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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2017

OR

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

For the transition period from _____ to _____

Commission File Number 001-32157

Savara Inc.

(Exact name of registrant as specified in its charter)

Delaware	**84-1318182**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
900 South Capital of Texas Highway, Las Cimas IV, Suite 150 Austin, TX	**78746**
(Address of principal executive offices)	**(Zip Code)**

(512) 961-1891
(Registrant's telephone number, including area code)

N/A

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

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

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

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

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

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

As of November 8, 2017, the registrant had 30,500,693 shares of common stock, $0.001 par value per share, outstanding.

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Savara Inc. and Subsidiaries
Condensed Consolidated Balance Sheets
(In thousands, except share and per share amounts)
(Unaudited)

	September 30, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 19,813	$ 13,373
Short-term investments	33,473	—
Grants and award receivable	—	400
Prepaid expenses and other current assets	2,235	840
Total current assets	55,521	14,613
Property and equipment, net	582	793
In-process R&D	33,449	10,477
Goodwill	28,332	3,051
Other non-current assets	1,004	—
Total assets	$ 118,888	$ 28,934
Liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)		
Current liabilities:		
Accounts payable	$ 1,665	$ 536
Accrued expenses	4,147	2,477
Current portion of capital lease obligation	265	442
Total current liabilities	6,077	3,455
Long-term liabilities:		
Accrued interest on convertible promissory notes	—	151
Debt facility	14,675	—
Convertible promissory notes	—	3,448
Put option derivative liability	—	979
Contingent consideration	11,816	9,708
Deferred tax liability	11,263	2,305
Capital lease obligation, net of current portion	297	579
Warrant liability	—	303
Other long-term liabilities	115	20
Total liabilities	44,243	20,948
Redeemable convertible preferred stock:		
Series A redeemable convertible preferred stock, $0.001 par value, 0 and 1,799,906 shares authorized, issued, and outstanding, as of September 30, 2017 and December 31, 2016, respectively	—	3,232
Series B redeemable convertible preferred stock, $0.001 par value, 0 and 6,000,000 shares authorized as of September 30, 2017 and December 31, 2016, respectively; 0 and 5,675,387 shares issued and outstanding as of September 30, 2017 and December 31, 2016; respectively	—	17,301
Series C redeemable convertible preferred stock, $0.001 par value; 0 and 8,000,000 shares authorized as of September 30, 2017 and December 31, 2016, respectively; 0 and 4,452,582 shares issued and outstanding as of September 30, 2017 and December 31, 2016, respectively	—	23,328
Total redeemable convertible preferred stock	—	43,861
Stockholders' equity (deficit):		
Common stock, $0.001 par value, 500,000,000 and 27,000,000 shares authorized as of September 30, 2017 and December 31, 2016, respectively; 24,389,105 and 3,162,573 shares (after giving effect to the Exchange Ratio and Reverse Stock Split) issued and outstanding as of September 30, 2017 and December 31, 2016, respectively	26	5
Additional paid-in capital	135,571	3,117
Accumulated other comprehensive income (loss)	747	(591)
Accumulated deficit	(61,699)	(38,406)
Total stockholders' equity (deficit)	74,645	(35,875)
Total liabilities, redeemable convertible preferred stock, and stockholder's equity (deficit)	$ 118,888	$ 28,934

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

Savara Inc. and Subsidiaries
Condensed Consolidated Statements of Operations and Comprehensive Loss
(In thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Grant and award revenue	$ —	$ —	$ —	$ —
Operating expenses:				
Research and development	4,966	2,142	12,076	4,694
General and administrative	1,486	1,002	8,410	1,955
Depreciation	91	86	272	256
Total operating expenses	6,543	3,230	20,758	6,905
Loss from operations	(6,543)	(3,230)	(20,758)	(6,905)
Other income (expense):				
Interest expense	(277)	(190)	(1,038)	(207)
Foreign currency exchange gain (loss)	(71)	92	(225)	20
Loss on extinguishment of debt	—	—	(1,816)	—
Change in fair value of financial instruments	(43)	101	(280)	137
Total other income (expense)	(391)	3	(3,359)	(50)
Loss before income taxes	(6,934)	(3,227)	(24,117)	(6,955)
Income tax benefit	117	—	824	—
Net loss	$ (6,817)	$ (3,227)	$ (23,293)	$ (6,955)
Accretion of redeemable convertible preferred stock	—	(44)	(578)	(70)
Deemed dividend on beneficial conversion feature	—	—	(404)	—
Net loss attributable to common stockholders	$ (6,817)	$ (3,271)	$ (24,275)	$ (7,025)
Other comprehensive income:				
Gain (loss) on foreign currency translation	348	39	1,343	39
Unealized gain (loss) on short-term investments	(5)	—	(5)	—
Total Comprehensive Loss	$ (6,474)	$ (3,188)	$ (21,955)	$ (6,916)
Net loss per share:				
Basic and diluted	$ (0.28)	$ (1.21)	$ (1.76)	$ (4.40)
Weighted average common shares outstanding				
Basic and diluted	24,209,517	2,707,055	13,770,032	1,596,123

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

Savara Inc. and Subsidiaries
Consolidated Statements of Changes in Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)
Period Ended September 30, 2017
(In thousands, except share amounts)
(Unaudited)

	Redeemable Convertible Preferred Stock							Stockholders' Equity (Deficit)					
	Redeemable Convertible Series A Preferred Stock		Redeemable Convertible Series B Preferred Stock		Redeemable Convertible Series C Preferred Stock			Common Stock					
	Number of Shares	Amount	Number of Shares	Amount	Number of Shares	Amount	Total	Number of Shares	Amount	Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total
Balance on December 31, 2016	**1,799,906**	**$ 3,232**	**5,675,387**	**$ 17,301**	**4,452,582**	**$ 23,328**	**$ 43,861**	**3,162,573**	**$ 5**	**$ 3,117**	**$ (38,406)**	**$ (591)**	**$ (35,875)**
Repurchase of forfeited restricted common stock	—	—	—	—	—	—	—	(19,045)	—	—	—	—	—
Accretion of redeemable convertible preferred stock	—	22	—	460	—	96	578	—	—	(578)	—	—	(578)
Issuance of common stock upon exercise of warrants	—	—	—	—	—	—	—	111,799	—	384	—	—	384
Conversion of convertible notes into common stock	—	—	—	—	—	—	—	1,140,046	1	10,044	—	—	10,045
Conversion of redeemable convertible preferred stock to common stock as effected for the reverse merger exchange ratio	(1,799,906)	(3,254)	(5,675,387)	(17,761)	(4,452,582)	(23,424)	(44,439)	7,034,102	7	44,431	—	—	44,438
Reclassification of warrant liability	—	—	—	—	—	—	—	—	—	370	—	—	370
Beneficial conversion feature	—	—	—	—	—	—	—	—	—	404	—	—	404
Business combination upon Merger	—	—	—	—	—	—	—	3,639,189	4	35,842	—	—	35,846
Issuance of common stock upon public offering, net closing costs	—	—	—	—	—	—	—	9,034,210	9	39,513	—	—	39,522
Issuance of detachable warrants with debt instrument	—	—	—	—	—	—	—	—	—	359	—	—	359
Issuance of common stock upon At The Market sales, net	—	—	—	—	—	—	—	124,210	—	991	—	—	991
Issuance of common stock for settlement of RSUs	—	—	—	—	—	—	—	72,361	—	—	—	—	—
Issuance of common stock upon cashless exercise of stock options	—	—	—	—	—	—	—	89,660	—	—	—	—	—
Issuance of call option derivative	—	—	—	—	—	—	—	-	—	344	—	—	344
Stock-based compensation	—	—	—	—	—	—	—	—	—	350	—	—	350
Foreign exchange translation adjustment	—	—	—	—	—	—	—	—	—	—	—	1,343	1,343
Unrealized gain (loss) on short-term investments	—	—	—	—	—	—	—	—	—	—	—	(5)	(5)
Net loss incurred	—	—	—	—	—	—	—	—	—	—	(23,293)	—	(23,293)
Balance on September 30, 2017	**—**	**$ —**	**—**	**$ —**	**—**	**$ —**	**$ —**	**24,389,105**	**$ 26**	**$ 135,571**	**$ (61,699)**	**$ 747**	**$ 74,645**

