensive income	-	29
Accumulated deficit	(201,177)	(157,116)
Total Stockholders' Equity	129,152	166,918
Total Liabilities and Stockholders' Equity	$ 138,012	$ 171,886

The accompanying notes are an integral part of these condensed consolidated financial statements.

IOVANCE BIOTHERAPEUTICS, INC.
Condensed Consolidated Statements of Operations
(unaudited; in thousands, except per share information)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	**2016**	**2017**	**2016**
Revenues	$ -	$ -	$ -	$ -
Costs and expenses				
Research and development	19,653	4,463	36,276	8,655
General and administrative	3,928	7,264	8,188	10,082
Total costs and expenses	23,581	11,727	44,464	18,737
Loss from operations	(23,581)	(11,727)	(44,464)	(18,737)
Other income				
Interest income	204	164	403	290
Net Loss	$ (23,377)	$ (11,563)	$ (44,061)	$ (18,447)
Net Loss Per Common Share, Basic and Diluted	$ (0.37)	$ (0.23)	$ (0.71)	$ (0.37)
Weighted-Average Common Shares Outstanding, Basic and Diluted	62,457	51,082	62,371	49,807

The accompanying notes are an integral part of these condensed consolidated financial statements.

IOVANCE BIOTHERAPEUTICS, INC.
Condensed Consolidated Statements of Comprehensive Loss
(unaudited; in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	**2016**	**2017**	**2016**
Net Loss	$ (23,377)	$ (11,563)	$ (44,061)	$ (18,447)
Other comprehensive income:				
Unrealized (loss) gain on short-term investments	(2)	10	(29)	30
Comprehensive Loss	$ (23,379)	$ (11,553)	$ (44,090)	$ (18,417)

The accompanying notes are an integral part of these condensed consolidated financial statements.

IOVANCE BIOTHERAPEUTICS, INC.
Condensed Consolidated Statements of Cash Flows
(unaudited; in thousands)

	Six Months Ended June 30,	
	2017	**2016**
Cash Flows From Operating Activities		
Net loss	$ (44,061)	$ (18,447)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	464	540
Amortization of premium on investments	37	-
Stock-based compensation expense	6,589	7,136
Changes in assets and liabilities:		
Prepaid expenses and other current assets	(3,375)	(505)
Accounts payable	2,987	(233)
Accrued expenses	1,060	3,209
Net cash used in operating activities	(36,299)	(8,300)
Cash Flows From Investing Activities		
Purchase of short- term investments	-	(68,340)
Maturities of short- term investments	44,955	67,881
Purchase of property and equipment	(823)	(56)
Net cash provided by (used in) investing activities	44,132	(515)
Cash Flows From Financing Activities		
Tax payments related to shares witheld for vested restricted stock awards	(1,161)	(349)
Proceeds from the issuance of common stock upon exercise of warrants	250	621
Proceeds from the issuance of common stock upon exercise of options	646	237
Proceeds from the issuance of preferred stock and common stock, net	-	95,685
Net cash (used in) provided by financing activities	(265)	96,194
Net increase in cash and cash equivalents	7,568	87,379
Cash and Cash Equivalents, Beginning of Period	106,717	33,587
Cash and Cash Equivalents, End of Period	$ 114,285	$ 120,966
Supplemental Disclosures of Cash Flow Information:		
Cash paid for income taxes	$ -	$ -
Interest paid	-	-
Supplemental disclosure of non-cash investing and financing activities:		
Unrealized (loss) gain on short-term investments	$ (29)	$ 30
Acquisitions of property and equipment under accounts payable	(155)	-

The accompanying notes are an integral part of these condensed consolidated financial statements.

NOTE 1. GENERAL ORGANIZATION AND BUSINESS

Iovance Biotherapeutics, Inc. (the "Company," "we," "us" or "our") is a biotechnology company focused on developing and commercializing adoptive cell therapy (ACT) using autologous tumor infiltrating lymphocytes (TIL) for the treatment of metastatic melanoma and other solid tumor cancers. ACT utilizes T-cells harvested from a patient to treat cancer in that patient. TIL, tumor infiltrating lymphocytes, are naturally present in a patient's tumors, are collected from individual patient tumor samples. The TIL are then extracted from the tumor tissue and expanded ex vivo and then infused back into the patient to fight their tumor. The Company was originally incorporated under the laws of the state of Nevada on September 17, 2007. Until March 2010, we were an inactive company known as Freight Management Corp. On March 15, 2010, we changed our name to Genesis Biopharma, Inc., and in 2011 we commenced our current business. On September 26, 2013, we changed our name to Lion Biotechnologies, Inc. On June 1, 2017, the Company reincorporated to become a Company governed by Delaware corporation laws. On June 27, 2017, we changed our name to Iovance Biotherapeutics, Inc.

Basis of Presentation of Unaudited Condensed Consolidated Financial Information

The unaudited condensed consolidated financial statements of the Company for the three and six months ended June 30, 2017 and 2016 have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and pursuant to the requirements for reporting on Form 10-Q and Regulation S-K. Accordingly, they do not include all the information and footnotes required by GAAP for complete financial statements. However, such information reflects all adjustments (consisting solely of normal recurring adjustments), which are, in the opinion of management, necessary for the fair presentation of the financial position and the results of operations. Results shown for interim periods are not necessarily indicative of the results to be obtained for a full fiscal year. The balance sheet information as of December 31, 2016 was derived from the audited financial statements included in the Company's financial statements as of and for the year ended December 31, 2016 included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission (the "SEC") on March 8, 2017. These financial statements should be read in conjunction with that report.

Liquidity

The Company is currently engaged in the development of therapeutics to fight cancer. We do not have any commercial products and have not yet generated any revenues from our biopharmaceutical business. We currently do not anticipate that we will generate any revenues during 2017 from the sale or licensing of any products. As shown in the accompanying financial statements, we have incurred a net loss of $44.1 million for the six months ended June 30, 2017 and used $36.3 million of cash in our operating activities during the six months ended June 30, 2017. As of June 30, 2017, we had $129.0 million of cash and cash equivalents and short-term investments.

The Company expects to further increase its research and development activities, which will increase the amount of cash used during the remainder of 2017. Specifically, we expect increased spending on clinical trials, research and development activities, higher payroll expenses as we increase our professional and scientific staff and continued and expansion of manufacturing activities. Based on the funds we have available, we believe that we have sufficient capital to fund our anticipated operating expenses for at least 12 months from the date that these financial statements are issued.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING PRACTICES

Short-term Investments

The Company's short-term investments are classified as "available-for-sale". The Company includes these investments in current assets and carries them at fair value. Unrealized gains and losses on available-for-sale securities are included in accumulated other comprehensive income. The amortized cost of debt securities is adjusted for the amortization of premiums and accretion of discounts to maturity. Such amortization is included in interest income. Gains and losses on securities sold are recorded based on the specific identification method and are included in interest income in the statement of operations. We have not incurred any realized gains or losses from sales of securities to date.

Loss per Share

Basic net loss per share is computed using the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed using the weighted average number of shares of common stock outstanding during the period increased to include the number of additional shares of common stock that would have been outstanding if the potentially dilutive securities had been issued.

At June 30, 2017 and 2016, the following outstanding common stock equivalents have been excluded from the calculation of net loss per share because their impact would be anti-dilutive.

	June 30,	
	2017	**2016**
Stock options	6,845,580	4,270,989
Warrants	6,466,216	6,953,716
Series A Convertible Preferred*	847,000	847,000
Series B Convertible Preferred*	7,946,673	11,368,633
Restricted stock awards	2,917	98,750
Restricted stock units	137,500	550,000
	22,245,886	24,089,088

** on an as-converted basis*

The dilutive effect of potentially dilutive securities is reflected in diluted earnings per common share by application of the treasury stock method. Under the treasury stock method, an increase in the fair market value of the Company's common stock can result in a greater dilutive effect from potentially dilutive securities.

Fair Value Measurements

Under Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 820, Fair Value Measurements and Disclosures, fair value is defined as the price at which an asset could be exchanged or a liability transferred in a transaction between knowledgeable, willing parties in the principal or most advantageous market for the asset or liability. Where available, fair value is based on observable market prices or parameters or derived from such prices or parameters. Where observable prices or parameters are not available, valuation models are applied.

Assets and liabilities recorded at fair value in our financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels directly related to the amount of subjectivity associated with the inputs to fair valuation of these assets and liabilities, are as follows:

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets at the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2—Are inputs, other than quoted prices included in Level 1, that are either directly or indirectly observable for the asset or liability through correlation with market data at the reporting date and for the duration of the instrument’s anticipated life.

The fair valued assets we hold that are generally assessed under Level 2 are corporate bonds and commercial paper. We utilize third party pricing services in developing fair value measurements where fair value is based on valuation methodologies such as models using observable market inputs, including benchmark yields, reported trades, broker/dealer quotes, bids, offers and other reference data. We use quotes from external pricing service providers and other on-line quotation systems to verify the fair value of investments provided by our third party pricing service providers. We review independent auditor’s reports from our third party pricing service providers particularly regarding the controls over pricing and valuation of financial instruments and ensure that our internal controls address certain control deficiencies, if any, and complementary user entity controls are in place.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities and which reflect management’s best estimate of what market participants would use in pricing the asset or liability at the reporting date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

We do not have fair valued assets classified under Level 3.

Financial assets measured at fair value on a recurring basis are categorized in the tables below based upon the lowest level of significant input to the valuations (in thousands):

	Assets at Fair Value as of June 30, 2017			
	Level 1	Level 2	Level 3	Total
Commercial paper	$ -	$ 13,233	$ -	$ 13,233
US Government agency securities	-	1,499	-	1,499
Total	$ -	$ 14,732	$ -	$ 14,732

	Assets at Fair Value as of December 31, 2016			
	Level 1	Level 2	Level 3	Total
Commercial paper	$ -	$ 29,178	$ -	$ 29,178
Corporate debt securities	-	26,578	-	26,578
US Government agency securities	-	3,997	-	3,997
Total	$ -	$ 59,753	$ -	$ 59,753

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates include valuation of short-term investments, accounting for potential liabilities, the valuation allowance associated with the Company's deferred tax assets, and the assumptions made in valuing stock instruments issued for services.

Principles of Consolidation

The accompanying condensed consolidated financial statements include the accounts of Iovance Biotherapeutics, Inc. and its wholly-owned subsidiary, Iovance Biotherapeutics GmbH (formerly Lion Biotechnologies GmbH). All intercompany accounts and transactions have been eliminated. The U.S. dollar is the functional currency for all the Company's consolidated operations.

Stock-Based Compensation

The Company periodically grants stock options and warrants to employees and non-employees in non-capital raising transactions as compensation for services rendered. The Company accounts for stock option grants to employees based on the authoritative guidance provided by the FASB where the value of the award is measured on the date of grant and recognized over the vesting period. The Company accounts for stock option grants to non-employees in accordance with the authoritative guidance of the FASB where the value of the stock compensation is determined based upon the measurement date at either a) the date at which a performance commitment is reached, or b) at the date at which the necessary performance to earn the equity instruments is complete. Non-employee stock-based compensation charges generally are amortized over the vesting period on a straight-line basis. In certain circumstances where there are no future performance requirements by the non-employee, option grants are immediately vested and the total stock-based compensation charge is recorded in the period of the measurement date.

The fair value of the Company's common stock option grants is estimated using a Black-Scholes option pricing model, which uses certain assumptions related to risk-free interest rates, expected volatility, expected life of the common stock options, and future dividends. Compensation expense is recorded based upon the value derived from the Black-Scholes option pricing model, and based on actual experience. The assumptions used in the Black-Scholes option pricing model could materially affect compensation expense recorded in future periods.

The Company has in the past issued restricted shares of its common stock for share-based compensation programs. The Company measures the compensation cost with respect to restricted shares issued to employees based upon the estimated fair value of the equity instruments at the date of the grant, and is recognized as expense over the period which an employee is required to provide services in exchange for the award.

The fair value of restricted stock units is based on the closing price of the Company's common stock on the grant date.

Total stock-based compensation expense related to all our stock-based awards was recorded on the statements of operations as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Research and development	$ 1,896	$ 593	$ 3,283	$ 1,178
General and administrative	1,397	4,764	3,306	5,958
Total stock-based compensation expense	$ 3,293	$ 5,357	$ 6,589	$ 7,136

Total stock-based compensation broken down based on each individual instrument was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Stock option expense	$ 2,977	$ 4,584	$ 5,631	$ 6,068
Restricted stock award expense	14	535	27	830
Restricted stock unit expense	302	238	931	238
Total stock-based compensation expense	$ 3,293	$ 5,357	$ 6,589	$ 7,136

Preferred Stock

The Company applies the accounting standards for distinguishing liabilities from equity when determining the classification and measurement of its preferred stock. Preferred shares subject to mandatory redemption are classified as liability instruments and are measured at fair value. Conditionally redeemable preferred shares (including preferred shares that feature redemption rights that are either within the control of the holder or subject to redemption upon the occurrence of uncertain events not solely within the Company's control) are classified as temporary equity. At all other times, preferred shares are classified as stockholders' equity.

Convertible Instruments

The Company applies the accounting standards for derivatives and hedging and for distinguishing liabilities from equity when accounting for hybrid contracts that feature conversion options. The accounting standards require companies to bifurcate conversion options from their host instruments and account for them as free standing derivative financial instruments per certain criteria. The criteria includes circumstances in which (i) the economic characteristics and risks of the embedded derivative instrument are not clearly and closely related to the economic characteristics and risks of the host contract, (ii) the hybrid instrument that embodies both the embedded derivative instrument and the host contract is not re-measured at fair value under otherwise applicable generally accepted accounting principles with changes in fair value reported in earnings as they occur and (iii) a separate instrument with the same terms as the embedded derivative instrument would be considered a derivative instrument. The derivative is subsequently marked to market at each reporting date based on current fair value, with the changes in fair value reported in results of operations.

Conversion options that contain variable settlement features such as provisions to adjust the conversion price upon subsequent issuances of equity or equity linked securities at exercise prices more favorable than that featured in the hybrid contract generally result in their bifurcation from the host instrument.

The Company also records, when necessary, deemed dividends for the intrinsic value of the conversion options embedded in preferred stock based upon the difference between the fair value of the underlying common stock at the commitment date of the transaction and the effective conversion price embedded in the preferred stock.

Recent Accounting Standards

In May 2017, the FASB issued ASU No. 2017-09, C*ompensation–Stock Compensation (Topic 718): Scope of Modification Accounting*, clarifying when a change to the terms or conditions of a share-based payment award must be accounted for as a modification. The new guidance requires modification accounting if the fair value, vesting condition or the classification of the award is not the same immediately before and after a change to the terms and conditions of the award. The new guidance is effective for the Company on a prospective basis beginning on January 1, 2018, with early adoption permitted. The Company is currently evaluating the impact that ASU 2017-09 will have on its consolidated financial statements and related disclosures.