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

Savara Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2017	**2016**
Cash flows from operating activities:		
Net loss	$ (23,293)	$ (6,955)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	272	256
Changes in fair value of financial instruments	280	(137)
Change in fair value of contingent consideration	2,108	—
Noncash interest	395	99
Loss on extinguishment of debt	1,816	—
Foreign currency gain/(loss)	225	(20)
Accretion on discount to convertible promissory notes	—	121
Amortization of debt issuance costs	301	—
Accretion on discount to short-term investments	(34)	—
Stock-based compensation	350	154
Issuance of call option derivative	344	—
Changes in operating assets and liabilities:		
Grant and award receivable	400	—
Tax refund receivable	(785)	—
Prepaid expenses and other current assets	(1,272)	(479)
Deferred rent	(14)	15
Accounts payable and accrued expenses	143	766
Net cash used in operating activities	$ (18,764)	$ (6,180)
Cash flows from investing activities:		
Cash acquired through Merger	$ 3,442	$ —
Purchase of property and equipment	(61)	(8)
Purchase of available-for-sale securities	(33,443)	—
Net cash used in investing activities	$ (30,062)	$ (8)
Cash flows from financing activity:		
Proceeds from debt facility	$ 14,894	$ —
Proceeds from convertible promissory note	3,569	4,315
Issuance of common stock upon exercise of warrants	384	—
Issuance of common stock upon public offering, net	39,522	—
Repayment of long-term debt	(3,567)	—
Issuance of common stock upon at the market offerings, net	991	—
Proceeds from exercise of stock option	—	1
Proceeds from issuance of Series C preferred stock, net	—	782
Capital lease obligation principal payments	(460)	(81)
Net cash provided by financing activities	$ 55,333	$ 5,017
Effect of exchange rate changes on cash and cash equivalents	(67)	—
Increase / (Decrease) in cash and cash equivalents	$ 6,440	$ (1,171)
Cash and cash equivalents beginning of period	13,373	16,683
Cash and cash equivalents end of period	$ 19,813	$ 15,512
Non-cash transactions:		
Issuance of common stock for Serendex	$ —	$ 2,851
Net assets acquired in business combination of Serendex	—	(12,375)
Contingent liability related to purchase of Serendex	—	9,524
Extinguishment and derecognition of put options	2,202	—
Conversion of convertible notes into common stock	8,249	—
Shares issued in connection of business combination and assumed equity awards	35,846	2,851
Accretion of Series A redeemable convertible preferred stock	22	3
Accretion of Series B redeemable convertible preferred stock	460	57
Accretion of Series C redeemable convertible preferred stock	96	10
Beneficial conversion feature	404	—

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

1. Description of Business and Basis of Presentation

Description of Business

Savara Inc. (“Savara,” the “Company,” or as used in the context of “we” or “us”) is an orphan lung disease company. The Company’s pipeline comprises: Molgradex, an inhaled granulocyte-macrophage colony-stimulating factor, or GM-CSF, in Phase 3 development for pulmonary alveolar proteinosis (“PAP”); AeroVanc, a Phase 3 stage inhaled vancomycin for treatment of persistent methicillin-resistant *Staphylococcus aureus* (“MRSA”), infection in cystic fibrosis; and, Aironite, an inhaled sodium nitrite for heart failure with preserved ejection fraction (“HFpEF”) in Phase 2 development. The Company and its wholly owned subsidiaries, including Aravas Inc. and Savara ApS, operate in one segment with its principal offices in Austin, Texas.

On April 27, 2017, Savara completed its business combination with Mast Therapeutics, Inc. ("Mast"), a publicly held company, in accordance with the terms of the Agreement and Plan of Merger and Reorganization (the "Merger Agreement"), dated January 6, 2017 (the "Merger"). In connection with and immediately prior to the effective time of the Merger, Mast implemented a reverse stock split at a ratio of one new share for every 70 shares of its common stock outstanding (the “Reverse Stock Split”). Under the terms of the Merger Agreement, each outstanding share of Savara common stock was then converted into Mast common stock at a ratio of approximately .5860 of a Savara share (the “Exchange Ratio”). Immediately following the effective date of the Merger, Mast’s preexisting equity holders owned approximately 23% of the combined company, and Savara’s preexisting equity holders owned approximately 77%.

Accordingly, all operations presented in the accompanying financial statements and notes to the financial statements represent the historical activity of Savara, the private company prior to the Merger.

The accompanying financial statements and notes to the consolidated financial statements also give retroactive effect to the common stock Exchange Ratio and Reverse Stock Split of the Merger for all periods presented, including common stock warrants and common stock-based compensation awards.

Following the Merger, Mast was renamed “Savara Inc." and its common stock is trading on The Nasdaq Global Select Market under the symbol "SVRA." Prior to the Merger, Mast’s common stock was traded on the New York Stock Exchange under the symbol "MSTX."

The combined company’s product pipeline includes:

- Molgradex
- AeroVanc
- Aironite, a sodium nitrite solution for intermittent inhalation via nebulization, which is being developed for the treatment of heart failure with HFpEF.

Since inception, Savara has devoted substantially all of its efforts and resources to identifying and developing its product candidates, recruiting personnel, and raising capital. Savara has incurred operating losses and negative cash flow from operations and has no product revenue from inception to date. The Company has not yet commenced commercial operations.

Basis of Presentation

The condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States (“U.S. GAAP”) as defined by the Financial Accounting Standards Board (“FASB”). These condensed consolidated financial statements should be read in conjunction with the audited financial statements and notes thereto for the year ended December 31, 2016. Certain prior year amounts have been reclassified for consistency with the current period presentation.

Unaudited Interim Financial Information

The interim condensed consolidated financial statements included in this document are unaudited. The unaudited interim financial statements have been prepared on the same basis as the annual financial statements and reflect, in the opinion of management, all adjustments of a normal and recurring nature that are necessary for a fair statement of the Company's financial position as of September 30, 2017, and its results of operations for the nine months ended September 30, 2017 and 2016, and cash flows for the nine months ended September 30, 2017 and 2016. The results of operations for the three and nine months ended September 30, 2017 are not necessarily indicative of the results to be expected for the year ending December 31, 2017 or for any other future annual or interim period. The December 31, 2016 consolidated balance sheet was derived from audited financial statements, but does not include all disclosures required by U.S. GAAP. These condensed consolidated financial statements should be read in conjunction with the audited financial statements and notes thereto for the year ended December 31, 2016.

2. Summary of Significant Accounting Policies

Liquidity

As of September 30, 2017, the Company had an accumulated deficit of approximately $61.7 million. The Company also had negative cash flow from operations of approximately $18.8 million during the nine months ended September 30, 2017. The cost to further develop and obtain regulatory approval for any drug is substantial and, as noted below, the Company may have to take certain steps to maintain a positive cash position. Accordingly, the Company will need additional capital to further fund the development of, and seek regulatory approvals for, its product candidates and begin to commercialize any approved products.

The Company is currently focused primarily on the development of respiratory drugs and believes such activities will result in the Company's continued incurrence of significant research and development and other expenses related to those programs. If the clinical trials for any of the Company's product candidates fail or produce unsuccessful results and those product candidates do not gain regulatory approval, or if any of the Company's product candidates, if approved, fail to achieve market acceptance, the Company may never become profitable. Even if the Company achieves profitability in the future, it may not be able to sustain profitability in subsequent periods. The Company intends to cover its future operating expenses through cash and cash equivalents on hand and through a combination of equity offerings, debt financings, government or other third-party funding, and other collaborations and strategic alliances. The Company cannot be sure that additional financing will be available when needed or that, if available, financing will be obtained on terms favorable to the Company or its stockholders.

While the Company had cash and cash equivalents of $19.8 million and short-term investments of $33.5 million as of September 30, 2017, we intend to continue to raise additional capital as needed through the issuance of additional equity and potentially through borrowings, and strategic alliances with partner companies. However, if such financings are not available timely and at adequate levels, the Company will need to reevaluate its operating plans. The condensed consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Principles of Consolidation

The interim condensed consolidated financial statements of the Company are stated in U.S. dollars and are prepared using U.S. GAAP. These financial statements include the accounts of the Company and its wholly owned subsidiaries. The financial statements of the Company's wholly owned subsidiaries are recorded in their functional currency and translated into the reporting currency. The cumulative effect of changes in exchange rates between the foreign entity's functional currency and the reporting currency is reported in Accumulated Other Comprehensive Income. All intercompany transactions and accounts have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires the Company to make certain estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Management's estimates include those related to the accrual of research and development costs, the valuation of preferred and common shares, certain financial instruments recorded at fair value, stock-based compensation, and the valuation allowance for deferred tax assets. The Company bases its estimates on historical experience and on various other market-specific and relevant assumptions that it believes to be reasonable under the circumstances. Accordingly, actual results could be materially different from those estimates.

Risks and Uncertainties

The product candidates being developed by the Company require approvals from the U.S. Food and Drug Administration (FDA) or foreign regulatory agencies prior to commercial sales. There can be no assurance that the Company's product candidates will receive the necessary approvals. If the Company is denied regulatory approval of its product candidates, or if approval is delayed, it may have a material adverse impact on the Company's business, results of operations and its financial position.

The Company is subject to a number of risks similar to other life science companies, including, but not limited to, risks related to the successful discovery and development of drug candidates, raising additional capital, development of competing drugs and therapies, protection of proprietary technology and market acceptance of the Company's products. As a result of these and other factors and the related uncertainties, there can be no assurance of the Company's future success.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and institutional bank money market accounts with original maturities of three months or less when acquired and are stated at cost, which approximates fair value.

Short-term Investments

The Company has classified its investments in debt securities and equity securities with readily determinable fair value as available-for-sale securities. These securities are carried at estimated fair value with the aggregate unrealized gains and losses related to these investments, net of taxes, reflected as a part of "Accumulated other comprehensive income (loss)" within stockholders' equity.

The fair value of the investments is based on the specific quoted market price of the securities or comparable securities at the balance sheet dates. Investments in debt securities are considered to be impaired when a decline in fair value is judged to be other than temporary because the Company either intends to sell or it is more-likely-than not that it will have to sell the impaired security before recovery. Once a decline in fair value is determined to be other than temporary, an impairment charge is recorded and a new cost basis in the investment is established.

Concentration of Credit Risk

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist principally of cash and cash equivalents and foreign exchange derivatives not designated as hedging. The Company places its cash and cash equivalents with a limited number of high quality financial institutions and at times may exceed the amount of insurance provided on such deposits.

Accrued Research and Development Costs

The Company records the costs associated with research nonclinical studies, clinical trials, and manufacturing development as incurred. These costs are a significant component of the Company's research and development expenses, with a substantial portion of the Company's on-going research and development activities conducted by third-party service providers, including contract research and manufacturing organizations.

The Company accrues for expenses resulting from obligations under agreements with contract research organizations ("CROs"), contract manufacturing organizations ("CMOs"), and other outside service providers for which payment flows do not match the periods over which materials or services are provided to the Company. Accruals are recorded based on estimates of services received and efforts expended pursuant to agreements established with CROs, CMOs, and other outside service providers. These estimates are typically based on contracted amounts applied to the proportion of work performed and determined through analysis with internal personnel and external service providers as to the progress or stage of completion of the services. The Company makes significant judgments and estimates in determining the accrual balance in each reporting period. In the event advance payments are made to a CRO, CMO, or outside service provider, the payments will be recorded as a prepaid asset which will be amortized as the contracted services are performed. As actual costs become known, the Company adjusts its prepaids and accruals. Inputs, such as the services performed, the number of patients enrolled, or the study duration, may vary from the Company's estimates resulting in adjustments to research and development expense in future periods. Changes in these estimates that result in material changes to the Company's accruals could materially affect the Company's results of operations. The Company has not experienced any material deviations between accrued and actual research and development expenses.

Business Combinations

Assets acquired and liabilities assumed as part of a business acquisition are recorded at their estimated fair value at the date of acquisition. The excess of purchase price over the fair value of assets acquired and liabilities assumed is recorded as goodwill. Determining fair value of identifiable assets, particularly intangibles, and liabilities acquired also requires management to make estimates, which are based on all available information and, in some cases, assumptions with respect to the timing and amount of future revenue and expenses associated with an asset.

Goodwill and Acquired In-Process Research and Development (IPR&D)

Goodwill and acquired IPR&D are not amortized but are tested annually for impairment or more frequently if impairment indicators exist. The Company adopted accounting guidance related to annual and interim goodwill and acquired IPR&D impairment tests which allows the Company to first assess qualitative factors before performing a quantitative assessment of the fair value of a reporting unit.

If it is determined on the basis of qualitative factors that the fair value of the reporting unit is more likely than not less than the carrying amount, a quantitative impairment test is required. During the nine months ended September 30, 2017, the Company experienced a $.4 million and $1.3 million increase in the carrying value of goodwill and IPR&D, respectively, related to its acquisition of Savara ApS, which was due to foreign currency translation. Additional goodwill and IPR&D were recorded with respect to the Merger.

Tax Refund Receivable

The Company has recorded a Danish tax credit earned by its subsidiary, Savara ApS for the post-acquisition period in 2016 and the nine months ended September 30, 2017. Under Danish Tax Law, Denmark remits a research and development tax credit equal to 22% of qualified research and development expenditures, not to exceed established thresholds. As of September 30, 2017, credits totaling $1.2 million had not been received. The portion of the total Danish tax credit related to the post-acquisition period in 2016 of approximately $.4 million which is expected to be collected in November 2017 is recorded as a receivable in prepaid expenses and other current assets while $.8 million expected to be received in the fourth quarter of 2018 is recorded in other non-current assets.

Segment Reporting

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker, or decision making group, in making decisions on how to allocate resources and assess performance. Our chief operating decision maker is the chief executive officer. We have one operating segment, specialty pharmaceuticals within the respiratory system.

Fair Value of Financial Instruments

The accounting standard for fair value measurements provides a framework for measuring fair value and requires disclosures regarding fair value measurements. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, based on the Company's principal or, in absence of a principal, most advantageous market for the specific asset or liability.

The Company uses a three-tier fair value hierarchy to classify and disclose all assets and liabilities measured at fair value on a recurring basis, as well as assets and liabilities measured at fair value on a non-recurring basis, in periods subsequent to their initial measurement. The hierarchy requires the Company to use observable inputs when available, and to minimize the use of unobservable inputs, when determining fair value.

The three tiers are defined as follows:

- Level 1 – Observable inputs that reflect quoted market prices (unadjusted) for identical assets or liabilities in active markets;
- Level 2 – Observable inputs other than quoted prices in active markets that are observable either directly or indirectly in the marketplace for identical or similar assets and liabilities; and
- Level 3 – Unobservable inputs that are supported by little or no market data, which require the Company to develop its own assumptions.

Financial instruments carried at fair value include cash and cash equivalents and contingent consideration related to the acquisition of Serendex for which any change is reflected in general and administrative expense, foreign exchange derivatives, and certain warrants classified as liabilities and embedded put options separated from the convertible promissory notes which were converted to common equity or derecognized on April 27, 2017 as a result of the Merger (Notes 6, 7, and 9).

Financial instruments not carried at fair value include accounts payable and accrued liabilities. The carrying amounts of these financial instruments approximate fair value due to the highly liquid nature of these short-term instruments.

Net Loss per Share

Basic net loss attributable to common stockholders per share is calculated by dividing the net loss by the weighted average number of shares of common stock outstanding during the period without consideration of common stock equivalents. Since the Company was in a loss position for all periods presented, diluted net loss per share is the same as basic net loss per share for all periods presented as the inclusion of all potential dilutive securities would have been antidilutive.

Redeemable Convertible Preferred Stock and Series B and Series C Warrants

The Series A, Series B, and Series C redeemable convertible preferred stock, previously classified in temporary equity as it was redeemable at the written request of the holders of at least two-thirds of the then outstanding shares of preferred stock, at any time after October 31, 2022, was converted to common stock on the effective date of the Merger subject to the Exchange Ratio. Additionally, certain outstanding warrants to purchase Series B convertible preferred stock ("Series B Warrants") previously classified as liabilities were exercised on the effective date of the Merger with any residual Series B warrants expiring in May 2017. Certain outstanding warrants to purchase Series C redeemable convertible preferred stock ("Series C Warrants") were reclassified from a liability to common equity as the Series C Warrants have been converted to warrants to purchase common stock subject to the Exchange Ratio following the Merger.

Stock-Based Compensation

The Company recognizes the cost of stock-based awards granted to employees based on the estimated grant-date fair value of the awards. The value of the portion of the award that is ultimately expected to vest is recognized as expense ratably over the requisite service period. The Company recognizes the compensation costs for awards that vest over several years on a straight-line basis over the vesting period (see Note 14). Forfeitures are recognized when they occur, which may result in the reversal of compensation costs in subsequent periods as the forfeitures arise. The Company recognizes the cost of stock-based awards granted to nonemployees at their then-current fair values as services are performed, and such awards are remeasured through the counterparty performance date.