Subsequent Events

The Company evaluates events that have occurred after the balance sheet date but before the financial statements are issued. Based upon the evaluation, the Company did not identify any recognized or non-recognized subsequent events that would have required adjustment or disclosure in the condensed consolidated financial statements.

Reclassifications

Certain amounts within the statements of cash flows for the prior periods have been reclassified to conform with the current period presentation. These reclassifications had no impact on the Company's previously reported financial position or cash flows for any of the periods presented.

NOTE 3. CASH AND CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS

Cash and cash equivalents and short-term investments consist of the following (in thousands):

	June 30, 2017	December 31, 2016
Cash - Demand deposits	$ 38,096	$ 76,071
Cash equivalents - money market funds	76,189	30,646
Cash and cash equivalents total	$ 114,285	$ 106,717

	June 30, 2017	December 31, 2016
Commercial paper	$ 13,233	$ 29,178
Corporate debt securities	-	26,578
US Government agency securities	1,499	3,997
Short-term investments total	$ 14,732	$ 59,753

Money market funds and short-term investments include the following securities with gross unrealized gains and losses (in thousands):

As of June 30, 2017	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Money market funds	$ 76,189	$ -	$ -	$ 76,189
Commercial paper	13,232	1	-	13,233
US Government agency securities	1,500	-	(1)	1,499
Total	$ 90,921	$ 1	$ (1)	$ 90,921

Unrealized gains and losses are included in Accumulated other comprehensive income.

As of December 31, 2016	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Money market funds	$ 30,646	$ -	$ -	$ 30,646
Commercial paper	29,118	60	-	29,178
Corporate debt securities	26,606	1	(29)	26,578
US Government agency securities	4,000	-	(3)	3,997
Total	$ 90,370	$ 61	$ (32)	$ 90,399

At June 30, 2017, the Company's short-term investments had the following remaining contractual maturities (in thousands):

	Amortized Cost	Estimated Fair Value
Less than one year	$ 14,732	$ 14,732

The Company's investment policy limits investments to certain types of instruments such as certificates of deposit, money market instruments, obligations issued by the U.S. government and U.S. government agencies as well as corporate debt securities, and places restrictions on maturities and concentration by type and issuer.

NOTE 4. BALANCE SHEET COMPONENTS

Property and equipment, net consists of the following (in thousands):

	June 30, 2017	December 31, 2016
Lab equipment	$ 2,942	$ 2,405
Leasehold improvements	1,707	1,381
Computer equipment	263	245
Office furniture and equipment	179	148
Construction in progress	32	276
Total Property and equipment, cost	5,123	4,455
Less: Accumulated depreciation and amortization	(2,545)	(2,081)
Property and equipment, net	$ 2,578	$ 2,374

Accrued liabilities consist of the following (in thousands):

	June 30, 2017	December 31, 2016
Accrued payroll and employee related expenses	$ 1,625	$ 1,581
Legal and related services	898	927
Clinical related	1,066	614
Manufacturing related	1,004	437
Deferred rent	485	422
Accrued other	87	124
	$ 5,165	$ 4,105

NOTE 5. STOCKHOLDERS' EQUITY

Preferred stock

The Company's articles of incorporation authorize the issuance of up to 50,000,000 shares of "blank check" preferred stock. At June 30, 2017 and December 31, 2016, 17,000 shares have been designated as the Series A Convertible Preferred Stock and 11,500,000 designated as Series B Convertible Preferred Stock.

Series A Convertible Preferred Stock

A total of 17,000 shares of Series A Convertible Preferred Stock ("Series A Preferred Stock") have been authorized for issuance under the Certificate of Designation of Preferences and Rights of Series A Convertible Preferred Stock. The shares of Series A Preferred Stock have a stated value of $1,000 per share and are initially convertible into shares of common stock at a price of $2.00 per share, subject to adjustment.

The Series A Preferred Stock may, at the option of each investor, be converted into fully paid and non-assessable shares of common stock. The holders of shares of Series A Preferred Stock do not have the right to vote on matters that come before stockholders. In the event of any dissolution or winding up of the Company, proceeds shall be paid pari passu among the holders of the shares of common stock and preferred stock, pro rata based on the number of shares held by each holder. The Company may not declare, pay or set aside any dividends on shares of capital stock of the Company (other than dividends on shares of common stock payable in shares of common stock) unless the holders of the Series A Preferred Stock shall first receive an equal dividend on each outstanding share of Series A Preferred Stock. The common shares issued were determined on a formula basis of 500 common shares for each share of Series A Preferred Stock converted. During the three and six months ended June 30, 2017 and 2016, no Series A Preferred stock was converted into common stock, respectively.

Series B Preferred Stock

In June 2016, the Company created a new class of Preferred Stock designated as Series B Convertible Preferred Stock (the "Series B Preferred"). The rights of the Series B Preferred are set forth in the Certificate of Designation of Rights, Preferences and Privileges of Series B Preferred Stock (the "Series B Certificate of Designation"). A total of 11,500,000 shares of Series B Preferred are authorized for issuance under the Series B Certificate of Designation. The shares of Series B Preferred have a stated value of $4.75 per share and are convertible into shares of common stock at an initial conversion price of $4.75 per share.

Holders of the Series B Preferred are entitled to dividends on an as-if-converted basis in the same form as any dividends actually paid on shares of the Company's Series A Preferred Stock or the Company's common stock. So long as any Series B Preferred remains outstanding, the Company may not redeem, purchase or otherwise acquire any material amount of our Series A Preferred Stock or any junior securities.

During the three and six months ended June 30, 2017 and 2016, no Series B Preferred was converted into common stock and 7,946,673 shares of Series B Preferred Stock remained outstanding at June 30, 2017.

Warrants

The following table summarizes the Company's stock warrant activity for the six months ended June 30, 2017:

	Shares Under Warrants	Weighted Average Exercise Price
Outstanding at January 1, 2017	6,566,216	$ 2.51
Issued	-	-
Exercised	(100,000)	2.50
Expired/Cancelled	-	-
Outstanding at June 30, 2017	6,466,216	$ 2.51

The warrants have a weighted average remaining life of 1.4 years at June 30, 2017.

NOTE 6. STOCK BASED COMPENSATION

Stock Plans

On September 19, 2014, the Company's Board of Directors adopted the Iovance Biotherapeutics, Inc. 2014 Equity Incentive Plan (the "2014 Plan"). The 2014 Plan was approved by our stockholders at the annual meeting of stockholders held in November 2014. The 2014 Plan as approved by the stockholders authorized the issuance up to an aggregate of 2,350,000 shares of common stock. On April 10, 2015, the Board amended the 2014 Plan to increase the total number of shares that can be issued under the 2014 Plan by 1,650,000 from 2,350,000 shares to 4,000,000 shares. The increase in shares available for issuance under the 2014 Plan was approved by stockholders on June 12, 2015.

On August 16, 2016, the stockholders approved the increase the total number of shares that can be issued under the 2014 Plan by 5,000,000 from 4,000,000 shares to 9,000,000 shares. At June 30, 2017, 2,688,716 shares were available for grant under the Company's 2014 plan.

Restricted Stock Units

On June 1, 2016, the Company entered into a restricted stock unit agreement with the Company's new Chief Executive Officer (Maria Fardis, Ph.D.) pursuant to which the Company granted Dr. Fardis 550,000 non-transferrable restricted stock units at fair market value of $5.87 per share as an inducement of employment pursuant to the exception to The NASDAQ Global Market rules that generally require stockholder approval of equity incentive plans. The 550,000 restricted stock units will vest in installments as follows: (i) 137,500 restricted stock units will vest upon the first anniversary of the effective date of Dr. Fardis' employment agreement; (ii) 275,000 restricted stock units will vest upon the satisfaction of certain clinical trial and manufacturing milestones; and (iii) 137,500 restricted stock units will vest in equal monthly installments over the 36-month period following the first anniversary of the effective date of Dr. Fardis' employment, provided that Dr. Fardis has been continuously employed with the Company as of such vesting dates.

On April 3, 2017, 137,500 restricted stock units with performance criteria vested based on the performance criteria having been met. On June 1, 2017, an additional 137,500 restricted stock units with performance criteria vested based on the performance criteria having been met and 137,500 vested based on the one-year anniversary of Dr. Fardis. The remaining 137,500 will vest over a 36-month period based on continued employment.

Stock-based compensation expense for restricted stock units is measured based on the closing fair market value of the Company's common stock on the date of grant. The stock compensation expense was $0.3 million and $0.2 million for the three months ended June 30, 2017 and 2016, respectively and was $0.9 million and $0.2 million for the six months ended June 30, 2017 and 2016, respectively.

As of June 30, 2017, there is $0.8 million of total unrecognized compensation expense related to the restricted stock units to be recognized over a weighted average period of 2.9 years.

Stock Options

The following table summarizes the Company's stock options activity for the six months ended June 30, 2017:

	Number of Options	Weighted Average Exercise Price
Outstanding at January 1, 2017	6,233,150	$ 7.24
Granted	1,341,000	6.96
Exercised	(116,348)	5.54
Expired/Forfeited	(612,222)	6.52
Outstanding at June 30, 2017	6,845,580	$ 7.28

The Company recorded stock compensation costs related to options of $3.0 million and $4.6 million for the three months ended June 30, 2017 and 2016, respectively and $5.6 million and $6.1 million for the six months ended June 30, 2017 and 2016, respectively. As of June 30, 2017, there was $23.3 million of total unrecognized compensation expense related to the options to be recognized over a weighted average period of 2.0 years.

The weighted-average grant date fair value per share of options granted under the Plan was $5.98 and $6.19 for the three months ended June 30, 2017 and 2016, respectively and was $6.85 and $5.68 for the six months ended June 30, 2017 and 2016, respectively.

Restricted Common Stock Awards

The following table summarizes the Company's restricted common stock awards activity for the six months ended June 30, 2017:

	Number of Shares	Weighted Average Grant Date Fair Value
Non-vested shares, January 1, 2017	7,084	$ 6.48
Granted	-	-
Vested	(4,167)	6.53
Forfeited	-	-
Non-vested shares, June 30, 2017	2,917	$ 6.40

The Company recorded stock compensation costs related to restricted stock awards of $0.0 million and $0.6 million for the three months ended June 30, 2017 and 2016, respectively and was $0.0 million and $0.8 million for the six months ended June 30, 2017 and 2016, respectively. As of June 30, 2017, the amount of unvested compensation related to the unvested outstanding shares of restricted common stock was $7,000 which will be recorded as expense in over a weighted average life of 0.20 years.

NOTE 7. AGREEMENTS

National Institutes of Health (NIH) and the National Cancer Institute (NCI)

Cooperative Research and Development Agreement (CRADA)

In August 2011, the Company signed a five-year CRADA with the NCI to work with Dr. Steven Rosenberg on developing adoptive cell immunotherapies that are designed to destroy metastatic melanoma cells using a patient's tumor infiltrating lymphocytes.

In January 2015, the Company executed an amendment (the "Amendment") to the CRADA to include four new indications. As amended, in addition to metastatic melanoma, the CRADA included the development of TIL therapy for the treatment of patients with bladder, lung, triple-negative breast, and HPV-associated cancers.

In August 2016, the NCI and the Company entered into a second amendment to the CRADA. The principal changes effected by the second amendment included (i) extending the term of the CRADA by another five years to August 2021, and (ii) modifying the focus on the development of unmodified TIL as a stand-alone therapy or in combination with U.S. Food and Drug Administration ("FDA") licensed products and commercially available reagents routinely used for adoptive cell therapy. The parties will continue the development of improved methods for the generation and selection of TIL with anti-tumor reactivity in metastatic melanoma, bladder, lung, breast, and HPV-associated cancers.

Pursuant to the terms of the CRADA, we are currently required to make quarterly payments of $0.5 million to the NCI for support of research activities. To the extent we license patent rights relating to a TIL-based product candidate, we will be responsible for all patent-related expenses and fees, past and future, relating to the TIL-based product candidate. In addition, we may be required to supply certain test articles, including TIL, grown and processed under cGMP conditions, suitable for use in clinical trials, where we hold the investigational new drug application for such clinical trial. The extended CRADA has a five-year term expiring in August 2021. The Company or the NCI may unilaterally terminate the CRADA for any reason or for no reason at any time by providing written notice at least 60 days before the desired termination date. The Company recorded costs associated with the CRADA of $0.5 million and $0.5 million for the three months ended June 30, 2017 and 2016, respectively and was $1.0 million and $1.0 million for the six months ended June 30, 2017 and 2016, respectively. These costs were recorded as research and development expenses.

Patent License Agreement Related to the Development and Manufacture of TIL

Effective October 5, 2011, the Company entered into a Patent License Agreement with the National Institutes of Health, an agency of the United States Public Health Service within the Department of Health and Human Services (NIH), which Patent License Agreement was subsequently amended on February 9, 2015 and October 2, 2015. Pursuant to the Patent License Agreement as amended, the NIH granted the Company licenses, including exclusive, co-exclusive, and non-exclusive licenses, to certain technologies relating to autologous tumor infiltrating lymphocyte adoptive cell therapy products for the treatment of metastatic melanoma, lung, breast, bladder and HPV-positive cancers. The Patent License Agreement requires the Company to pay royalties based on a percentage of net sales (which percentage is in the mid-single digits), a percentage of revenues from sublicensing arrangements, and lump sum benchmark royalty payments on the achievement of certain clinical and regulatory milestones for each of the various indications and other direct costs incurred by the NIH pursuant to the agreement.

Exclusive Patent License Agreement Related to TIL Selection

On February 10, 2015, the Company entered into an Exclusive Patent License Agreement with the NIH under which the Company received an exclusive license to the NIH's rights to patent-pending technologies related to methods for improving adoptive cell therapy through more potent and efficient production of TIL from melanoma tumors by selecting for T-cell populations that express various inhibitory receptors. Unless terminated sooner, the license shall remain in effect until the last licensed patent right expires.

In consideration for the exclusive rights granted under the Exclusive Patent License Agreement, the Company agreed to pay the NIH a non-refundable upfront licensing fee in the amount of $0.8 million. The Company also agreed to pay customary royalties based on a percentage of net sales of a licensed product (which percentage is in the mid-single digits), a percentage of revenues from sublicensing arrangements, and lump sum benchmark payments upon the successful completion of clinical studies involving licensed technologies, the receipt of the first FDA approval or foreign equivalent for a licensed product or process resulting from the licensed technologies, the first commercial sale of a licensed product or process in the United States, and the first commercial sale of a licensed product or process in any foreign country. The Company will also be responsible for all costs associated with the preparation, filing, maintenance and prosecution of the patent applications and patents covered by the License. The Company recorded costs associated with this agreement of $0.0 million and $0.0 million for the three months ended June 30, 2017 and 2016, respectively and was $0.0 million and $0.0 million for the six months ended June 30, 2017 and 2016, respectively. These costs were recorded as research and development expenses.

H. Lee Moffitt Cancer Center

Research Collaboration Agreement with Moffitt

In September 2014, we entered into a research collaboration agreement with Moffitt to jointly engage in transitional research and development of adoptive tumor-infiltrating lymphocyte cell therapy with improved anti-tumor properties and process.