Manufacturing Commitments and Contingencies

The Company is subject to various manufacturing royalties and payments related to its product candidate, Molgradex. Under this agreement with the Active Pharmaceutical Ingredients ("API") manufacturer, no signing fee or milestones are included in the royalty payments, and there is no minimum royalty. Additionally, Savara amended its agreement with the API manufacturer in the third quarter of 2017 under which the Company agreed to pay $.4 million for technology transfer services rendered through September 30, 2017, $.6 million upon the delivery of a working cell bank and master cell bank, and $2.0 million upon the achievement of certain milestones related to regulatory approval of Molgradex. As a result, this amendment eliminated the previously disclosed purchase commitment to acquire a working cell bank and master cell bank for $2.0 million from this API manufacturer in the third quarter of 2017. Upon the successful development, registration and attainment of approval by the proper health authorities, such as the FDA, in any territory except Latin America, Central America and Mexico, the Company must pay a royalty of three percent (3%) on annual net sales to the manufacturer of its API.

The Company is also subject to certain contingent milestone payments up to approximately 7.0 million euros based upon various development activities and regulatory approvals payable to the Company's manufacturer of its nebulizer used to administer Molgradex. In addition to these milestones, the Company will owe a royalty to the manufacturer of its nebulizer based on net sales. The royalty rate ranges from three and a half percent (3.5%) to five percent (5%) depending on the device technology used by the Company to administer the product.

Income Taxes

The Company uses the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the carrying amounts and the tax basis of assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect of a change in tax rates on deferred tax assets and liabilities will be recognized in the period that includes the enactment date. A valuation allowance is established against the deferred tax assets to reduce their carrying value to an amount that is more likely than not to be realized.

Recent Accounting Pronouncements

In February 2016, the FASB issued Accounting Standards Update 2016-02, "Leases" ("ASU 2016-02"). The update aims at making leasing activities more transparent and comparable, and requires substantially all leases to be recognized by lessees on their balance sheet as a right-of-use asset and a corresponding lease liability, including leases currently accounted for as operating leases. The update also requires improved disclosures to help users of financial statements better understand the amount, timing and uncertainty of cash flows arising from leases. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018 with early adoption permitted. The Company is currently evaluating the impact of the adoption of ASU 2016-02 on its financial statements.

In August 2016, the FASB issued Accounting Standards Update 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments" ("ASU 2016-15"), which intended to add or clarify guidance on the classification of certain cash receipts and payments on the statement of cash flows. The new guidance addresses cash flows related to the following: debt prepayment or extinguishment costs, settlement of zero-coupon bonds, contingent consideration payments made after a business

combination, proceeds from the settlement of insurance claims, proceeds from the settlement of corporate-owned life insurance policies and bank-owned life insurance policies, distributions received from equity method investees, beneficial interest in securitization transactions, and the application of predominance principle to separately identifiable cash flows. ASU 2016-15 is effective for the Company for annual periods beginning after December 15, 2017, and interim periods within those fiscal years with early adoption permitted. The Company is currently evaluating the effect of this new guidance on its financial statements.

3. Prepaid expenses and other current assets

Prepaid expenses, consisted of (in thousands):

	September 30, 2017	December 31, 2016
R&D tax credit receivable	$ 357	$ 357
Prepaid clinical trial costs	1,324	243
VAT receivable	114	111
Prepaid insurance	263	35
Deposits and other	177	94
Total prepaid expenses and other current assets	**$ 2,235**	**$ 840**

4. Accrued expenses and other liabilities

Accrued expenses and other liabilities, consisted of (in thousands):

	September 30, 2017	December 31, 2016
Accrued contracted research and development costs	$ 3,321	$ 1,855
Accrued general and administrative costs	630	458
Accrued compensation	157	117
Forward currency contract obligation	39	—
Other	—	47
Total accrued expenses and other liabilities	**$ 4,147**	**$ 2,477**

5. Short-term Investments

Short-term Investments in Available for Sale Securities

The Company's investment policy seeks to preserve capital and maintain sufficient liquidity to meet operational and other needs of the business. The following table summarizes, by major security type, the Company's investments as of September 30, 2017 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Short-term investments				
U.S. government securities	$ 3,985	$ —	$ —	$ 3,985
Asset backed securities	3,612	—	(1)	3,611
Corporate securities	11,546	—	(4)	11,542
Commercial paper	14,335	—	—	14,335
Total short-term investments	**$ 33,478**	**$ —**	**$ (5)**	**$ 33,473**

The Company has classified its investments as available-for-sale securities. These securities are carried at estimated fair value with the aggregate unrealized gains and losses related to these investments, net of taxes, reflected as a part of "Accumulated other comprehensive income (loss)" in the Consolidated Balance Sheets. Classification as short-term or long-term is based upon the maturity of the debt securities, which is less than twelve months.

There were no significant realized gains or losses related to investments for the nine months ended September 30, 2017 and the year ended December 31, 2016.

6. Acquisitions

(a) Mast

On April 27, 2017, the Company completed the Merger with Mast as discussed in Note 1. The Merger was accounted for as a reverse merger under the acquisition method of accounting whereby Savara was considered to have acquired Mast for financial reporting purposes because, immediately upon completion of the Merger, Savara stockholders held a majority of the voting interest of the combined company.

Pursuant to business combination accounting, the Company applied the acquisition method, which requires the assets acquired and liabilities assumed be recorded at fair value with limited exceptions. The Company used the Multi-Period Excess Earnings Model (MPEEM), a form of the income approach to value the in-process research and development intangible asset. Under the valuation method, the present value of future cash flows expected to be generated from the in-process research and development of the acquired product candidate, Aironite, was determined using a reasonable discount rate, and identified projected cash flows from Aironite were risk adjusted to take into consideration the probabilities of moving through the various clinical stages. The excess of the purchase price over the assets acquired and liabilities assumed represents goodwill. The goodwill is primarily attributable to the synergies expected to arise after the acquisition and is not expected to be deductible for tax purposes. Transaction costs associated with the Merger of approximately $2.2 million are included in general and administrative expense for the nine months ended September 30, 2017. The total purchase price for Mast was $35.8 million based on the fair value of the outstanding Mast equity on the date of the Merger which was allocated as follows:

Purchase Consideration	**(in thousands)**
Fair value of Mast shares outstanding	$ 33,117
Fair value of Mast equity	2,729
Fair value of total consideration	$ 35,846
Assets acquired and liabilities assumed	
Cash and cash equivalents	$ 3,442
Tangible assets	283
In-process research and development intangible assets	21,692
Liabilities	(2,396)
Debt	(3,407)
Deferred tax liability	(8,677)
Total assets acquired and liabilities assumed	10,937
Goodwill	24,909
Total	**$ 35,846**

The final allocation of the purchase price is dependent on the finalization of the valuation of the fair value of assets acquired and liabilities assumed and may differ from the amounts included in these financial statements. The Company expects to complete the final allocation as soon as practical but no later than one year from the acquisition date. Management does not expect adjustments, if any, resulting from changes to the purchase price allocation, to have a material effect on the Company's financial position or results of operations.

(b) Serendex

On May 13, 2016, the Company entered into a Business Transfer Agreement with Serendex Pharmaceuticals A/S ("Serendex") under which Serendex agreed to sell, transfer and assign to the Company all of its assets and subsidiaries, certain of its contracts, and certain of its employees and liabilities. On July 15, 2016, the Company completed the acquisition of Serendex through its wholly-owned subsidiary, Savara ApS, a limited liability company established under the laws in Denmark. Through this acquisition, the Company gained access to the late-stage asset, Molgradex, for the treatment of PAP. In addition to Molgradex, Savara gained access to an experienced development team familiar with all aspects of the Molgradex program. Pursuant to the Business Transfer Agreement, the Company issued 1,965,400 shares of the Company's common stock to the seller, after giving effect of the Exchange Ratio and agreed to pay up to $21.5 million of contingent cash consideration upon the attainment of certain contingent development milestones of Molgradex.

(c) Pro Forma

The following summary pro forma condensed consolidated financial information reflects the Merger with Mast as if it had occurred on January 1, 2016 for purposes of the statements of operations. This summary pro forma information is not necessarily representative of what the Company's results of operations would have been had the Merger in fact occurred on January 1, 2016, and is not intended to project the Company's results of operations for any future period. Included in the Savara condensed consolidated statement of

operations for the nine months ended September 30, 2017 is $0 of revenue and $1.2 million of net loss before income tax generated by Mast since April 27, 2017, the acquisition date.

Pro forma condensed consolidated financial information for the nine months ended September 30, 2017 and the year ended December 31, 2016 (unaudited) is as follows (in thousands):

	Nine Months Ended September 30, 2017	Year Ended December 31, 2016
Net revenues	$ 94	$ 528
Net loss	$ (18,211)	$ (42,560)

Pro forma combined net loss includes adjustments to remove transaction costs of $8.5 million and $.6 million for the nine months ended September 30, 2017 and the year ended December 31, 2016, respectively, because they will not have a continuing impact on operations, and a reduction in historical interest expense of $1.4 million for the year ended December 31, 2016 due to the new debt to finance the merger and extinguishment of Mast pre-merger debt.

7. Convertible Promissory Notes

A. 2016 Convertible Promissory Note

During 2016, the Company borrowed approximately $4.4 million from several investors under convertible subordinate promissory notes (the "2016 Notes"). Under the amended terms, the 2016 Notes converted into equity in connection with the Merger. See further discussion under Accounting for the 2016 Notes below.

The 2016 Notes accrued interest at 8.0% per annum computed on the basis of the actual number of days elapsed and a 365-day year. All unpaid principal, together with any then accrued but unpaid interest was due and payable on the earliest of (i) June 30, 2018 (the "Maturity Date"), (ii) the closing of a change of control as defined, or (iii) the occurrence of an event of default, as defined (such earliest date is hereinafter referred to as Maturity). The 2016 Notes were prepayable only with the written consent of the holders of a majority of the principal amount of the then-outstanding 2016 Notes. The following paragraphs describe the original and amended conversion features of the 2016 Notes.

Automatic Conversion

The principal and any accrued interest automatically convert into shares of Qualified Private Placement Financing Securities at the 2016 Note Conversion Price, upon the closing of a Qualified Private Placement Financing ("Private Placement Automatic Conversion"). In the event of a Private Placement Automatic Conversion, the 2016 Notes are converted into a number of Qualified Private Placement Financing Securities determined by dividing (i) the aggregate outstanding principal amount and accrued but unpaid interest by (ii) the 2016 Note Conversion Price. A Qualified Private Placement Financing is defined as the next Private Placement transaction (or series of related transactions) after the date of the 2016 Notes and before Maturity in which the Company issues and sells shares of its preferred stock in exchange for aggregate gross proceeds of at least $5 million (excluding amounts received upon conversion of indebtedness). Private Placement means any equity financing transaction (or series of related transactions) pursuant to a private placement exempt from the registration requirements of the Securities Act, other than pursuant to the exemption provided by Regulation A under the Securities Act (i.e., not a Regulation A Offering or an Initial Public Offering).

The Note Conversion Price is the lesser of (A) (i) the price per share of the Next Round Securities, Qualified Financing Shares or Regulation A Offering Shares, as the case may be, times (ii) 0.8 (i.e. a 20% discount), or (B) the quotient obtained by dividing $125 million (the "Valuation Cap") by the Company's fully diluted capitalization immediately prior to the initial closing of the Qualified Financing, Non-Qualified Financing, Qualified Regulation A Offering or Non-Qualified Regulation A Offering in which the Notes are converted. Non-Qualified Private Placement Financing means any transaction (or series of related transactions) after the date of the 2016 Notes and before Maturity in which the Company issues and sells shares of its capital stock in any Private Placement transaction that is not deemed to be a Qualified Private Placement Financing. Next Round Securities means the equity shares sold in a Non-Qualified Private Placement Financing.

The entire outstanding principal amount of the 2016 Notes and any accrued but unpaid interest will be converted automatically into shares of Regulation A securities at the Note Conversion Price upon the closing of a Qualified Regulation A Offering. In the event of an automatic conversion under a Qualified Regulation A Offering, the 2016 Notes will be converted into that number of Regulation A securities determined by dividing (i) the aggregate outstanding principal amount of the 2016 Notes and any accrued but unpaid interest by (ii) the Note Conversion Price. A Qualified Regulation A Offering means a Regulation A Offering with gross proceeds to the Company of at least $5 million in one or more closings during a twelve-month period, excluding amounts received on conversion of the 2016 Notes.

Voluntary Conversion

In the event that the Company consummates a Non-Qualified Private Placement Financing, at the option of each holder or holders of a majority of the outstanding aggregate principal amount, all or part of the outstanding principal and any accrued interest may be converted into Next Round Securities. A Non-Qualified Private Placement Financing is any transaction (or series of related transactions) after the date of the 2016 Notes and before Maturity in which the Company issues and sells shares of its capital stock in any Private Placement transaction that is not deemed to be a Qualified Private Placement Financing at the applicable 2016 Note Conversion Price as defined above.

In the event that the Company consummates a Non-Qualified Regulation A Offering (i) at the option of the holder, but subject to the consent of the board of directors, all or part of the outstanding principal amount of the 2016 Notes and any accrued but unpaid interest may be converted into Regulation A Securities, and (ii) at the option of the holders of a majority of the outstanding principal amount of the 2016 Notes, all or part of the outstanding principal amount of the 2016 Notes and any accrued but unpaid interest will be converted into shares of Regulation A Securities. In the event of such conversion, the 2016 Notes will be converted into that number of shares of Regulation A Securities determined by dividing (x) the aggregate outstanding principal amount of the 2016 Notes and any accrued but unpaid interest by (y) the Note Conversion Price. A Non-Qualified Regulation A Offering means the closing of a Regulation A Offering with gross proceeds to the Company of less than $5 million excluding amounts received on conversion of the 2016 Notes.

Change in Control Conversion

In the event of a Change of Control after the date of the 2016 Notes but prior to Maturity, at the option of each holder or holders of a majority of the outstanding aggregate principal amount, all or part of the outstanding principal amount and any accrued interest, (i) may be converted into the number of shares of Series C Redeemable Convertible Preferred Stock (“Series C Preferred Stock”) determined by dividing (x) the aggregate outstanding principal amount and any accrued interest by (y) the quotient obtained by dividing (1) the Valuation Cap by (2) the Company’s capital stock outstanding immediately prior to such Change of Control.

A Change of Control means any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, and shall be deemed to be occasioned by, or to include, (i) a merger or consolidation of the Company into or with another entity after which the stockholders of the Company immediately prior to such transaction do not own, immediately following the consummation of the transaction by virtue of their shares in the Company or securities received in exchange for such shares in connection with the transaction, a majority of the voting power of the surviving entity in proportions substantially identical to those that existed immediately prior to such transaction and with substantially the same rights, preferences, privileges and restrictions as the shares they held immediately prior to the transaction, (ii) the sale, transfer or other disposition (but not including a transfer or disposition by pledge or mortgage to a bona fide lender) of all or substantially all of the assets of the Company (other than to a wholly-owned subsidiary), or (iii) the sale or transfer by the Company or its stockholders of more than 50% of the voting power of the Company in a transaction or series of related transactions other than in a transaction or series of transactions effected by the Company primarily for financing purposes.

IPO Conversion

Upon an initial public offering of the Company’s common stock, the entire outstanding principal amount plus any accrued interest under the 2016 Notes automatically converts into shares of Company common stock at the IPO Conversion Price. The IPO Conversion Price means the lesser of the (x) quotient obtained by dividing (1) the Valuation Cap by (2) the Company’s fully diluted capitalization immediately prior to the consummation of the initial public offering or (y) quotient obtained by dividing (1) the pre-money valuation of the Company approved by the board of directors in connection with the Initial Public Offering, by (2) the Company’s fully diluted capitalization immediately prior to the consummation of the Initial Public Offering.

Maturity Date Conversion

The entire outstanding principal amount and any accrued interest under the 2016 Notes automatically converts into shares of Series C Preferred Stock at the Series C Price upon the close of business of the Maturity Date. In the event of such automatic conversion, the 2016 Notes convert into that number of Series C Preferred Stock determined by dividing (i) the aggregate outstanding principal amount of the 2016 Notes plus any accrued interest by (ii) the Series C Price. The Series C Price is $5.2605 as adjusted for stock dividends, stock splits, recapitalizations and other similar events.