In December 2016, we entered into a new three-year Sponsored Research Agreement with Moffitt. At the same time, we entered into a Clinical Grant Agreement with Moffitt to support an ongoing clinical trial at Moffitt that combines TIL therapy with Opdivo® (nivolumab) for the treatment of patients with metastatic melanoma.

Exclusive License Agreement with Moffitt

The Company entered into a license agreement with Moffitt (the "Moffitt License Agreement"), effective as of June 28, 2014, under which the Company received a world-wide license to Moffitt's rights to patent-pending technologies related to methods for improving tumor-infiltrating lymphocytes for adoptive cell therapy. Unless earlier terminated, the term of the license extends until the earlier of the expiration of the last patent related to the licensed technology or 20 years after the effective date of the license agreement.

Pursuant to the Moffitt License Agreement, the Company paid an upfront licensing fee in the amount of $0.1 million. A patent issuance fee will also be payable under the Moffitt License Agreement, upon the issuance of the first U.S. patent covering the subject technology. In addition, the Company agreed to pay milestone license fees upon completion of specified milestones, customary royalties based on a specified percentage of net sales (which percentage is in the low single digits) and sublicensing payments, as applicable, and annual minimum royalties beginning with the first sale of products based on the licensed technologies, which minimum royalties will be credited against the percentage royalty payments otherwise payable in that year. The Company will also be responsible for all costs associated with the preparation, filing, maintenance and prosecution of the patent applications and patents covered by the Moffitt License Agreement related to the treatment of any cancers in the United States, Europe and Japan and in other countries designated by the Company in agreement with Moffitt. The Company recorded costs associated with Moffitt of $1.7 million and $0.2 million for the three months ended June 30, 2017 and 2016, respectively and was $2.3 million and $0.6 million for the six months ended June 30, 2017 and 2016, respectively. These costs were recorded as research and development expenses.

PolyBioCept and Karolinska University Hospital

PolyBioCept Exclusive and Co-Exclusive License Agreement

On September 14, 2016, the Company entered into an Exclusive and Co-Exclusive License Agreement (the "PolyBioCept Agreement") with PolyBioCept AB, a corporation organized under the laws of Sweden ("PolyBioCept"). PolyBioCept has filed two patent applications with claims related to a cytokine cocktail for use in expansion of lymphocytes, one of which has been abandoned. Under the PolyBioCept Agreement, the Company received the exclusive right and license to PolyBioCept's intellectual property to develop, manufacture, market and genetically engineer tumor infiltrating lymphocytes (TIL) produced by expansion, selection and enrichment using a cytokine cocktail. The Company also received a co-exclusive license (with PolyBioCept) to develop, manufacture and market genetically engineered TIL under the same intellectual property. The licenses are for the use in all cancers and are worldwide in scope, with the exception that the uses in melanoma are not included for certain countries of the former Soviet Union.

The Company paid PolyBioCept a total of $2.5 million as an up-front exclusive license payment. The Company will also have to make additional milestone payments to PolyBioCept under the PolyBioCept Agreement if, and when, (i) certain product development milestones are achieved, (ii) certain regulatory approvals have been obtained from the FDA and/or the European Medicines Agency, and (iii) certain product sales targets are achieved. The milestone payments will be payable both in cash (U.S. dollars) and in shares of the Company's common stock. If all of the foregoing product development, regulatory approval and sales milestone payments are met, the Company will have to pay PolyBioCept an additional $8.7 million and will have to issue to PolyBioCept a total 2,219,376 shares of unregistered common stock. In addition to these potential payments, the Company will reimburse PolyBioCept up to $0.2 million in expenses related to the transfer of know-how and will pay PolyBioCept $0.1 million as a clinical trials management fee. The Company also separately engaged PolyBioCept as a consultant to provide certain product development and research related services in a one-year agreement for up to $0.2 million, subject to the consent of the Karolinska Institute to the services to be performed by its employees thereunder. The PolyBioCept Agreement has an initial term of 30 years, and may be extended for additional five-year periods. The Company recorded costs associated with the PolyBioCept of $0.0 million and $0.2 million for the three months ended June 30, 2017 and 2016, respectively and was $0.2 million and $0.2 million for the six months ended June 30, 2017 and 2016, respectively. These costs were recorded as research and development expenses.

Karolinska University Hospital and Karolinska Institute Agreements

In connection with the execution of the PolyBioCept Agreement, the Company also (i) entered into a clinical trials agreement with the Karolinska University Hospital to conduct clinical trials in glioblastoma and pancreatic cancer at the Karolinska University Hospital, and (ii) agreed to enter into a sponsored research agreement with the Karolinska Institute for the research of the cytokine cocktail in additional indications. The Company agreed to enter into the sponsored research agreement within 90 days after the date of the PolyBioCept Agreement, which date has been extended by amendments to the PolyBioCept Agreement. Failure to enter into the sponsored research agreement or further amend the PolyBioCept Agreement so will give PolyBioCept the right to terminate the PolyBioCept Agreement (and the Company shall have the right to repayment of $2.2 million of the payments it made). The Company will pay the Karolinska Institute an additional $2.6 million in connection with these other related agreements. In 2016 the Company paid Karolinska University Hospital $1.6 million under this agreement to conduct the clinical trials. The $1.6 million payment has been capitalized and will be expensed in accordance with the Company's Research and Development Expense significant accounting practices. The Company recorded costs associated with the Karolinska University Hospital of $0.5 million and $0.0 million for the three months ended June 30, 2017 and 2016, respectively and was $0.7 million and $0.0 million for the six months ended June 30, 2017 and 2016, respectively. These costs were recorded as research and development expenses.

M.D. Anderson Cancer Center

Strategic Alliance Agreement

On April 17, 2017, the Company entered into a Strategic Alliance Agreement (the "SAA") with M.D. Anderson Cancer Center ("M.D. Anderson") under which the Company and M.D. Anderson agreed to conduct clinical and preclinical research studies. The Company agreed in the SAA to provide total funding not to exceed approximately $14.2 million for the performance of the multi-year studies under the SAA. In return, we will acquire all rights to inventions resulting from the studies and have been granted a non-exclusive, sub-licensable, royalty-free, and perpetual license to specified background intellectual property of M.D. Anderson reasonably necessary to exploit, including the commercialization of, any invention. We have also been granted certain rights in clinical data generated by M.D. Anderson outside of the clinical trials to be performed under the SAA. The SAA's term shall continue in effect until the later of the fourth anniversary of the SAA or the completion or termination of the research and receipt by us of all deliverables due from M.D. Anderson thereunder. As of June 30, 2017, the Company had paid $1.4 million under this agreement. The amount has been recorded as a prepaid asset, and will be amortized to research and development expenses based on enrollment and other factors. The Company has not recorded costs associated with the M.D. Anderson Agreement for the three and six months ended June 30, 2017.

Medimmune

In December 2015, the Company entered into a collaboration to conduct clinical and preclinical research in immuno-oncology with MedImmune, the global biologics research and development arm of AstraZeneca. Under the terms of the agreement, the Company will fund and conduct at least one Phase 2a clinical trial combining MedImmune's investigational PD-L1 inhibitor durvalumab with TIL for the treatment of patients. MedImmune will supply durvalumab for the clinical trials. The purpose of the studies is to establish a dosing regimen for this combination therapy and assess its safety and efficacy.

Preclinical research under the agreement will focus on identifying and evaluating therapeutically effective combinations of MedImmune's checkpoint antibodies, using TIL as an in vitro model of the tumor microenvironment. The research will be funded by MedImmune and conducted by the Company.

NOTE 8. LEGAL PROCEEDINGS

Class Action Lawsuits. On April 10, 2017, the SEC announced settlements with us and with other public companies and unrelated parties in the *In the Matter of Certain Stock Promotion* investigation. Our settlement with the SEC is consistent with our previous disclosures (including in our Form 10-K that we filed with the SEC on March 9, 2017). On April 14 2017, a purported shareholder filed a class action complaint in the United States District Court, Northern District of California for violations of the federal securities laws (*Leonard DeSilvio v. Lion Biotechnologies, Inc., et al., case no: 3:17cv2086*) against our company and three of our former officers and directors. On April 19, 2017, a second class action complaint *(Amra Kuc vs. Lion Biotechnologies, Inc., et al., case no: 3:17cv2086*) was filed in the same court. Both complaints allege, among other things, that the defendants violated the federal securities laws by making materially false and misleading statements, or by failing to make certain disclosures, regarding the actions taken by Manish Singh and our former investor relations firm that were the subject of the *In the Matter of Certain Stock Promotions* SEC investigation. On July 20, 2017 the plaintiff in the *Kuc* case filed a notice to voluntarily dismiss that case. The Court entered an order dismissing the *Kuc* complaint on July 21, 2017. On July 26, 2017, the court appointed a movant as lead plaintiff.

We intend to vigorously defend against the foregoing complaints. Based on the very early stage of the litigation, it is not possible to estimate the amount or range of possible loss that might result from an adverse judgment or a settlement of these matters.

Solomon Capital, LLC. On April 8, 2016, a lawsuit titled *Solomon Capital, LLC, Solomon Capital 401(K) Trust, Solomon Sharbat and Shelhav Raff v. Lion Biotechnologies, Inc.* was filed by Solomon Capital, LLC, Solomon Capital 401(k) Trust, Solomon Sharbat and Shelhav Raff against the Company in the Supreme Court of the State of New York, County of New York (index no. 651881/2016). The plaintiffs allege that, between June and November 2012 they provided to the Company $0.1 million and that they advanced and paid on our behalf an additional $0.2 million. The complaint further alleges that the Company agreed to (i) provide them with promissory notes totaling $0.2 million, plus interest, (ii) issue a total of 111,425 shares to the plaintiffs (before the 1-for-100 reverse split of our common stock effected in September 2013), and (iii) allow the plaintiffs to convert the foregoing funds into our securities in the next transaction. The plaintiffs allege that they should have been able to convert their advances and payments into shares of the Company's common stock in the restructuring that was effected in May 2013. Based on the foregoing, the plaintiffs allege causes for breach of contract and unjust enrichment and demand judgment against the Company in an unspecified amount exceeding $1.5 million, plus interest and attorneys' fees.

On June 3, 2016, the Company filed an answer and counterclaims in the lawsuit. In its counterclaims, the Company alleges that the plaintiffs misrepresented their qualifications to assist it in fundraising and that they failed to disclose that they were under investigation for securities laws violations. The Company is seeking damages in an amount exceeding $0.5 million and an order rescinding any and all agreements that the plaintiffs contend entitled them to obtain stock in the Company.

On April 19, 2017, the Court granted plaintiffs' counsel's motion to withdraw from the case. On May 25, 2017, plaintiffs filed a notice that they had hired new counsel. On June 7, 2017, the judge presiding over the case recused herself because of a conflict of interest arising from her relationship with plaintiffs' new attorneys. The case has been assigned to a new judge, but the court has not yet scheduled a status conference or otherwise set a schedule for the case.

The Company intends to vigorously defend the complaint and pursue its counterclaims.

Other Matters. During the second quarter of 2016, warrants representing 128,500 shares were exercised. The 128,500 shares of common stock had previously been registered for re-sale. However, we believe that these 128,500 warrant shares were sold by the holders in open market transactions in May 2016 at a time when the registration statement was ineffective. Accordingly, those sales were not made in accordance with Sections 5 and 10(a)(3) of the Securities Act, and the purchasers of those shares may have rescission rights (if they still own the shares) or claims for damages (if they no longer own the shares). The amount of any such liability is uncertain and as such, an accrual for any potential loss has not been made. The Company believes that any claims brought against it would not result in a material impact to the Company's financial position or results of operations. The Company has not accrued a loss for a potential claim associated with this matter as it is unable to estimate any at this time.

The Company may be involved, from time to time, in legal proceedings and claims arising in the ordinary course of its business. Such matters are subject to many uncertainties and outcomes are not predictable with assurance. The Company accrues amounts, to the extent they can be reasonably estimated, that it believes are adequate to address any liabilities related to legal proceedings and other loss contingencies that the Company believes will result in a probable loss. While there can be no assurances as to the ultimate outcome of any legal proceeding or other loss contingency involving the Company, management does not believe any pending matter will be resolved in a manner that would have a material adverse effect on the Company's financial position, results of operations or cash flows.

NOTE 9. COMMITMENTS AND CONTINENGIES

Facilities Leases

Tampa Lease

In December 2014, the Company commenced a five-year non-cancellable operating lease with the University of South Florida Research Foundation for a 5,115 square foot facility located in Tampa, Florida. The facility is part of the University of South Florida research park and is used as the Company's research and development facilities. The Company has the option to extend the lease term of this facility for an additional five-year period on the same terms and conditions, except that the base rent for the renewal term will be increased in accordance with the applicable consumer price index.

In April 2015, the Company amended the original lease agreement to increase the rentable space to 6,043 square feet. In September 2016, the Company further increased the rentable space to 8,673 square feet. The per square foot cost and term of the lease were unchanged.

San Carlos Lease

On August 4, 2016, the Company entered into an agreement to lease 8,733 square feet in San Carlos, California. The term of the lease is 54 months subsequent to the commencement date, and total expected rental payments under the lease are expected to be $2.1 million.

On April 28, 2017, the Company entered into a sublease agreement with Teradata US, Inc., pursuant to which the Company agreed to sublease certain office space located adjacent to the Company's headquarters in San Carlos, California. The space consists of approximately 11,449 rentable square feet in the building located in San Carlos, California and will expire on October 31, 2018.

New York Lease

The Company leases office space in New York for a monthly rental of approximately $18,000 a month through July 2017. On June 5, 2017, the Company entered into an agreement whereby the Company will lease office space from August 1, 2017 to July 31, 2018 for approximately $8,000 a month.

The Company recognizes rental expense on the facilities on a straight-line basis over the lease term. Differences between the straight-line rent expense and rent payments are classified as deferred rent liability on the balance sheet. As of June 30, 2017, the Company's future minimum lease payments under non-cancelable operating leases are as follows (in thousands):

Year	Operating Lease Commitments
2017 (remaining six months)	$ 552
2018	1,023
2019	700
2020	495
2021	169
	$ 2,939

Rent expense was $0.2 million and $0.1 million for the three months ended June 30, 2017 and 2016, respectively and was $0.5 million and $0.2 million for the six months ended June 30, 2017 and 2016, respectively.

NOTE 10. RELATED PARTY TRANSACTIONS

Sanford J. Hillsberg, one of the Company’s directors, is an attorney at TroyGould PC. TroyGould PC rendered and continues to render legal services to the Company. The Company paid TroyGould PC $0.2 million and $0.2 million for the three months ended June 30, 2017 and 2016, respectively and $0.4 million and $0.3 million for the six months ended June 30, 2017 and 2016, respectively. Mr. Hillsberg did not directly provide any legal services to the Company during the periods noted. As of June 30, 2017, the Company had $0.0 million in liabilities owing to TroyGould PC related to legal services.

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

In this section, "we," "our," "ours" and "us" refer to Iovance Biotherapeutics, Inc.