Public Listing Conversion

The 2016 Notes and the Series C Warrants, issued with the note subscriptions, were amended to include a conversion clause in the case of the Merger. The amendment provides the warrant holder the right to voluntarily exercise the Series C Warrants; however, the 2016 Notes would be automatically converted in the case of the Merger. Upon the consummation of the Merger or a similar transaction that results in the listing of capital stock of the Company or shares issued in exchange for the capital stock of the Company, the entire principal amount plus any accrued interest under the 2016 Notes automatically converts into shares of Common Stock at $4.22 per share, which was 80% of the estimated Merger per share value, for notes issued on or prior to August 15, 2016 and 80% of the amount equal to the average trading price of Mast's common stock for the twenty day period ending two days prior to the closing of the Merger, as adjusted by the Exchange Ratio described in the Merger Agreement.

Accounting for the 2016 Notes

Management determined that the automatic conversion upon a Qualified Private Placement Financing, a Qualified Regulation A Offering, a Non-Qualified Private Placement Financing, or a Non-Qualified Regulation A Offering as defined above represented, in substance, a put option (redemption feature) designed to provide the investor with a fixed monetary amount, settleable in shares. Management determined that this put option should be separated and accounted for as a derivative primarily because the put option met the net settlement criterion and the settlement provisions were not consistent with a fixed-for-fixed equity instrument. With respect to the Series C Warrants issued to investors who purchased 2016 Notes prior to August 15, 2016, management determined that the Series C Warrants should also be separated and accounted for as a derivative and classified as a liability.

Both the put option, with a fair value of approximately $1.0 million and warrant liability, with a fair value of approximately $.3 million at inception, were initially recorded as derivative liabilities on the accompanying balance sheet and a corresponding discount to the 2016 Notes. The Company accreted the discount to interest expense on the statement of operations and comprehensive loss over the term of the 2016 Notes using the effective interest rate method. The Company recorded interest expense of $.2 million during the nine months ended September 30, 2017 related to the accretion of the total discount through the date of conversion.

Upon the Merger, the date of the automatic conversion under the Public Listing Conversion provisions, the 2016 Notes were surrendered in exchange for shares of the Company's common stock after giving effect to the Exchange Ratio. The debt host contract and separated derivative liability were both subject to extinguishment accounting, and a loss in the amount of $.9 million was recorded in the Statement of Operations and Comprehensive Loss. The loss was calculated as the difference between the net book value of the 2016 Notes plus the fair value of the put option immediately prior to the Automatic Conversion, and the fair value of the common stock into which the 2016 Notes were converted.

B. 2017 Convertible Promissory Note

During 2017, the Company borrowed approximately $3.6 million from several investors under convertible subordinate promissory notes (the "2017 Notes") which converted into equity in connection with the Merger. The 2017 Notes accrued interest at 8.0% per annum computed on the basis of the actual number of days elapsed and a 365-day year. All unpaid principal, together with any then accrued but unpaid interest was due and payable on the earliest of (i) June 30, 2018, (ii) the closing of a change of control as defined, or (iii) the occurrence of an event of default, as defined (such earliest date is hereinafter referred to as Maturity). The 2017 Notes were prepayable only with the written consent of the holders of a majority of the principal amount of the then-outstanding 2017 Notes. The terms and conditions of the 2017 Notes were substantially consistent with the 2016 Notes as described above, other than the Public Listing Conversion feature which is described below.

Public Listing Conversion

Immediately prior to, but in any event conditioned upon the consummation of a merger or similar transaction that results in the listing of capital stock the Company or shares issued in exchange for the capital stock of the Company on any tier of any U.S. national securities exchange, including the transactions described in the Merger Agreement, the entire outstanding principal amount of the 2017 Notes, any accrued but unpaid interest and any other amounts payable under the 2017 Notes shall be converted automatically into shares of the Company's common stock, as adjusted for the Exchange Ratio, at the Reverse Merger Conversion Price. Upon such occurrence, the 2017 Notes shall be converted into that number of shares of common stock determined by dividing (i) the aggregate outstanding principal amount of the 2017 Notes, any accrued but unpaid interest, and any other amounts payable under the 2017 Notes by (ii) the Reverse Merger Conversion Price. The Reverse Merger Conversion Price means eighty percent of the amount equal to the average trading price of Mast's common stock for the twenty-day period prior to the Merger date.

Accounting for the 2017 Notes

Management determined that the automatic conversion upon a Qualified Private Placement Financing, a Qualified Regulation A Offering, a Non-Qualified Private Placement Financing, or a Non-Qualified Regulation A Offering as defined above represented, in substance, a put option (redemption feature) designed to provide the investor with a fixed monetary amount, settleable in shares. Management determined that this put option should be separated and accounted for as a derivative primarily because the put option met the net settlement criterion and the settlement provisions were not consistent with a fixed-for-fixed equity instrument.

The put option, with a fair value of approximately $.8 million at inception, was initially recorded as a derivative liability on the accompanying balance sheet and a corresponding discount to the 2017 Notes. The Company accreted the discount to interest expense on the statement of operations and comprehensive loss over the term of the 2017 Notes using the effective interest rate method. The Company recorded interest expense of approximately five thousand dollars during the nine months ended September 30, 2017 related to the accretion of the discount through the date of conversion.

Upon the Merger, the date of the automatic conversion under the Public Listing Conversion provisions, the 2017 Notes were surrendered in exchange for the Company's common stock after giving effect to the Exchange Ratio. The debt host contract and separated derivative liability were both subject to extinguishment accounting, and a loss in the amount of approximately $.9 million was recorded in the Statement of Operations and Comprehensive Loss. The loss was calculated as the difference between the net book value of the 2017 Notes plus the fair value of the put option immediately prior to the Automatic Conversion, and the fair value of the common stock into which the 2017 Notes were converted.

8. Debt Facility

On April 28, 2017, the Company entered into a loan and security agreement with Silicon Valley Bank (the "Loan Agreement"). The Loan Agreement provides for a $15 million debt facility, of which the first tranche, or $7.5 million, was immediately available to the Company upon completion of the Merger with a minimum market cap of $100 million. The Company executed the first tranche in early May 2017. The primary use of the capital was for the repayment of $3.7 million of principal debt and fees of Mast assumed in the Merger. The residual capital will be utilized to fund ongoing development programs of the Company and for general corporate purposes. Under the terms of the Loan Agreement, the Company may, but is not obligated to draw a second tranche of $7.5 million available through June 30, 2017, subject to the achievement of certain corporate milestones specifically a minimum new capital raise with combined proceeds of at least $40 million through a secondary offering, private investment in public entity (PIPE), ATM, partnerships or grant to be received within twelve months of signing the agreement.

On June 15, 2017, following an underwritten public offering of 9,034,210 shares of the Company's common stock and the sale of 23,550 shares of the Company's common stock under the At The Market Sales Agreement (Note 11), the Company executed the second tranche of the Loan Agreement for $7.5 million as the financing conditions under the Loan Agreement had been met.

The Loan Agreement contains customary affirmative and negative covenants, including among others, covenants limiting our ability and our subsidiaries to dispose of assets, permit a change in control, merge or consolidate, make acquisitions, incur indebtedness, grant liens, make investments, make certain restricted payments and enter into transactions with affiliates, in each case subject to certain exceptions.

The Loan Agreement bears interest at the prime rate reported in The Wall Street Journal, plus a spread of 4.25%. Interest only payments are due through September 2018 followed by monthly payments of principal plus interest over the following thirty (30) months. Since the second tranche was fully extended, the interest only period was extended for an additional six (6) months, through March 2019 followed by monthly payments of principal plus interest over the following twenty-four (24) months through the maturity date of March 1, 2021 under the Loan Agreement provisions. We were obligated to pay customary closing fees and are obligated to pay a final payment of 6.0% of the aggregate principal amount of term loans advanced under the facility. The end of term charge of $.9 million will be due on the scheduled maturity date and is being recognized as an increase to the principal with a corresponding charge to interest expense over the term of the facility using the effective interest method.

In connection with the Loan Agreement, we paid $.1 million in legal costs directly attributable to issuing the debt instrument. Such charges were accounted for as debt issuance costs and are being amortized to interest expense using the effective interest method through the scheduled maturity date.

Upon funding the first tranche of the Loan Agreement, the Company was obligated to issue warrants to purchase shares of the Company's common stock equal to 3.0% of the funded amount divided by the exercise price to be set based on the average price per share over the preceding 10 trading days prior to closing. The number of shares callable under the warrant agreement for the first tranche and exercise price were 24,725 shares of the Company's common stock at an exercise price of $9.10 per share, with a ten year life, expiring April 28, 2027 ("April 2017 Warrants").

Upon funding the second tranche of the Loan Agreement, the Company was obligated to issue warrants to purchase shares of the Company's common stock equal to 3.0% of the funded amount divided by an exercise price to be set based on the average price per share over the preceding 10 trading days prior to funding or the price per share prior to the day of funding. As such, the Company issued a second warrant for 41,736 shares at an exercise price of $5.39 with a ten year life, expiring June 15, 2027 ("June 2017 Warrants").

The April 2017 Warrants and June 2017 Warrants issued were valued using the Black-Scholes option pricing model with the following assumptions: volatility of 71.42% and 71.57%, respectively, expected term of ten years, risk-free interest rate of 2.33% and 2.16%, respectively, and a zero dividend yield. The collective warrant fair value of $.4 million has been recorded as a debt discount and is being amortized through interest expense using the effective interest method through the scheduled maturity date.

Summary of Carrying Value

The following table summarizes the components of the debt facility carrying value (in thousands):

	As of September 30, 2017	
	Short-term	Long-term
Principal payments to lender and end of term charge	$ —	$ 15,087
Debt Issuance costs	—	(91)
Debt discount related to warrants	—	(321)
Carrying Value	$ —	$ 14,675

9. Fair Value Measurements

The Company measures and reports certain financial instruments at fair value on a recurring basis and evaluates its financial instruments subject to fair value measurements on a recurring basis to determine the appropriate level in which to classify them in each reporting period.

The Company determined that certain investments in debt securities classified as available-for-sale securities were Level 1 financial instruments.

Additional investments in corporate debt securities and commercial paper are considered Level 2 financial instruments because the Company has access to quoted prices, but does not have visibility to the volume and frequency of trading for all of these investments. For the Company's investments, a market approach is used for recurring fair value measurements and the valuation techniques use inputs that are observable, or can be corroborated by observable data, in an active marketplace.

Foreign exchange derivatives not designated as hedging instruments are considered Level 2 fair value measurements. The Company's foreign exchange derivative instruments are typically short-term in nature.

The Company also determined that the warrant liability for the Series B Warrants and Series C Warrants, the put options on the 2016 Notes and 2017 Notes, described further in Note 6, and the contingent consideration, described further below, were Level 3 financial instruments.

The fair value of these instruments as of September 30, 2017 and December 31, 2016 was as follows (in thousands):

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
As of September 30, 2017:			
Cash equivalents:			
U.S. Treasury money market funds	$ 408	$ —	$ —
U.S. government securities	$ 1,999	$ —	$ —
Commercial paper	$ —	$ 1,199	$ —
Repurchase agreements	$ —	$ 3,000	$ —
At the market fiduciary account	$ 59	$ —	$ —
Short-term investments:			
U.S. government securities	$ 3,985	$ —	$ —
Asset backed securities		$ 3,611	
Corporate securities	$ —	$ 11,542	$ —
Commercial paper	$ —	$ 14,335	$ —
Liabilities:			
Foreign exchange derivatives not designated as hedging instruments	$ —	$ 38	$ —
Contingent consideration	$ —	$ —	$ 11,816
As of December 31, 2016:			
Liabilities:			
Put option	$ —	$ —	$ 979
Warrant liability	$ —	$ —	$ 303
Contingent consideration	$ —	$ —	$ 9,708

The estimated fair value of the put option on the 2016 Notes was determined using a multi-scenario probability weighted average method analysis in which the future probability of the equity financing event or Merger was weighted for its respective probability. The Company used the following assumptions to value the put option on the 2016 Notes and 2017 Notes as of September 30, 2017 and December 31, 2016. Upon the Merger date, April 27, 2017, the 2016 Notes and 2017 Notes were automatically converted into shares of common stock of the Company.

Assumption	September 30, 2017	December 31, 2016
Discount rate	—	0.43%
Probability of event	—	85.0%

Changes in the unobservable inputs noted above would impact the fair value of the put options and have a corresponding impact on the Company's net loss. The probability of the automatic conversion feature was determined by management based on its consideration of the expected timeline for the next round of Financing, Merger, and historical experience. Increases (decreases) in discount rate would decrease (increase) the value of the put options, and an increase (decrease) in the probability of the equity financing event or Merger event occurring would increase (decrease) the value of the put options.

The estimated fair value of the warrant liability (Series B Warrants and Series C Warrants) was determined using a Noreen Wolfson option pricing model. The assumptions used in valuing these warrants are presented in the table below. The warrant liability was reclassified as common equity upon the Merger date.

Assumption	September 30, 2017	December 31, 2016
Expected term	—	0.42 – 4.50
Expected dividend yield	—	—
Expected volatility	—	44.65% - 60.66%
Risk-free interest rate	—	0.58% - 1.82%

Changes in the unobservable inputs noted above would impact the fair value of the liabilities and have a corresponding impact on the Company's net loss. Increases (decreases) in the expected term and expected volatility would increase (decrease) net loss and the value of the warrant liability and an increase(decrease) in the risk-free interest rate would decrease (increase) net loss and the value of the warrant liability. Pursuant to the acquisition of certain assets, liabilities, and subsidiaries of Serendex (see Note 1), Savara agreed to pay the seller, in addition to a stipulated amount of shares of Savara's common stock, (i) $5 million upon receipt of marketing approval of Molgradex (the Product) by the European Medicines Agency, (ii) $15 million upon receipt of marketing approval of the Product by the FDA, and (iii) $1.5 million upon receipt of marketing approval of the Product by the Japanese Pharmaceuticals and Medical Devices Agency (the "Contingent Milestone Payments"). The Company estimates the likelihood of approval in each region, separately, based on the product candidate's current phase of development and utilizing published studies of clinical development success rates for comparable non-oncology orphan drugs. The present value of the potential cash outflows from the probability weighted Contingent Milestone Payments is then estimated by taking into consideration that the Contingent Milestone Payments are similar to a business expense of the Company and would be senior to any Company debt obligations. The resulting weighted average present value factor is then applied to discount the probability adjusted Contingent Milestone Payments for each region to derive the fair value of the Contingent Milestone Payments.

The following tables sets forth a summary of the changes in the fair value of the Company's Level 3 financial instrument (in thousands) for the nine months ended September 30, 2017 and year ended December 31, 2016:

	Warrant Liability	Put Option on 2016 Note and 2017 Note	Contingent Consideration
As of December 31, 2015	**$ 274**	**$ —**	**$ —**
Put option at issuance of 2016 Notes	—	977	—
Contingent consideration	—	—	9,524
Issuance of Series C Warrants	259	—	—
Change in fair value	(230)	2	184
Balance at December 31, 2016	**$ 303**	**$ 979**	**$ 9,708**
Change in fair value	67	169	2,108
Put option at issuance of 2017 Notes	—	828	—
Reclassification of warrant liability to common equity	(370)	—	—
Conversion of 2016 and 2017 Notes	—	(1,976)	—
Balance at September 30, 2017	**$ —**	**$ —**	**$ 11,816**

The Company records changes in fair value of the contingent consideration in general and administrative expense.

In June 2017, the Company determined that there would be a change to the Molgradex program due to the FDA's guidance on the clinical program requirements for a New Drug Application submission in the U.S. related to the Molgradex product, which was issued in May 2017. Based on the FDA's guidance, the Company modified certain criteria of its Molgradex development program which the Company believes will accelerate the development timeline in the U.S. The Company accordingly accounted for this change in its valuation of the contingent consideration as of June 30, 2017. The Company also accounted for the time value of money related to the Contingent Milestone Payments from December 31, 2016 to September 30, 2017 in its assessment. Accordingly, the related contingent consideration liability was remeasured to $11.8 million as of September 30, 2017 reflecting a change in fair value of $2.1 million for the nine months ended September 30, 2017 of which $2.0 million was related to the period from December 31, 2016 through June 30, 2017 and $.1 million related to the three months ended September 30, 2017.

The Company did not transfer any assets measured at fair value on a recurring basis to or from Level 1, Level 2 and Level 3 during the nine months ended September 30, 2017 and year ended December 31, 2016.

10. Derivative Financial Instruments

In the normal course of business, the Company is exposed to the impact of foreign currency fluctuations. The Company seeks to limit these risks by following risk management policies and procedures, including the use of derivatives. The Company's derivative contracts, which are not designated as hedging instruments, principally address short-term foreign currency exchange. The estimated fair value of the derivative contracts was based upon the relative exchange rate as of the balance sheet date. Accordingly, any gains or losses resulting from variances between this exchange rate the exchange rate at the contract inception date were recognized as other income or expense in the Condensed Consolidated Statements of Operations and Comprehensive Loss. As of September 30, 2017, there were approximately $1.8 million of unsettled forward exchange contracts to purchase foreign currency and the net derivative financial instruments were recorded at estimated fair value in accrued expenses, or thirty-nine thousand dollars.