This management's discussion and analysis of financial condition as of June 30, 2017 and results of operations for the three and six months ended June 30, 2017 and 2016, should be read in conjunction with management's discussion and analysis of financial condition and results of operations included in our Annual Report on Form 10-K for the year ended December 31, 2016 which was filed with the SEC on March 8, 2017.

Forward-Looking Statements

The discussion below includes forward-looking statements based upon current expectations that involve risks and uncertainties, such as our plans, objectives, expectations and intentions. Actual results and the timing of events could differ materially from those anticipated in these forward-looking statements as a result of a number of factors. We use words such as "anticipate," "estimate," "plan," "project," "continuing," "ongoing," "expect," "believe," "intend," "may," "will," "should," "could," and similar expressions to identify forward-looking statements. All forward-looking statements included in this Quarterly Report are based on information available to us on the date hereof and, except as required by law, we assume no obligation to update any such forward-looking statements. For a discussion of some of the factors that may cause actual results to differ materially from those suggested by the forward-looking statements, please read carefully the information in the "Risk Factors" section in our Form 10-K for the year ended December 31, 2016. The identification in this Quarterly Report of factors that may affect future performance and the accuracy of forward-looking statements is meant to be illustrative and by no means exhaustive. All forward-looking statements should be evaluated with the understanding of their inherent uncertainty.

Background on the Company and Recent Events Affecting our Financial Condition and Operations

We are a clinical-stage biopharmaceutical company focused on the development and commercialization of novel cancer immunotherapy products designed to harness the power of a patient's own immune system to eradicate cancer cells. Our lead program is an adoptive cell therapy utilizing tumor-infiltrating lymphocytes (TIL), which are T cells derived from patients' tumors, for the treatment of metastatic melanoma.

We have an on-going Phase 2 clinical trial of our lead product candidate, LN-144, TIL for the treatment of metastatic melanoma. This three-arm study is enrolling patients with melanoma whose disease has progressed following treatment with at least one systemic therapy. The trial opened for enrollment in 2015 and is currently being conducted at ten sites.

Two studies are active with LN-145 TIL product. Patients with recurrent, metastatic, or persistent cervical carcinoma are being enrolled in the C-145-04 trial and patients with metastatic squamous cell carcinoma of the head and neck in C-145-03.

On April 17, 2017, we entered into a Strategic Alliance Agreement (the "SAA") with M.D. Anderson Cancer Center ("M.D. Anderson") under which we and M.D. Anderson agreed to conduct clinical and preclinical research studies. Initially, we plan to conduct multi-arm clinical trials to evaluate tumor-infiltrating lymphocyte, or TIL, technology in several different cancers using two different TIL manufacturing processes. We have agreed in the SAA to provide total funding not to exceed approximately $14.2 million for the performance of the multi-year studies under the SAA.

Results of Operations

Revenues

As a development stage company that is currently engaged in the development of novel cancer immunotherapy products, we have not yet generated any revenues from our biotechnology business or otherwise since our formation. We currently do not anticipate that we will generate any revenues during 2017 from the sale or licensing of our products. Our ability to generate revenues in the future will depend on our ability to complete the development of our product candidates and to obtain regulatory approval for them.

Research and Development (in thousands)

	Three months ended June 30,		Increase (Decrease)		Six months ended June 30,		Increase (Decrease)	
	2017	2016	$	%	2017	2016	$	%
Research and development	$ 19,653	$ 4,463	15,190	340%	$ 36,276	$ 8,655	27,621	319%
Stock-based compensation expense included in research and development expense	1,896	593	1,303	220%	3,283	1,178	2,105	179%

Research and development expense for the three months ended June 30, 2017 increased by $15.2 million, or 340%, compared to the three months ended June 30, 2016, inclusive of stock-based compensation. The increase was primarily attributable to a $2.5 million increase in payroll and related expenses primarily due to an increase in headcount, a $6.1 million increase in drug manufacturing costs, a $2.4 million increase in costs related to our clinical trials, an increase of $2.9 million related to consultants and outside services contracted with to perform research and development activities on our behalf, and $1.3 million increase in stock-based compensation expense.

Research and development expense for the six months ended June 30, 2017 increased by $27.6 million, or 319%, compared to the six months ended June 30, 2016, inclusive of stock-based compensation. The increase was primarily attributable to a $4.9 million increase in payroll and related expenses primarily due to an increase in headcount, an $11.7 million increase in drug manufacturing costs, a $4.1 million increase in costs related to our clinical trials, an increase of $4.8 million related to consultants and outside services contracted with to perform research and development activities on our behalf, and $2.1 million increase in stock-based compensation expense.

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. We expect our research and development expenses to increase over the next several years as we continue to conduct our clinical trial for our products and as we increase our research and development efforts in other cancer indications. However, 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 our clinical trials and development of our product candidates will depend on a number of factors that include, but are not limited to, the number of patients that enroll in the trial, per patient trial costs, number of sites included in the trial, discontinuation rates of patients, duration of patient follow-up, efficacy and safety profile of the product candidate, and the length of time required to enroll eligible patients. Additionally, the probability of success for our product candidate will depend on a number of factors, including competition, manufacturing capability and cost efficiency, and commercial viability.

General and Administrative (in thousands)

	Three months ended June 30,		Increase (Decrease)		Six months ended June 30,		Increase (Decrease)	
	2017	2016	$	%	2017	2016	$	%
General and administrative	$ 3,928	$ 7,264	(3,336)	-46%	$ 8,188	$ 10,082	(1,894)	-19%
Stock-based compensation expense included in general and administrative	1,397	4,764	(3,367)	-71%	3,306	5,958	(2,652)	-45%

General and administrative expense for the three months ended June 30, 2017 decreased by $3.3 million, or 46%, compared to the three months ended June 30, 2016, inclusive of stock-based compensation. The change was primarily attributable to a $3.4 million decrease in stock-based compensation expense, driven by expense incurred in connection with the separation of the previous CEO from the Company in June 2016, a $0.3 million decrease in payroll, offset by a $0.3 million increase in consulting and legal related expenses.

General and administrative expense for the six months ended June 30, 2017 decreased by $1.9 million, or 19%, compared to the six months ended June 30, 2016, inclusive of stock-based compensation. The changed was primarily attributable to a $2.7 million decrease in stock-based compensation expense, driven by expense incurred in connection with the separation of the previous CEO from the Company in June 2016, a $0.3 million decrease in payroll, offset by a $1.1 million increase in consulting and legal related expenses.

General and administrative expenses include personnel costs for our employees engaged in general and administrative activities, legal fees, audit and tax fees, consultants and professional services, and general corporate expenses.

Interest Income (in thousands)

	Three months ended June 30,		Increase (Decrease)		Six months ended June 30,		Increase (Decrease)	
	2017	2016	$	%	2017	2016	$	%
Interest Income	$ 204	$ 164	40	24%	$ 403	$ 290	113	39%

Interest income results from our interest-bearing cash and investment balances. Interest income for the three and six months ended June 30, 2017 increased compared to the three and six months ended June 30, 2016 due to funds received in June 2016 related to our equity financing in June 2016.

Net Loss

We had a net loss of $23.4 million and $44.1 million for the three and six months ended June 30, 2017, respectively. The increase in our net loss during 2017 is due to the continued expansion of our research and development activities, increased clinical trials and manufacturing activities, and the overall growth of our corporate infrastructure. We anticipate that we will continue to incur net losses in the future as we further invest in our research and development activities, including our clinical development.

Liquidity and Capital Resources

Corporate Capitalization . As of June 30, 2017, we had outstanding 62,680,390 shares of our $0.000041666 par value common stock, 1,694 shares of our $0.001 par value Series A Convertible Preferred Stock, and 7,946,673 shares of our $0.001 par value Series B Convertible Preferred Stock. The outstanding shares of Series A Convertible Preferred Stock are currently convertible into 847,000 shares of our common stock, and the outstanding shares of Series B Convertible Preferred Stock are currently convertible into 7,946,673 shares of our common stock. The shares of Series A Convertible Preferred Stock and Series B Convertible Preferred Stock do not have voting rights or accrue dividends.

Our major sources of funding have been proceeds from various public and private offerings of our equity securities (both common stock and preferred stock), option and warrant exercises, and interest income.

We are currently engaged in the development of therapeutics to fight cancer. We do not have any commercial products and have not yet generated any revenues from our biopharmaceutical business. We currently do not anticipate that we will generate any revenues during 2017 from the sale or licensing of any products. We have incurred a net loss of $44.1 million for the six months ended June 30, 2017 and used $36.3 million of cash in our operating activities during the six months ended June 30, 2017. As of June 30, 2017, we had $129.0 million of cash and cash equivalents and short-term investments, stockholders' equity of $129.0 million and had working capital of $126.6 million.

We expect to further increase our research and development activities, which will increase the amount of cash we will use during 2017. Specifically, we expect increased spending on clinical trials, research and development activities, higher payroll expenses as we increase our professional and scientific staff and continued and expansion of manufacturing activities. However, based on the funds we have available; we believe that we have sufficient capital to fund our anticipated operating expenses for at least 12 months from the date of filing this quarterly report.

Off-Balance Sheet Arrangements

At June 30, 2017, we had no obligations that would require disclosure as off-balance sheet arrangements.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our condensed financial statements and accompanying notes, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. When making these estimates and assumptions, we consider our historical experience, our knowledge of economic and market factors and various other factors that we believe to be reasonable under the circumstances. Actual results may differ under different estimates and assumptions.

The accounting estimates and assumptions discussed in this section are those that we consider to be the most critical to an understanding of our financial statements because they inherently involve significant judgments and uncertainties. There were no significant changes to our critical accounting policies from those disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

Inflation

Inflation and changing prices have had no effect on our continuing operations over our two most recent fiscal years.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Our exposure to market risk is limited primarily to interest income sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because a significant portion of our investments are in short-term debt securities issued by the U.S. government, corporations and institutional money market funds. The primary objective of our investment activities is to preserve principal. Due to the nature of our marketable securities, we believe that we are not exposed to any material market risk. We do not have any derivative financial instruments or foreign currency instruments. If interest rates had varied by 10% in the three and six months ended June 30, 2017, it would not have had a material effect on our results of operations or cash flows for that period.

Item 4. Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Exchange Act as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on this evaluation, our principal executive officer and our interim principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this Quarterly Report.

Changes in Internal Controls Over Financial Reporting

There have not been any changes in the Company's internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended June 30, 2017 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

Class Action Lawsuits. On April 10, 2017, the SEC announced settlements with us and with other public companies and unrelated parties in the *In the Matter of Certain Stock Promotion* investigation. Our settlement with the SEC is consistent with our previous disclosures (including in our Form 10-K that we filed with the SEC on March 9, 2017). On April 14 2017, a purported shareholder filed a class action complaint in the United States District Court, Northern District of California for violations of the federal securities laws (*Leonard DeSilvio v. Lion Biotechnologies, Inc., et al., case no: 3:17cv2086*) against our company and three of our former officers and directors. On April 19, 2017, a second class action complaint *(Amra Kuc vs. Lion Biotechnologies, Inc., et al., case no: 3:17cv2086*) was filed in the same court. Both complaints allege, among other things, that the defendants violated the federal securities laws by making materially false and misleading statements, or by failing to make certain disclosures, regarding the actions taken by Manish Singh and our former investor relations firm that were the subject of the *In the Matter of Certain Stock Promotions* SEC investigation. On July 20, 2017 the plaintiff in the *Kuc* case filed a notice to voluntarily dismiss that case. The Court entered an order dismissing the *Kuc* complaint on July 21, 2017. On July 26, 2017, the court appointed a movant as lead plaintiff.

We intend to vigorously defend against the foregoing complaints. Based on the very early stage of the litigation, it is not possible to estimate the amount or range of possible loss that might result from an adverse judgment or a settlement of these matters.

Item 1A. Risk Factors

Information regarding risk factors appears under "Risk Factors" included in Item 1A, Part I, and under Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, of our Annual Report on Form 10-K for the year ended December 31, 2016. Except as follows, there have been no material changes from the risk factors previously disclosed in the above-mentioned periodic report.

We are, and in the future may be, subject to legal or administrative actions that could adversely affect our results of operations and our business.

On April 10, 2017, the SEC announced settlements with us and with other public companies and unrelated parties in the *In the Matter of Certain Stock Promotions* investigation. Our settlement with the SEC is consistent with our previous disclosures (including in our Form 10-K that we filed with the SEC on March 9, 2017). On April 14, 2017, a purported shareholder filed a class action complaint in the United States District Court, Northern District of California for violation of Federal securities laws (*Leonard DeSilvio v. Lion Biotechnologies, Inc., et al., case no: 3:17cv2086*) against our company and three of our former officers and directors. On April 19, 2017, a second class action complaint *(Amra Kuc vs. Lion Biotechnologies, Inc., et al., case no: 3:17cv2086*) was filed in the same court. Both complaints allege, among other things, that the defendants violated the federal securities laws by making materially false and misleading statements, or by failing to make certain disclosures, regarding the actions taken by Manish Singh and our former investor relations firm that were the subject of the *In the Matter of Certain Stock Promotions* SEC investigation. Due to the duplicative nature of the two complaints, on July 20, 2017 the plaintiff in the *Kuc* case filed a notice to voluntarily dismiss that case. The Court entered an order dismissing the *Kuc* complaint on July 21, 2017. On July 26, 2017, the court appointed a movant as lead plaintiff.

We intend to vigorously defend against the foregoing complaints. Litigation is inherently uncertain, and it is not possible to estimate the amount or range of possible loss that might result from an adverse judgment or a settlement of these matters. We could incur substantial unreimbursed legal fees, settlements, judgments and other expenses in connection with these or other legal and regulatory proceedings that may not qualify for coverage under, or may exceed the limits of, our applicable directors and officers liability insurance policies and could have a material adverse effect on our financial condition, liquidity and results of operations. These matters also may distract the time and attention of our officers and directors or divert our other resources away from our ongoing commercial and development programs. An unfavorable outcome in any of these matters could damage our business and reputation or result in additional claims or proceedings against us.

Provisions in our corporate charter documents and under Delaware law may prevent or frustrate attempts by our stockholders to change our management and hinder efforts to acquire a controlling interest in us, and the market price of our common stock may be lower as a result.

There are provisions in our certificate of incorporation and amended and restated bylaws that may make it difficult for a third party to acquire, or attempt to acquire, control of our company, even if a change in control was considered favorable by you and other stockholders. For example, our board of directors will have the authority to issue up to 50,000,000 shares of preferred stock and to fix the price, rights, preferences, privileges, and restrictions of the preferred stock without any further vote or action by our stockholders. The issuance of shares of preferred stock may delay or prevent a change in control transaction. As a result, the market price of our common stock and the voting and other rights of our stockholders may be adversely affected. An issuance of shares of preferred stock may result in the loss of voting control to other stockholders.

In addition, we are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, which regulates corporate acquisitions by prohibiting Delaware corporations from engaging in specified business combinations with particular stockholders of those companies. These provisions could discourage potential acquisition proposals and could delay or prevent a change in control transaction. They could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that investors are willing to pay for our stock.

Our certificate of incorporation designates the state or federal courts located in the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our certificate of incorporation provides that, subject to limited exceptions, the state and federal courts located in the State of Delaware will be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (3) any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our amended and restated bylaws, or (4) any other action asserting a claim against us that is governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our certificate of incorporation described above. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage such lawsuits against us and our directors, officers, and employees. Alternatively, if a court were to find these provisions of our certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business and financial condition.

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

Nothing to report.

Item 3. Defaults Upon Senior Securities.

Nothing to report.

Item 4. Mine Safety Disclosures

Nothing to report.

Item 5. Other Information.

Nothing to report.

Item 6. Exhibits

Exhibit Number	Description of Exhibit
2.1	Plan of Conversion (incorporated herein by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K filed with the Commission on June 2, 2017.)
3.1	Articles of Conversion (incorporated herein by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K filed with the Commission on June 2, 2017).
3.2	Certificate of Conversion (incorporated herein by reference to Exhibit 3.2 of Registrant's Current Report on Form 8-K filed with the Commission on June 2, 2017.)
3.3	Certificate of Incorporation of Registrant (incorporated herein by reference to Exhibit 3.3 of Registrant's Current Report on Form 8-K filed with the Commission on June 2, 2017.)
3.4	Certificate of Designations of Rights, Preferences and Privileges of Series A Convertible Preferred Stock (incorporated herein by reference to Exhibit 3.4 of Registrant's Registration Statement on Form S-3 filed with the Commission on July 31, 2017.)
3.5	Certificate of Designations of Rights, Preferences and Privileges of Series B Preferred Stock (incorporated herein by reference to Exhibit 3.5 of Registrant's Registration Statement on Form S-3 filed with the Commission on July 31, 2017.)
3.6	Certificate of Amendment of Certificate of Incorporation of Registrant (incorporated herein by reference to Exhibit 3.1 of Registrant's Current Report on Form 8-K filed with the Commission on June 27, 2017.)
3.7	Bylaws of Registrant (incorporated herein by reference to the Exhibit 3.4 to Registrant's Current Report on Form 8-K filed with the Commission on June 2, 2017).
3.8	Amendment to the Bylaws of Registrant (incorporated herein by reference to the Exhibit 3.2 to Registrant's Current Report on Form 8-K filed with the Commission on June 27, 2017).
10.1	Strategic Alliance Agreement, between Lion Biotechnologies, Inc. and The University of Texas M. D. Anderson Cancer Center, effective April 17, 2017*
10.2	Sublease Agreement, entered into as of April 28, 2017, between Lion Biotechnologies, Inc. and Teradata US, Inc. (incorporated herein by reference from Registrant's Current Report on Form 8-K filed with the Commission on May 1, 2017.)
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14 and Rule 15d-14(a), promulgated under the Securities and Exchange Act of 1934, as amended.
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14 and Rule 15d 14(a), promulgated under the Securities and Exchange Act of 1934, as amended.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chief Executive Officer).
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chief Financial Officer).
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

* Certain portions of the Exhibit have been omitted based upon a pending request for confidential treatment filed by us with the SEC . The omitted portions of the Exhibit have been separately filed by us with the SEC.

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.

Iovance Biotherapeutics, Inc.

August 3, 2017 By: /s/ Maria Fardis
Maria Fardis
Chief Executive Officer (Principal Executive Officer)

August 3, 2017 By: /s/ Franco Valle
Franco Valle
Controller, Interim Principal Financial Officer and Principal Accounting Officer

Exhibit 10.1

Text Marked By [* * *] Has Been Omitted Pursuant To A Request For Confidential Treatment And Was Filed Separately With The Securities And Exchange Commission.

STRATEGIC ALLIANCE AGREEMENT
Effective Date: April 17, 2017

THIS STRATEGIC ALLIANCE AGREEMENT (this "Agreement"), is entered into by and between Lion Biotechnologies, Inc., with a place of business located at 999 Skyway Road, Suite 150, San Carlos, CA 94070 ("LBIO"), and The University of Texas M. D. Anderson Cancer Center, with a place of business located at 1515 Holcombe Blvd., Houston, TX 77030 ("MD Anderson"), a member institution of The University of Texas System ("System"), as of the date set forth above (the "Effective Date"). MD Anderson and LBIO are hereinafter individually referred to as a "Party" and are collectively known as the "Parties".

WHEREAS, as a comprehensive cancer research, treatment, and educational center, MD Anderson undertakes research and experimental activities in a variety of disciplines; and

WHEREAS, the Parties hereby wish to establish a collaboration ("Collaboration") with respect to the performance of one or more research studies to be conducted pursuant to this Agreement (each such study, a "Study", and collectively the "Studies", and the activities to be performed with respect to the Studies collectively, the "Research").

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the receipt and sufficiency of which are hereby acknowledged, LBIO and MD Anderson hereby agree to be legally bound as follows:

1. **Governance.**

1.1 Joint Steering Committee. The Parties will establish a joint steering committee ("JSC") of equal representation, comprised of three members from each Party, with the members of each Party collectively having one vote on all matters to be decided upon by the JSC. Each Party can appoint and replace its members in the JSC at its own discretion through timely written notice to the other Party. The Principal Investigators for each Study (as defined hereinafter) shall attend each JSC meeting, except in the event of exigent circumstances that do not permit such attendance.

1.2 JSC Meetings. The JSC will have meetings (either in person, by teleconference or via electronic means) at least quarterly. At least one meeting per year will be conducted in person or by videoconference (including the kick-off meeting), with the location alternating between a site a selected by LBIO and a site selected by MD Anderson. LBIO will choose the location of the first such in-person meeting. Subject to Section 1.4 below, the JSC will decide on matters by unanimous vote; provided, however, that no action may lawfully be taken at any meeting unless at least two members from each Party (including for this purpose any proxy member appointed as provided below) are present at the meeting. If a member of the JSC is unable to attend a meeting, he or she may appoint, in writing, a proxy to participate and vote in his or her stead.

1.3 JSC Responsibilities. The main task of the JSC will be to oversee the Collaboration. In order to achieve the objectives of the Collaboration, the JSC will oversee each Study under the Collaboration. The JSC will provide technical, scientific, clinical, and regulatory guidance regarding the Studies and will be responsible for monitoring progress of the Studies. In addition, the JSC will be responsible for coordinating resolution of problems arising in the Studies or in the Collaboration as a whole. Additional members can be invited by the JSC on a case by case basis should discussion of certain topics require so; provided, that such members will be subject to obligations of confidentiality and non-use at least as strict as those set forth in Section 5 below.

1.4 Dispute Resolution. Decisions regarding Study design, changes and/or additions to the initially-agreed Protocols must be unanimous, with each Party exercising one vote each, and in the absence of such unanimity the status quo shall be maintained. For all other matters before the JSC, a unanimous decision, with each Party exercising one vote, is required; provided, that, if unanimity cannot be achieved regarding such other matters, then LBIO's chief executive officer may make the decision on behalf of the JSC, provided that LBIO's chief executive officer will first make a good faith effort to consult with a designated executive at MD Anderson to resolve such matter.

2. **Performance of Studies.**

2.1 Studies.

(a) During the Term (as defined below), LBIO and MD Anderson may periodically agree to collaborate with respect to the performance of one or more Studies. In connection with each Study, the Parties shall execute, as applicable, a Study-specific clinical trial agreement or a pre-clinical work order where a clinical trial is not being conducted (each, a "Study Order"). Study Orders shall be numbered sequentially and, when executed, appended to this Agreement and made a part hereof. The first three Study Orders, when completed, will be incorporated into this Agreement as Exhibit I, Exhibit II, and Exhibit III, and the Studies that are the subject of such Study Orders are also referred to herein as the "Initial Studies". Each Study Order shall detail the specifics of the Study to be performed under such Study Order including (i) a detailed Study-specific protocol ("Protocol") that will be developed jointly by the Parties working together in good faith and (ii) any Study-specific resources or support to be provided by LBIO, including any financial consideration ("Collaboration Funding", but excluding financial support associated with the Initial Studies to the extent addressed in Section 4 of this Agreement). Any revisions or amendments to a Study Order or Protocol shall be implemented, if at all, solely in accordance with the terms of the relevant Study Order and shall be subject to the approval of the JSC. The Parties acknowledge and agree that MD Anderson will be the "sponsor" of the Initial Studies that are clinical studies, as defined at 21 C.F.R. §§ 50.3(f) and 312.3(b), and will be the holder of the investigational new drug applications (INDs) submitted to the FDA (as defined hereinafter) for such Initial Studies.

(b) In the event of any conflict of any terms of this Agreement and the terms of a Study Order, the terms of this Agreement shall govern, unless the Study Order specifically and expressly supersedes this Agreement with respect to a specific term, and then only with respect to the particular Study Order and specific term. If there is any discrepancy or conflict between the terms contained in a Protocol and this Agreement and/or the relevant Study Order, the terms of the Protocol shall govern and control with respect to clinical matters and the terms of this Agreement and/or the relevant Study Order shall govern and control with respect to all other matters (e.g., legal and financial matters).

2.2 Investigators.

(a) Principal Investigator. Each Study Order will identify the individual that will serve as the "Principal Investigator" for the relevant Study at MD Anderson and shall be responsible for MD Anderson's administration and supervision of its portion of such Study. If the originally named Principal Investigator becomes unable or unwilling to continue a Study for any reason, MD Anderson shall propose a substitute Principal Investigator with comparable qualifications within two business days of MD Anderson becoming aware of such event. If the proposed candidate is not available or is not acceptable to LBIO, LBIO may terminate the applicable Study in accordance with Section 8.3(ii).

(b) MD Anderson and Principal Investigator may appoint one or more collaborating physicians ("Sub-Investigators") to participate in a Study. Such Sub-Investigators shall work under the supervision of, shall report to and be the sole responsibility of Principal Investigator, and Principal Investigator and MD Anderson shall each ensure that all Sub-Investigators undertake all activity related to the Study in accordance with the terms of this Agreement, the applicable Study Order, and the Protocol.

(c) On a Study Order-by-Study Order basis, in the event that a Principal Investigator leaves or is removed from MD Anderson (or is otherwise unwilling or unavailable to direct the applicable Study in accordance with this Agreement and the applicable Study Order), then MD Anderson shall, as soon as practicable but in any event within two (2) business days of such event, provide written notice of such event to LBIO. Any subsequently appointed principal investigator must be approved, in writing in advance, by LBIO and such new principal investigator shall be required to agree to all the terms and conditions of the applicable Study Order and this Agreement and to sign each such document as evidence of such agreement (although failure to so sign will not relieve such new principal investigator from abiding with all the terms and conditions of the applicable Study Order and this Agreement). If LBIO does not approve of the new principal investigator, or the new principal investigator does not sign this Agreement, then LBIO may terminate the applicable Study Order in accordance with Section 8.3(ii).

2.3 Performance; Compliance with Law.

(a) MD Anderson shall, and shall cause each of its employees, agents, contractors, and subcontractors performing Research activities or other obligations under this Agreement, including the Principal Investigator (collectively, "Representatives") to, conduct such activities, and use, store and handle all materials used in the performance of activities under this Agreement and each Study Order, or cause the same to be done, in accordance with (i) all applicable laws, regulations, and guidelines, including, to the extent applicable, the Federal Food, Drug, and Cosmetic Act ("FFCDA"); the anti-kickback and related provisions of the Social Security Act; the Public Health Services Act; the regulations promulgated by the Food and Drug Administration ("FDA"), including 21 C.F.R. Parts 50, 56, and 58, and, with respect to clinical Studies, the requirements of the Statement of Investigator, FDA Form 1572 (as described in 21 312.53), the terms of which are incorporated by reference into any Study Order pertaining to a clinical Study (and the Principal Investigator for any such clinical Study shall complete, sign, and deliver a Form 1572 to LBIO prior to the commencement of such Study); the United States Health Insurance Portability and Accountability Act of 1996, as amended by the HITECH Act, including the Standards for Privacy of Individually Identifiable Health Information; the EU Data Protection Directive; and all other applicable privacy, security and data protection laws (collectively, this sub-clause (i), "Laws"), and, as applicable, the quality standards of "Good Clinical Practice" (which term shall mean generally accepted good clinical practices including those set out in the current version of the Declaration of Helsinki and the International Conference on Harmonization Guidelines for Good Clinical Practice in force from time to time and FDA's most recent guidance and regulations concerning current Good Clinical Practice), (ii) the provisions of this Agreement (including each applicable Study Order and Protocol), and (iii) all written instruction from LBIO, as well as MD Anderson's internal policies and procedures to the extent they do not conflict with the foregoing subsections (i) and (ii).

(b) LBIO is a United States corporation subject to the provisions of the Foreign Corrupt Practices Act (the "FCPA"). Under the FCPA it is unlawful to pay or to offer to pay anything of value, directly or indirectly, to foreign government officials, government employees, political candidates, or political parties, or to persons or entities who will offer or give such payments to any of the foregoing, in order to obtain or retain business or to secure an improper commercial advantage for LBIO. MD Anderson shall not, and MD Anderson shall ensure that its Representatives do not, take or permit any action, including paying or transferring anything of value, directly or indirectly, to any official or other person to influence any decision to obtain or retain business or gain an advantage in the conduct of business, or to induce such official or other person to perform a function in violation of any Laws, that will either constitute a violation under, or cause LBIO to be in violation of, the provisions of the FCPA or applicable local bribery and corruption Laws.

(c) MD Anderson shall register each Study that is a clinical study with the relevant governmental authorities and government websites (including http://www.clinicaltrials.gov) and make all updates as required under the Laws, and shall identify LBIO as a financial collaborator (e.g., a "Collaborator" for the purposes of www.clinicaltrials.gov) in such registrations.

(d) To the extent required by Law, MD Anderson and Principal Investigator shall be responsible for ensuring that the Research and all applicable documents, including any Protocol and informed consent and authorization forms are properly approved by applicable regulatory authorities and an Institutional Review Board ("IRB"). As may be required by Law, and with respect to any given applicable Study hereunder, MD Anderson and Principal Investigator shall further be responsible for making all reports and obtaining the continuing approval from the applicable IRB. Prior to making any submission to an IRB with respect to any given applicable Study hereunder (including a Protocol, and information to be provided to potential Study subjects including the informed consent and HIPAA authorization, and as applicable, the Case Report Forms ("CRFs") or supporting source documentation), MD Anderson shall provide the proposed submission to LBIO for LBIO's review and approval. MD Anderson shall promptly further provide LBIO with documentation of the IRB's initial and continuing review and approval with respect to any given applicable Study hereunder, as well as any other communications and/or interactions with the IRB (summaries in the case of oral interactions and/or communications) that is related to or which may impact the Research, prior to the commencement of the Research and promptly thereafter. In the event MD Anderson's IRB requires changes in any Protocol, informed consent or related forms for a Study after the Effective Date of the applicable Study Order, LBIO shall be advised in advance and all such modifications must be approved in advance and in writing by the JSC under this Agreement. MD Anderson and Principal Investigator shall not modify a Study described in a Protocol without the prior written approval of the JSC.

(e) MD Anderson and/or Principal Investigator shall be responsible for reporting and tracking of all adverse events with respect to a Study ("AEs") in compliance with all Laws and each applicable Protocol and Principal Investigator shall be responsible for updating all AEs, including any expedited safety reports. MD Anderson and LBIO will share information with each other of any findings that may impact the safety of a Study Drug including as Study Drug safety may adversely affect the health and safety of any Study subject, influence the conduct of a Study, alter an IRB's approval to continue a Study, or affect the willingness of a Study subject to continue participation in the Study. Principal Investigator and MD Anderson shall notify LBIO within twenty-four (24) hours after learning of any serious AE and any special situation report (both as defined in the applicable Protocol) incurred during or as the result of the Study, and provide a written confirmation report of such individual serious adverse event and special situation report promptly thereafter, as well as a monthly listing of all such serious adverse events and special situation reports, by electronic mail to: lionbiosafety@lionbio.com. LBIO shall have the ability to request additional information related to any such safety finding, serious AE or special situation report, if applicable, thereafter. Additionally, MD Anderson and/or Principal Investigator will promptly provide LBIO with all information in their possession or control as may be needed to assist LBIO in the identification and resolution of problems or unexpected occurrences involving the Study Drug or its use in the Study.

2.4 Facilities. MD Anderson shall cause its Representatives to perform the Research only at the facility(ies) identified in the applicable Study Order (the "Facility(ies)"). MD Anderson may not utilize any facility, other than the Facility(ies), for performing any portion of the Research without obtaining LBIO's prior written consent to do so. MD Anderson shall maintain, or cause to be maintained, the Facility(ies), all personal property, equipment, machinery, excipients, materials, systems, intangibles, intellectual property and contract rights in use at the Facility(ies) free of defects, except for defects attributable to wear and tear consistent with the age and usage of such assets, and except for such defects as do not and will not, in the aggregate, materially impair the ability to use such assets in connection with the Research.

2.5 No Inducement. MD Anderson agrees that LBIO's support of the Research is not conditioned on the value or volume of business generated between the Parties and is not being provided or received as a reward or in exchange for recommending, prescribing, dispensing, purchasing, supplying, selling, administering, referring, arranging for, or ordering any product that is manufactured, sold, or distributed by LBIO, or to induce recommending, prescribing, dispensing, purchasing, supplying, selling, administering, referring, arranging for, or ordering any product that is manufactured, sold, or distributed by LBIO in the future.

3. Materials.

3.1 Study Materials and Equipment. Unless otherwise provided by this Agreement (including as expressly set forth in a Study Order), Principal Investigator shall conduct the Research with MD Anderson's materials and equipment. MD Anderson shall be responsible for the acquisition, purchasing, replacement, repair, maintenance, and calibration, to the extent applicable, of all materials and equipment, unless otherwise provided by this Agreement (including as expressly set forth in a Study Order), necessary for MD Anderson to conduct the Research. LBIO shall have no role, responsibilities, and or liability with regard to any materials and equipment necessary for MD Anderson and Principal Investigator to conduct the Research, except as provided in this Agreement (including as expressly set forth in a Study Order).

3.2 Informed Consent. MD Anderson shall ensure that all patients from whom Patient Materials (as defined below) were obtained, provided their informed consent and authorization for MD Anderson's and Principal Investigator's transfer of the applicable Patient Materials, data, and information to LBIO as called for in any applicable Study Order, LBIO's use of Patient Materials, data, and information, and LBIO's further transfer of the Patient Materials, data, and information to governmental or regulatory authorities and other third parties, as applicable. Upon LBIO's request, MD Anderson shall provide LBIO with copies of the patient informed consent and authorization forms for LBIO to confirm the provisions of this Section 3.2.

3.3 LBIO Materials.

(a) "Material" shall mean the tangible materials, Patient Materials (as defined below) and equipment described in an exhibit to a given Study Order (such exhibit, if provided, the "Materials Exhibit"). The Parties will amend a given Materials Exhibit from time to time as additional Materials are provided by or to LBIO in connection with a given Study Order. The Parties shall provide, or cause to be provided, Materials, and rights with respect to associated intellectual property, to each other in the quantities described in the applicable Study Order (or if no such quantities are described, in reasonable quantities) and at the times set forth in the applicable Study Order (or if no such times are set forth, as soon as reasonably practicable and necessary after the effective date of the applicable Study Order). All Materials supplied to MD Anderson by or on behalf of LBIO shall, as between LBIO and MD Anderson, remain the exclusive property of LBIO.

(b) THE MATERIALS PROVIDED TO INSTITUTION BY LBIO ARE PROVIDED BY LBIO ON AN "AS IS" BASIS. LBIO HEREBY DISCLAIMS ANY WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE MATERIALS, INCLUDING ANY WARRANTIES OF TITLE, INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO OFFICER, EMPLOYEE, AGENT OR REPRESENTATIVE OF LBIO HAS ANY AUTHORITY TO BIND LBIO TO ANY AFFIRMATION, REPRESENTATION OR WARRANTY CONCERNING THE MATERIALS, EXCEPT AS SET EXPRESSLY FORTH HEREIN. THE MATERIALS PROVIDED TO LBIO BY INSTITUTION ARE PROVIDED BY INSTITUTION ON AN "AS IS" BASIS. INSTITUTION HEREBY DISCLAIMS ANY WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE MATERIALS, INCLUDING ANY WARRANTIES OF TITLE, INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO OFFICER, EMPLOYEE, AGENT OR REPRESENTATIVE OF INSTITUTION HAS ANY AUTHORITY TO BIND INSTITUTION TO ANY AFFIRMATION, REPRESENTATION OR WARRANTY CONCERNING THE MATERIALS, EXCEPT AS SET EXPRESSLY FORTH HEREIN.

(c) The Materials provided by or on behalf of LBIO shall only be used as necessary to conduct the Research, in accordance with the Research Plan, this Agreement, all written instructions from LBIO and all Laws and not for any other uses or activities whatsoever, including in connection with research for any third person or entity. MD Anderson shall maintain control over Materials received by it from or on behalf of LBIO hereunder and shall not transfer any portion of such Materials to any third party for any purpose other than the purposes of performing its obligations under, and in accordance with, this Agreement, the Research Plan, all written instructions from LBIO and all Laws. MD Anderson shall maintain complete and accurate records relating to the disposition of all Materials provided by or on behalf of LBIO. MD Anderson shall return to LBIO all unused supplies of Materials provided by or on behalf of LBIO in accordance with Section 8.4 or at LBIO's earlier request. MD Anderson shall have no right to provide samples of the Materials provided by or on behalf of LBIO (or products created thereby) to any person or entity.

3.4 Patient Materials. "Patient Materials" shall mean those certain biological materials, and derivatives thereof and related patient data and information, received from individual patients and described in an applicable Materials Exhibit. Without limiting Section 3.3, MD Anderson shall further handle, transport, use and store Patient Materials exclusively at the Facility(ies) or otherwise in accordance with this Agreement, unless otherwise requested by LBIO in writing, and at all times strictly in accordance with (a) MD Anderson's standards of security and confidentiality and (b) all applicable privacy, security and data protection Laws (including the United States Health Insurance Portability and Accountability Act of 1996, as amended by the HITECH Act, including the Standards for Privacy of Individually Identifiable Health Information, and the EU Data Protection Directive).

4. **Certain Financial Matters.**

4.1 Initial Funding. LBIO agrees to commit funding in an amount not to exceed $14,211,864.00 for the performance of the Studies during the Term (collectively, "Initial Funding"), with the Initial Funding specifically allocated as follows: (a) $[* * *] for an upfront payment, and a minimum of $[* * *] for enrollment and treatment of a minimum of 40 patients in the Study described in Exhibit I (i.e., the Minimum Enrollment Target as defined in Exhibit 1) or up to $[* * *] (an "Individual Study Budget") for enrollment and treatment of up to 60 patients in the Study described in Exhibit I (i.e., the Maximum Enrollment Target as defined in Exhibit 1); (b) $[* * *] (which shall also be considered an Individual Study Budget) for enrollment, manufacturing of product, and treatment of 30 patients in the Study described in Exhibit II; and (c) $[* * *] for the Study described in Exhibit III. LBIO shall pay the Initial Funding in accordance with Section 4.3. For clarity, the Initial Funding is Collaboration Funding. MD Anderson agrees that all costs of this Collaboration, with the sole exceptions of any costs to supply clinical-grade aldesleukin and 4-1BB agonist for use in the expansion of tumor infiltrating lymphocytes ("TILs"), and in the case of aldesleukin, for use in the treatment of patients, are included in the Initial Funding. Subject to the foregoing exceptions, MD Anderson shall be solely responsible for any costs it incurs in performing the Studies that are in excess of the Initial Funding.

4.2 Collaboration Funding Generally. MD Anderson shall use the Collaboration Funding solely to conduct the applicable Study and MD Anderson shall be responsible for managing cash flow between payments. It is understood and agreed that the Collaboration Funding shall cover all administrative, IRB review, patient recruitment, and all other fees, costs and expenses of MD Anderson and any of its Representatives for the conduct of the Studies or the provision of equipment or services to facilitate the Studies, and that no other form of compensation shall be paid to MD Anderson in connection with the Studies except as otherwise may be specifically and mutually agreed upon by the Parties in writing.

4.3 Payments. LBIO shall pay the Initial Funding to MD Anderson as follows. An upfront payment of $[* * *] (the "Upfront Payment") shall be invoiced by MDACC on the Effective Date. The remainder of the Initial Funding shall be paid as follows:

(a) In the event that the Study Order covers the performance of a clinical trial, funding shall be invoiced based on Study patient enrollment as follows, based on the Maximum Enrollment Target as defined in each Study Order:

Milestone (on Study Order-by-Study Order basis)	**Payment (% of the Individual Study Budget) to be provided in connection with such Study Order***
Enrollment of [* * *]% of the target patient enrollment as set forth in the applicable Protocol	[* * *]%
Enrollment of [* * *]% of the target patient enrollment as set forth in the applicable Protocol	[* * *]%
Enrollment of [* * *]% of the target patient enrollment as set forth in the applicable Protocol	[* * *]%
Enrollment of final patient as set forth in the applicable Protocol	[* * *]%
Receipt by LBIO of both (a) the final clinical study report and (b) all raw clinical data (anonymized and without including any identifying information)	[* * *]%

With respect to Exhibit 1, the Individual Study Budget shall be the one associated with the Minimum Enrollment Target (as defined in Exhibit 1), and in the event that the Parties move to the Maximum Enrollment Target (as defined in Exhibit 1) then this table shall be applied to the incremental additional patients as if the incremental additional patients constitute their own protocol/budget. For example, if LBIO decides to add ten (10) additional patients to the clinical study in Exhibit 1, each patient will be accrued at $[* *] per patient, and LBIO will be invoiced for percentage enrollment of these ten (10) patients based on the table above.

(b) In the event that the Study Order covers activities other than the performance of a clinical trial, a payment schedule will be set forth in the relevant Study Order.

(c) Notwithstanding the foregoing, LBIO may suspend payment if, in LBIO's reasonable opinion after review of the Reports (as defined below), MD Anderson has not been performing the Research diligently and in the manner agreed upon herein.

(d) Upon the occurrence of one of the milestones identified in the table in Section 4.3(a), or described in an applicable Study Order for a non-clinical Study according to Section 4.3(b), MD Anderson shall invoice LBIO for the related payment amount. In each case, invoices shall be itemized, including by reference to Study Order title, and otherwise shall include such supporting documentation as LBIO may reasonably request. LBIO shall pay all undisputed invoices within thirty (30) days of receipt of such invoice.

(e) If the Study described in Exhibit II is not commenced, the portion of the Upfront Payment that would have been applied to that Study ($[* * *]) will be credited by MD Anderson towards the Studies described in Exhibit I and Exhibit III.

(f) All terms and payments of compensation, benefits, and any other conditions of engagement, including payment of taxes, for any person working with Principal Investigator and any other support staff who may be used in the performance of a Study (including any Sub-Investigator) shall be solely a matter between MD Anderson and such individuals. Principal Investigator and any MD Anderson personnel shall not be deemed to be employees of LBIO or entitled to any benefits offered by LBIO to LBIO's employees.

5. **Records and Reports.**

5.1 Records. MD Anderson shall, and shall cause its Representatives to, keep appropriate records of the Research, including laboratory notebooks, in accordance with MD Anderson policies and all Laws, sufficient to properly document the results of the Research and otherwise sufficient to determine identity and dates of inventorship of Inventions (as defined in Section 7.1(a)). MD Anderson shall make such records available to LBIO upon reasonable notice during MD Anderson's normal business hours. LBIO may use the records and Reports (as defined below) for any purpose, including interactions and communications with, and/or submissions and filings to the applicable governmental or regulatory authorities.

5.2 Reports. MD Anderson, through the Principal Investigator, shall provide to LBIO (a) interim written reports regarding the Research, no less than once per calendar quarter, and (b) on Study-by-Study basis, (i) a draft final written Study report within thirty (30) days after completion (or earlier termination) of each such Study and (ii) a final written Study report within thirty (30) days after receipt of LBIO's comments to the draft final written Study report with respect to each such Study, which shall be given by LBIO not later than thirty (30) days after LBIO's receipt of the draft final Study report (collectively, the "Reports"); provided, that, if this schedule of reports differs from the reporting obligations provided in a Study Order, the schedule listed in the Study Order shall be followed. LBIO shall own all Reports and data compilations resulting from the Research, excluding the physical original lab notebooks themselves (but not excluding the data and data compilations contained therein, which shall be deemed to be owned by LBIO) and any patient medical records.

5.3 Electronic Transfer. In addition to MD Anderson's reporting obligations under Section 5.2, no less than once per calendar quarter, MD Anderson shall provide to LBIO an electronic transfer of all data and results (including all raw data and process data) generated through the performance of the Research.

5.4 Other Notifications. During the performance of the Research, MD Anderson shall notify LBIO promptly if the Research reveals any unexpected result or any accident or harm occurs, and shall also comply with any safety notifications required under each Study Order.

6. **Confidentiality and Publications.**

6.1 Confidential Information.

(a) "Confidential Information" means any proprietary or confidential information, technical data, trade secrets or know-how, including research, product plans, products, services, customer lists and customers, markets, software, developments, inventions, processes, formulas, technology, designs, drawings, engineering, marketing, distribution and sales methods and systems, sales and profit figures, finances and other business information disclosed by a Party or its Representatives ("Disclosing Party") to the other Party or its Representatives ("Receiving Party"), whether in writing, orally or by drawings or inspection of documents or other tangible property; provided that: (i) Confidential Information shall not include any of the foregoing items to the extent that (1) they are or have become publicly known and made generally available through no wrongful act of Receiving Party, (2) they were known to Receiving Party prior to disclosure by Disclosing Party, as evidenced by pre-existing written records promptly provided to Disclosing Party by Receiving Party, (3) they were disclosed to Receiving Party without an obligation of confidentiality by a third party having a lawful right to make such disclosure, or (4) they were developed by Receiving Party without use or aid of Disclosing Party's Confidential Information, and (ii) the results of the Research (including the contents of each Report and any Inventions) shall be deemed to be LBIO's Confidential Information, subject to MD Anderson's right to publish any Research data and information as set forth in and in accordance with Section 6.4, MD Anderson's right to use any Inventions (and any Work) as set forth in and in accordance with Section 7.2, and MD Anderson's right to use any Research data and information for internal research, academic, and non-commercial patient care purposes prior to publication or public disclosure and for any purpose thereafter. LBIO shall be deemed the Disclosing Party with respect to such results of the Research, regardless of the Party initially disclosing the same.

(b) Receiving Party shall take reasonable steps to ensure that Disclosing Party's Confidential Information (as defined in Section 6.1(a)) is maintained in confidence, used only for the purpose of exercising rights and performing obligations under this Agreement, and disclosed only to persons and/or entities authorized under this Agreement. As used herein, "reasonable steps" means the steps that Receiving Party takes to protect its own, similar confidential and proprietary information, which shall not be less than a reasonable standard of care. Receiving Party further agrees not to reveal, publish or otherwise disclose Disclosing Party's Confidential Information to any third party without the prior written consent of Disclosing Party as described in Section 6.4 below, however, Receiving Party is permitted to disclose Confidential Information obtained under the terms of this Agreement to its Representatives on a need-to-know basis related to the exercise of rights and performance of its obligations under this Agreement and only if such Representatives are informed by Receiving Party of the confidential nature of such information and are bound by confidentiality obligations consistent with those set forth in this Section 6.1. Receiving Party shall ensure that its Representatives having a need-to-know Disclosing Party's Confidential Information observe these obligations of confidentiality. These obligations of confidentiality and nondisclosure shall remain in effect after the termination or expiration of this Agreement for a period of five (5) years.

(c) Neither Party shall improperly use or disclose to the other Party or any of its directors, officers, employees or agents, any confidential information of any current or former client or other person or entity with whom such Party has an agreement or duty to keep such information confidential, and such Party shall not bring onto the premises of the other Party any such information in any medium unless consented to in writing by such client, person or entity. In the event of a Party's breach of this Section 6.1(c), the breaching Party shall ensure that the other Party may freely and fully utilize the information so disclosed for any and all purposes.

6.2 Required Disclosure of Confidential Information.

(a) If Receiving Party is required by Law or court order to disclose Disclosing Party's Confidential Information, Receiving Party shall give Disclosing Party prompt written notice of such requirement such that Disclosing Party shall have the opportunity to apply for a protective order, injunction or for confidential treatment of such Confidential Information. Receiving Party shall cooperate with Disclosing Party in seeking any Disclosing Party requested protective order, injunction or confidential treatment of such Confidential Information and shall only disclose the minimal amount of such Confidential Information required under Law or court order. Notwithstanding the forgoing, any information disclosed by Receiving Party pursuant to Law or a court order shall remain Confidential Information hereunder, and may not be disclosed under any other circumstances unless and until the Confidential Information so disclosed falls into one of the exceptions set forth in subclauses (1) through (4), inclusive, in Section 6.1(a).

(b) If Principal Investigator is a member of or affiliated with any committee that sets formularies or develops clinical practice guidelines that could influence the prescribing of medicines or is otherwise affiliated with any other healthcare institution, medical committee, or other medical or scientific organization, Principal Investigator will inform the committee of the existence and nature of Principal Investigator's relationship with LBIO under this Agreement. Principal Investigator also agrees to disclose Principal Investigator's relationship with LBIO as needed to comply with any disclosure requirements of any healthcare institution, medical or formulary committee, or other medical or scientific organization with which Principal Investigator is affiliated and agrees to comply with any such entities' recusal or other requirements relating to the relationship with LBIO. This duty to disclose will continue during the term of this Agreement and for two years after its termination

6.3 LBIO Mandatory Disclosures. MD Anderson and Principal Investigator recognize that LBIO may be required under Law, including the Physician Payment Sunshine Act, to report to the relevant governmental or regulatory authorities or publicly disclose information related to this Agreement and/or the Research, including any payments, reimbursements, or other transfers of value made to MD Anderson or Principal Investigator. Nothing herein shall prevent LBIO from making any reports or disclosures required under Law or by a relevant governmental or regulatory authority. Moreover, nothing herein shall prevent LBIO from disclosing any information relating to this Agreement and/or the Research for the purpose of making any regulatory or other submissions, patent applications and pursuing patent prosecution.

6.4 Publications. MD Anderson agrees to provide LBIO with a copy of any manuscript, abstract or other proposed publication or presentation relating to the Research or the Materials (a "Publication"), prior to submission thereof to a publisher or to any third party, and in any case, not less than 45 days prior to any public disclosure, for the purpose of protecting proprietary or intellectual property of LBIO that might be contained in such Publication. Following receipt of such proposed Publication, LBIO shall have the right to cause MD Anderson to (i) withhold publication or other public disclosure thereof for a period of up to 90 days in order to provide LBIO time to obtain appropriate intellectual property protection thereof, and (ii) remove any proprietary, or otherwise confidential, information of LBIO contained in such Publication (excluding Research results). In any event, MD Anderson will not disclose proprietary, or otherwise confidential, information in an "unblinded" manner when it can be done so in a "blinded" manner. In the event of any Publication (including any public presentation relating to the Research or the Materials), MD Anderson agrees to acknowledge LBIO and/or give credit to LBIO scientists, as scientifically appropriate, based on any contribution they may have made to the work which shall be in accordance with any relevant policies and guidelines of the publication, presentation forum, as well as policies and guidelines of general applicability, such as the International Committee of Medical Journal Editors recommendations. In addition, to the extent that it is legally able to do so, MD Anderson hereby grants LBIO a royalty-free right and license to use and reproduce any Publication. LBIO shall be acknowledged as a financial collaborator of the Study reported in a Publication.

6.5 Unauthorized Disclosure. Receiving Party shall be responsible for any breach of this Section 6 by any of its Representatives. Receiving Party shall take reasonable steps to ensure that unauthorized persons do not gain access to Disclosing Party's Confidential Information. Receiving Party shall promptly notify Disclosing Party of any unauthorized release of or access to Disclosing Party's Confidential Information. For clarity, such notice shall not remedy any breach of this Agreement resulting from such unauthorized release or access.

6.6 Prior CDA. This Agreement supersedes that certain Confidentiality Agreement between LBIO and MD Anderson, dated July 22, 2016 ("Prior CDA"), which is hereby terminated; provided, however, that all information disclosed or received by the Parties under the Prior CDA will be deemed Confidential Information hereunder (to the extent applicable) and will be subject to the terms and conditions of this Agreement. The Parties agree that this Agreement provides the written notice required for termination of the Prior CDA pursuant to Section 6.8 of the Prior CDA.

6.7 Publicity. LBIO shall be permitted to publicly disclose the existence of this Agreement, and the title and purpose of each clinical Study, in LBIO's electronic materials, printed materials, oral presentations, and press releases, and LBIO shall be permitted to include each clinical Study as a component of LBIO's clinical product pipeline.

6.8 Health Information. Notwithstanding anything to the contrary in this Agreement or any Study Order, all individually identifiable health information shall be treated as confidential by the Parties in accordance with all Laws governing the confidentiality and privacy of individually identifiable health information, including HIPAA, and any regulations and official guidelines promulgated thereunder, and the Parties agree to take such additional steps and/or to negotiate such amendments to this Agreement as may be required to ensure that the Parties are and remain in compliance with the HIPAA regulations and official guidance.

7. **Inventions.**

7.1 Background Intellectual Property and Definitions.

(a) Neither Party will, as a result of this Agreement, acquire any right, title or interest in, to, or under any Intellectual Property (as defined below) owned or controlled by the other Party or the other Party's affiliates prior to the Effective Date or developed independently of this Agreement ("Background Intellectual Property"), except for the licenses expressly granted under this Agreement.

(b) "Invention" means any idea, invention or discovery, whether or not patented or patentable, that is first conceived, discovered, developed or reduced to practice by a Party in connection with this Agreement, including through MD Anderson's performance of the Research (solely or jointly with others) or that result, to any extent, from use of Confidential Information or the Study article that is the subject of a given Study, including any developments, discoveries, improvements, compositions, know-how, trade secrets, procedures, technical information, data, reports, processes, methods, devices, formulae, protocols, techniques, designs, drawings, methodologies, and biological or chemical material.

(c) "Intellectual Property Rights" means any and all moral rights and intellectual property rights, including all patent rights, copyrights, trademarks, know-how and trade secrets and the rights to apply for the same.

(d) "Fields" means the treatment of platinum resistant ovarian cancer, chondrosarcoma, and pancreatic ductal adenocarcinoma, and, solely for the purposes of Section 7.3(b), double refractory melanoma, such treatment being performed using TILs manufactured by MD Anderson using a 4-1BB agonist; provided that Fields shall also include the treatment of other diseases in the event that the JSC decides to amend or replace the initially-agreed clinical Protocol for the Study Order provided in Exhibit II to include the treatment of such other diseases.

7.2 Assignment of Inventions; Further Assurances.

(a) MD Anderson shall promptly make full written disclosure to LBIO, shall hold in trust for the sole right and benefit of LBIO, and hereby assigns, transfers and conveys to LBIO, or its designee, all of MD Anderson's worldwide right, title and interest in and to any and all Inventions and all Intellectual Property Rights therein and relating thereto[, provided that MD Anderson shall retain the right to use any such Invention for internal research, academic, and patient care purposes]. MD Anderson further acknowledges and agrees that all original works of authorship that are made by MD Anderson (solely or jointly with others) in the performance of the Research, excluding any publication made in accordance with Section 6.4 (a "Work") and that are protectable by copyright are "works made for hire," as that term is defined in the United States Copyright Act. However, to the extent that any Work may not, by operation of any Laws, be a work made for hire, MD Anderson hereby assigns, transfers and conveys to LBIO all of MD Anderson's worldwide right, title and interest in and to such Work, including all Intellectual Property Rights therein and relating thereto, subject to MD Anderson's right to use such Work for internal research, academic, and non-commercial patient care purposes prior to publication or public disclosure.

(b) Upon the request and at the reasonable expense of LBIO, MD Anderson shall execute and deliver any and all instruments and documents and take such other acts as may be reasonably necessary to document or perfect the assignment and transfer described in Section 7.2(a) or to enable LBIO to secure its rights in the Inventions, Works and Intellectual Property Rights therein and relating thereto in any and all jurisdictions, or to apply for, prosecute and enforce Intellectual Property Rights in any and all jurisdictions with respect to any Inventions or Works, or to obtain any extension, validation, re-issue, continuance or renewal of any such Intellectual Property Right.

(c) As between the Parties, and without limiting MD Anderson's assistance obligations under Section 7.2(b), LBIO shall have the sole and exclusive right to file patents covering or claiming Inventions and shall bear all costs with respect to the prosecution and maintenance thereof. In furtherance of the foregoing, the Parties shall work together in good faith to, as expeditiously as possible following the Effective Date, put in place a power of attorney granted by the System to LBIO for purposes of enabling LBIO to apply for or to pursue any application for any United States or foreign patent, trademark, copyright or other registration covering Inventions or Works assigned to LBIO hereunder in the event that LBIO is unable to secure MD Anderson's assistance in connection with the same.

7.3 Background Licenses.

(a) MD Anderson hereby grants LBIO a non-exclusive, royalty free, perpetual license (with rights to sub-license) under, in and to all Background Intellectual Property that is: (a) owned by MD Anderson; (b) consists of and/or comprises the manufacturing protocol utilized by MD Anderson in the conduct of a Study; and (c) reasonably necessary to exploit (including developing, obtaining and maintaining regulatory approval for, manufacturing, or commercializing) any Invention, Study result, or Study article, or any improvement or derivative thereof, strictly limited to the Fields (collectively, the "Non-Exclusively Licensed MD Anderson Background Intellectual Property"), to the extent that such Non-Exclusively Licensed MD Anderson Background Intellectual Property does not include Third Party IP (as defined hereinafter).

(b) MD Anderson also grants LBIO a non-exclusive, royalty free, perpetual license (with rights to sub-license) under, in and to any and all data generated by MD Anderson in conducting studies of TILs in double refractory melanoma outside of the Collaboration and as of the Effective Date, and LBIO shall have unrestricted rights to use such double refractory melanoma data in governmental and regulatory submissions, including submissions that may become public.

7.4 Third Party Intellectual Property. To the extent that MD Anderson controls any Background Intellectual Property that it will use in conducting a Study or manufacturing any Study article through a license agreement with a third party ("Third Party IP"), MD Anderson shall notify LBIO thereof as soon as any such Third Party IP is identified. MD Anderson shall not use any Third Party IP in performing activities under this Agreement or otherwise in connection with a Study unless and until the JSC approves the use thereof. In addition, MD Anderson shall provide such assistance as is reasonably requested by LBIO in connection with LBIO obtaining a license in and to any such Third Party IP.

7.5 No Implied Licenses; Retained Rights. Except as explicitly set forth in this Agreement, neither Party grants any license, express or implied, under its intellectual property rights to the other Party, whether by implication, estoppel or otherwise, and each Party hereby agrees that it does not have rights under any intellectual property of the other Party that are broader than the licenses expressly granted herein.

7.6 Effectiveness. The provisions of Section 7 shall become effective upon payment by LBIO of the Upfront Payment and the approval by LBIO of the Study Orders in Exhibit I and Exhibit III. For clarity, the commencement of work, or the lack thereof, under the Study Order in Exhibit II shall have no effect upon the effectiveness of the provisions of Section 7.

8. **Term and Termination.**

8.1 Term. The term of this Agreement commences on the Effective Date and shall continue in effect until the later of (a) the fourth (4th) anniversary of the Effective Date, or (b) the completion or termination of the Research and receipt by LBIO of all deliverables due from MD Anderson hereunder, unless sooner terminated in accordance with the provisions of Section 2.2 or Section 9.14.

8.2 Termination. Either Party may terminate this Agreement for the material breach or default of any of the terms or conditions of this Agreement by the other Party upon thirty (30) days' written notice and the opportunity to cure during such notice period; and such termination shall be in addition to any other remedies that it may have at law or in equity. Additionally, LBIO may terminate this Agreement if MD Anderson is declared insolvent or enters into liquidation or has a receiver or an administrator appointed over all or any part of its assets or ceases or threatens to cease to carry on business, or a resolution is passed or a petition presented to any court for the winding up of the Party or for the granting of an administration order in respect of MD Anderson, or any proceedings are commenced relating to the insolvency or possible insolvency of MD Anderson.

8.3 Termination of a Study Order. LBIO may terminate a Study Order immediately upon written notice to MD Anderson if:

(i) the applicable approvals, authorizations, and/or continuing reviews for a Study are not obtained or maintained;

(ii) Principal Investigator is no longer available for the Study and a replacement deemed acceptable by LBIO is not provided;

(iii) the Study is canceled, terminated, suspended, delayed or placed on hold for any reason;

(iv) an Institutional Review Board or other review authority, including governmental or regulatory authorities, does not approve a Study or recommends the cancelation, termination, suspension, or hold of a Study for any reason;

(v) immediate termination of the Study is necessary due to LBIO's evaluation of risks to Study subjects, such risks including the futility of treatment; or

(vi) MD Anderson or Principal Investigator materially breaches any obligations with respect to the Study, including failure to comply with this Agreement, the Protocol or the Study Order or any Law relevant to the Study.

8.4 Obligations upon Termination. Upon expiration or termination of this Agreement, in addition to its other obligations hereunder, including Section 5.2, MD Anderson shall return to LBIO all of its Confidential Information and all Materials or, at LBIO's option, destroy or completely delete such Confidential Information and Materials, at LBIO's option. With respect to each item of Confidential Information and Materials destroyed or completely deleted, such destruction or complete deletion shall be certified in writing to LBIO. In the event that this Agreement is terminated prior to MD Anderson's receipt of all internal approvals to commence work on the Study Orders in Exhibit I, Exhibit II and/or Exhibit III, MD Anderson shall refund the Upfront Payment to LBIO.

8.5 Effects of Termination. Termination of this Agreement by either Party shall not affect the rights and obligations of the Parties accrued prior to the effective date of termination. No termination of this Agreement, however effectuated, shall release the Parties, the Principal Investigator, or any other Representative of MD Anderson having access to Confidential Information from their respective rights and obligations under Sections 6, 7, and 9.

9. **Miscellaneous.**

9.1 Mutual Representations. Each Party hereto hereby represents, warrants and covenants to the other that: (a) it is duly incorporated or otherwise formed, validly existing and in good standing; (b) it has taken all necessary actions on its part to authorize the execution, delivery and performance of the obligations undertaken in this Agreement, and no other corporate or regulatory actions (e.g., obtaining permits, licenses or authorizations) are necessary with respect thereto; (c) it is not a party to, and will not become a party to, any agreement or understanding and knows of no law or regulation that would prohibit it from entering into and performing this Agreement, or that would conflict with this Agreement; and (d) when executed and delivered by it, this Agreement will constitute a legal, valid and binding obligation of it, enforceable against it in accordance with this Agreement's terms.

9.2 MD Anderson Representations. MD Anderson represents, warrants, and, to the extent applicable, covenants, that:

(a) MD Anderson and all of its Representatives maintain as current the applicable licenses and permits, including medical practitioner licenses as required by the applicable national, state, and/or local licensing body and that no license or permit has been revoked, limited, suspended, or otherwise modified.

(b) Neither MD Anderson nor any of its Representatives have (i) violated or caused a violation of any federal or state health care fraud and abuse or false claims statute or regulation, including the anti-kickback provisions of the Social Security Act, 42 U.S.C. § 1320a-7b(b), (ii) violated or caused a violation of any federal or state privacy or security law or regulation, including HIPAA, (iii) not been excluded or threatened with exclusion under state or federal statutes or regulations, including under 42 U.S.C. § 1320a-7 or relevant regulations in 42 C.F.R. Part 1001, or (iv) not been assessed or threatened with assessment of civil money penalties pursuant to 42 C.F.R. Part 1003, or any foreign equivalent.

(c) Neither MD Anderson nor any of its Representatives have been charged, named in an action, found liable, or convicted for conduct relating to the development or approval of, or otherwise related to the regulation of any healthcare product or the practice of medicine.

(d) Neither MD Anderson nor any of its Representatives (i) have been found by the FDA or any other relevant governmental or regulatory authority to have violated any Laws, regulations or guidelines concerning the conduct of clinical investigations or related services; (ii) have been debarred, denied, or suspended by the FDA under 21 U.S.C. § 335a, disqualified or restricted by the FDA, named on any FDA list related to investigator disqualifications, restrictions, restrictions removed, or adequate assurances, or are otherwise ineligible to participate in federal procurement or non-procurement programs or any foreign equivalents of the above; and (iii) have any unresolved FDA warning letter, Form 483, or other regulatory enforcement action threatened against or issued to them;

(e) MD Anderson and its Representatives will not make and have not made any untrue statement of material fact to or filed a false claim or report with any governmental or regulatory authority, or failed to disclose a material fact required to be disclosed to any governmental or regulatory authority, or have ever been investigated by the FDA, National Institutes of Health ("NIH"), Office of the Inspector General for the Department of Health and Human Services ("OIG"), Department of Justice or other comparable governmental or regulatory authority for data or healthcare program fraud.

(f) There is no investigation, threat, pending, or proposed proceeding, notice, or action by a governmental or regulatory entity which could result in 9.2(a)-9.2(e) above.

(g) MD Anderson has no knowledge of any facts or circumstances that may affect the accuracy or completeness of any the foregoing representations and warranties. MD Anderson is responsible for (i) requiring all of its Representatives to disclose the occurrence of 9.2(a)-9.2(f) above and (ii) reviewing on reasonable intervals all available public filings and lists to confirm that it and its Representatives are not subject to 9.2(a)-9.2(f) above. If MD Anderson becomes aware of any such facts or circumstances during the Term or otherwise determines that any representation or warranty made by it under this Agreement is no longer true, correct, or complete, MD Anderson will notify LBIO immediately, but in no case later than twenty-four (24) hours after MD Anderson becomes aware of such facts, circumstances, or determination. MD Anderson shall immediately remove any of its Representatives from performing activities relating to the Research to which the facts, circumstances, or determination relate. Any such facts, circumstances, or determinations shall be grounds for termination of this Agreement.

(h) Each of MD Anderson's Representatives is under a written obligation to assign to MD Anderson all Inventions and any Intellectual Property Rights therein or relating thereto made by such Representative in the course of his or her employment.

(i) Neither the United States government nor any agency thereof nor any other third party has funded or will fund any part of the Research.

(j) MD Anderson's applicable database applications and electronic records systems and facilities which are used in the performance of the Research, including the database to be used by MD Anderson and Principal Investigator for the tracking, handling, recording, reporting and transmitting of data generated during a Study, have been fully validated and are compliant with all Laws.

(k) MD Anderson is not entering into this Agreement (i) as a result of any pre-existing or future business relationships between MD Anderson and/or Principal Investigator and LBIO, (ii) as a result of any business or other decisions MD Anderson and/or Principal Investigator have made or may make in the future relating to LBIO or LBIO products, or (iii) as a reward or in exchange for MD Anderson or Principal Investigator prescribing or purchasing LBIO products or to induce the prescription or purchase of LBIO products by MD Anderson or Principal Investigator.

9.3 Warranty of cGMP. LBIO represents and warrants that any Study Drug (as defined in an applicable Study Order) manufactured by and provided by it for any Study hereunder has been and will be manufactured in accordance with current Good Manufacturing Practice regulations.

9.4 Independent Status. MD Anderson shall not be considered a partner, co-venturer, agent, employee, or representative of LBIO by reason of this Agreement, but shall remain in all respects an independent contractor, and neither Party shall have any right or authority to make or undertake any promise, warranty or representation, to execute any contract or otherwise to assume any obligation in the name of or on behalf of the other Party. MD Anderson's employees, including the Principal Investigator and the other Representatives of MD Anderson, are not and shall not be deemed to be employees of LBIO, and MD Anderson shall indemnify and hold harmless LBIO from all liabilities arising from any allegation or determination to the contrary.

9.5 Notices. All notices and other communications required or permitted hereunder shall be in writing and deemed to have been given when hand delivered, or mailed by registered or certified mail or overnight courier with tracking capabilities, as follows or as a Party may otherwise notify to the other in accordance with this Section 9.5 (provided that such notice of change of address or recipient shall be deemed given only when received), with an electronic copy to an email address if specified below:

If to LBIO, to:
Lion Biotechnologies, Inc.

999 Skyway Road, Suite 150
San Carlos, CA 94070
Attention: Legal Department
With a copy to: legal@lionbio.com

If to MD Anderson:
The University of Texas
M.D. Anderson Cancer Center
1515 Holcombe Blvd.
Houston, TX 77030
Attention: Chief Legal Officer

9.6 Assignment; No Third Party Beneficiaries. LBIO may assign or transfer this Agreement without the prior written consent of but with written notice to MD Anderson promptly following consummation of the relevant transaction. MD Anderson hereby acknowledges and agrees that the rights and obligations hereunder are of a personal nature and, therefore, neither this Agreement nor any right or obligation contained within shall be assignable, transferable or delegable in whole or in part by MD Anderson and MD Anderson shall not, without the prior written consent of LBIO, sub-contract or otherwise engage any consultant or other third party to perform any of MD Anderson's activities or obligations under this Agreement or any Study Order. All of the terms and provisions of this Agreement shall be binding upon, and inure to the benefit of and be enforceable by, the respective successors and permitted assigns of the Parties. Nothing in this Agreement, express or implied, is intended to confer on any person or entity, other than the Parties or their respective successors and permitted assigns, any benefits, rights or remedies.

9.7 Governing Law, Jurisdiction. This Agreement shall be governed by and interpreted in accordance with the laws of the State of Texas, United States of America, without giving effect to any conflict of laws provisions. The Parties agree that any dispute or controversy arising out of or relating to any interpretation, construction, performance or breach of this Agreement may be brought in a United States District Court in Texas, or if such court does not accept jurisdiction or will not accept jurisdiction, in any court of general jurisdiction in the State of Texas.

9.8 Equitable Relief. MD Anderson agrees that it may be impossible or inadequate to measure and calculate LBIO's damages from any breach of MD Anderson's obligations under Section 6 and/or Section 7 of this Agreement, and that a breach of such obligations could cause serious and irreparable injury to LBIO. Accordingly, LBIO shall have available, in addition to any other right or remedy available to it, the right to seek an injunction from a court of competent jurisdiction restraining such a breach (or threatened breach) and to specific performance of any such Section. MD Anderson further agrees that no bond or other security shall be required in obtaining such equitable relief.

9.9 Entire Agreement, Amendment and Waiver. This Agreement contains the entire understandings of the Parties and supersedes all previous agreements (oral and written), negotiations and discussions with respect to the subject matter herein. The Parties may modify any of the provisions hereof only by an instrument in writing duly executed by the Parties. No waiver of any rights under this Agreement shall be effective unless in writing signed by the Party to be charged.

9.10 Severability. In the event of the invalidity of any provisions of this Agreement containing any gaps, the Parties agree that such invalidity or gap shall not affect the validity of the remaining provisions of this Agreement. The Parties will replace an invalid provision or fill any gaps with valid provisions, which most closely approximate the purpose and economic effect of the invalid provision or, in the case of a gap, the Parties' presumable intentions.

9.11 Further Assurances. Each Party shall, as and when reasonably requested by the other Party, do all acts and execute all documents as may be reasonably necessary to give effect to the provisions of this Agreement.

9.12 Interpretation. The headings in this Agreement are intended solely for convenience or reference and shall be given no effect in the construction or interpretation of this Agreement. This Agreement shall be construed as if both Parties drafted it jointly, and shall not be construed against either Party as principal drafter. The words "include", "includes" and "including" (and words of similar meaning) shall be deemed to be followed by the phrase "without limitation".

9.13 Counterparts. This Agreement may be executed in two (2) or more counterparts, including by "PDF" exchange, each of which shall be deemed to be an original as against any Party whose signature appears thereon, but all of which together shall constitute but one and the same instrument.

9.14 Texas State Agency. MD Anderson is an agency of the State of Texas and under the constitution and laws of the State of Texas possesses certain rights and privileges and only such authority as is granted to it under the constitution and laws of the State of Texas. Notwithstanding any provision hereof, nothing herein is intended to be, nor will it be construed to be, a waiver of the sovereign immunity of the State of Texas or a prospective waiver or restriction of any of the rights, remedies, claims, and privileges of the State of Texas. Moreover, notwithstanding the generality or specificity of any provision hereof, the provisions of this agreement as they pertain to MD Anderson are enforceable only to the extent authorized by the constitution and laws of the State of Texas.

9.15 DISCLAIMER OF SPECIAL DAMAGES. NEITHER LBIO NOR MD ANDERSON, NOR ANY OF THEIR AFFILIATES, NOR ANY OF THEIR RESPECTIVE DIRECTORS, OFFICERS, MEMBERS OR EMPLOYEES, SHALL HAVE ANY LIABILITY OF ANY TYPE, FOR ANY SPECIAL, PUNITIVE, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING THE LOSS OF OPPORTUNITY, LOSS OF USE, OR LOSS OF REVENUE OR PROFIT, IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY STUDY ORDER; PROVIDED, THAT, THE FOREGOING DISCLAIMER SHALL NOT APPLY WITH RESPECT TO (1) A PARTY'S INDEMNIFICATION OBLIGATIONS, (2) A PARTY'S BREACH OF ITS OBLIGATIONS UNDER THIS AGREEMENT WITH RESPECT TO CONFIDENTIALITY AND NON-USE OR INTELLECTUAL PROPERTY-RELATED MATTERS OR (3) A PARTY'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned, intending to be legally bound, have duly executed this Agreement as of the Effective Date.

LION BIOTECHNOLOGIES, INC.

/s/ Maria Fardis
Authorized Signature

Name: Maria Fardis
Title: CEO & President
Date: April 17, 2017

THE UNIVERSITY OF TEXAS
M. D. ANDERSON CANCER CENTER

/s/ Chris McKee
Authorized Signature

Name: Chris McKee, M.H.A.
Title: VP, Business Operations
Date: April 12, 2017

This Agreement is to be executed in duplicate.
Please return one fully executed copy to LBIO at the address for notices set forth above.

Exhibit 31.1

CERTIFICATION

I, Maria Fardis, Chief Executive Officer of Iovance Biotherapeutics, Inc., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Iovance Biotherapeutics, 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. I am 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 my 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 my 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 my conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

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

5. I have disclosed, based on my 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.

Dated: August 3, 2017

By: /s/ Maria Fardis
Maria Fardis
Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Franco Valle, Controller, Interim Principal Financial Officer and Principal Accounting Officer of Iovance Biotherapeutics, Inc., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Iovance Biotherapeutics, 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. I am 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 my 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 my 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 my conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

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

5. I have disclosed, based on my 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.

Dated: August 3, 2017

By: /s/ Franco Valle
Controller, Interim Principal Financial Officer and Principal Accounting Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Iovance Biotherapeutics, Inc. (the "Company") for the quarter ended June 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Maria Fardis, Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

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

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

Dated: August 3, 2017

By: /s/ Maria Fardis
Maria Fardis
Chief Executive Officer

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Iovance Biotherapeutics, Inc. (the "Company") for the quarter ended June 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Franco Valle, Controller, Interim Principal Financial Officer and Principal Accounting Officer of the Company, hereby certifies, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

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

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

Dated: August 3, 2017

By: /s/ Franco Valle
Controller, Interim Principal Financial Officer and Principal Accounting Officer

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.