11. Shareholders' Equity

Public Offering

On June 7, 2017, the Company completed an underwritten public offering consisting of 9,034,210 shares of its common which included 613,157 shares upon the partial exercise of the underwriters' option to purchase additional shares of Savara common stock at the public offering price, less the underwriting discounts and commissions. The underwriters' option to purchase the remaining balance of additional shares expired as of June 30, 2017. The net proceeds from the offering, after deducting the underwriting discounts and commissions and offering expenses, were approximately $39.5 million. The Company intends to use the net proceeds from this offering for working capital and general corporate purposes, which include, but are not limited to, the funding of clinical development of and pursuing regulatory approval for its product candidates, and general and administrative expenses. The public offering was executed under an existing shelf registration statement as previously filed with the Securities and Exchange Commission on August 12, 2015 and declared effective on August 19, 2015.

Common Stock Sales Agreement/At The Market (ATM)

On April 27, 2017, the Company delivered written notice to Cowen and Company, LLC that it was terminating its prior sales agreement, dated August 21, 2015, and on April 28, 2017, the Company entered into a Common Stock Sales Agreement (the "Sales Agreement") with H.C. Wainwright & Co., LLC, as sales agent ("Wainwright"), pursuant to which the Company may offer and sell, from time to time, through Wainwright, shares of Savara's common stock, par value $0.001 per share (the "Shares"), having an aggregate offering price of not more than $18.0 million. The Shares will be offered and sold pursuant to the Company's shelf registration statement on Form S-3. Subject to the terms and conditions of the Sales Agreement, Wainwright will use its commercially reasonable efforts to sell the Shares from time to time, based upon the Company's instructions. The Company has provided Wainwright with customary indemnification rights, and Wainwright will be entitled to a commission at a fixed commission rate equal to 3.0% of the gross proceeds per Share sold. Sales of the Shares, if any, under the Sales Agreement may be made in transactions that are deemed to be "at the market offerings" as defined in Rule 415 under the Securities Act of 1933, as amended. The Company has no obligation to sell any of the Shares, and may at any time suspend sales under the Sales Agreement or terminate the Sales Agreement.

During the nine months ended September 30, 2017, the Company sold 124,210 shares of common stock under the sales agreement, for net proceeds, of approximately $1.0 million.

Common Stock

The Company's amended and restated certificate of incorporation, effective upon the completion of the Merger, authorizes the Company to issue 501 million shares of common and preferred stock, consisting of 500 million shares of common stock with $0.001 par value and 1 million shares of preferred stock with $0.001 par value. The following is a summary of the Company's common stock at September 30, 2017 and December 31, 2016, which reflects Savara as a private company prior to the Merger, as restated for the Exchange Ratio upon closing of the Merger.

	September 30, 2017	December 31, 2016
Common stock authorized	500,000,000	27,000,000
Common stock outstanding	24,389,105	3,162,573

The Company's shares of common stock reserved for issuance as of September 30, 2017 and December 31, 2016 were as follows:

	September 30, 2017	December 31, 2016
Series A Preferred Stock	—	1,799,906
Series B Preferred Stock	—	5,675,387
Series C Preferred Stock	—	4,452,582
Series B Warrants	—	289,966
Series C Warrants	—	125,885
Warrants from Mast acquired in Merger	1,152,231	—
Warrants Converted Pursuant to Merger	74,992	—
April 2017 SVB Warrants	24,725	—
June 2017 SVB Warrants	41,736	—
Call Options Pursuant to Serendex Settlement	650,000	—
Stock options outstanding	1,657,078	1,814,645
Total shares reserved	**3,600,762**	**14,158,371**

Redeemable Convertible Preferred Stock

Prior to the Merger and the effect of the Exchange Ratio, the Company had 11,927,875 issued and outstanding shares of preferred stock, of which 1,799,906 shares were designated as Series A redeemable convertible preferred stock ("Series A"), 5,675,387 shares were designated as Series B redeemable convertible preferred stock ("Series B"), and 4,452,582 shares were designated as Series C convertible preferred stock ("Series C").

In the Merger, the previously outstanding shares of Series A and Series B preferred stock were converted on a one-to-one basis into shares of common stock and then subject to the Exchange Ratio. Due to the conversion of the 2016 Notes and 2017 Notes upon the Merger, the holders of Series C preferred stock received broad-based weighted average anti-dilution protection such that the previously outstanding shares of Series C preferred stock were converted on a 1:1.01706 basis (the “Anti-Dilution Conversion Ratio”) into shares of common stock and then adjusted for the Exchange Ratio. Following the Merger, there were no shares of preferred stock outstanding.

Warrants

Immediately prior to the Merger, Series B preferred stock warrants were exercised (either on a net exercise basis or for cash) and exchanged for 111,799 shares of the Company’s common stock after giving effect to the Exchange Ratio. Proceeds from the cash exercises were $.4 million.

Pursuant to the Merger, Series C Warrants were converted to warrants to purchase 74,992 shares of the Company’s common stock after giving effect to both the Anti-Dilution Conversion Ratio and Exchange Ratio.

The following table summarizes the outstanding warrants for the Company’s common stock as of September 30, 2017:

Shares Underlying Outstanding Warrants		Exercise Price	Expiration Date
401,391	$	45.50	June 2018
314,446	$	52.50	November 2019
32,467	$	7.00	August 2020
403,927	$	29.40	February 2021
74,992	$	8.98	June 2021
24,725	$	9.10	April 2027
41,736	$	5.39	June 2027
1,293,684			

Beneficial Conversion Feature

Due to the conversion of the 2016 Notes and 2017 Notes upon the Merger resulting in an Anti-Dilution Conversion Ratio to the holders of Series C preferred stock and Series C Warrants, a Contingent Beneficial Conversion Feature (“BCF”) was triggered resulting in an intrinsic BCF value attributable to the securities of approximately $.4 million, collectively. Since the conversion of the Series C preferred stock and Series C Warrants occurred contemporaneously on the BCF commitment date, the Company measured the value on that date and recorded the BCF as a “deemed dividend.”

Financial Advisor Fees

The Company executed an agreement with Canaccord Genuity in February 2016 as modified in March 2017 (collectively the “Advisory Agreement”) where the Company was obligated to pay Canaccord a success fee upon the closing of the Merger. As of September 30, 2017, following the Merger and public offering on June 7, 2017, the Company paid Canaccord Genuity $1.0 million related to the success fee for the Merger due under the Advisory Agreement following the public offering and which was paid in July 2017.

12. Commitments

Operating Leases

On March 23, 2017, we entered into a sub-sublease agreement for approximately 13,707 square feet of rentable office space located in San Diego, California. The subleased space served as Mast's corporate headquarters. However, as a result of the Merger, the Company no longer had an ongoing need for these facilities. The term of the sub-sublease commenced on July 1, 2017 and expires on May 31, 2020, coterminous with a sublease agreement dated June 19, 2014 with the Sublessor. Monthly base rent under the sub-sublease is approximately forty-four thousand dollars, subject to increases of 3.0% annually on the anniversary of the commencement date of the sub-sublease term. However, monthly base rent for calendar month two of the sub-sublease term was abated.

Settlement with Clinical Vendor

On June 29, 2017, the Company executed a Memorandum of Understanding ("MOU") with TFS Trial Form Support International AB ("TFS") and DOT World Co., Ltd. ("DOT") in order to resolve the issue of outstanding payment for services owed to DOT by Serendex in connection with the Molgradex clinical trial conducted prior to our acquisition of Serendex in July 2016. As part of this MOU, the Company agreed to pay TFS approximately 53 million Japanese Yen (approximately $.5 million) based on an installment payment schedule through December 31, 2017, if Serenova A/S ("Serenova"), the successor to Serendex, failed to pay the parties in full by June 30, 2017. Serenova failed to pay TFS in full by June 30, 2017, and the Company accrued the full settlement amount. During the three months ended September 30, 2017, the Company paid $.2 million of the accrued settlement amount and continued to pursue collection from Serenova.

On September 1, 2017, Savara and Serenova entered into a settlement agreement with respect to the matter under which Serenova agreed to make a cash settlement payment to Savara of $.3 million. Additionally, under the terms of settlement agreement, within ninety days following the cash settlement payment to Savara, which occurred on September 11, 2017, Serenova was provided the right, but not the obligation, to purchase up to 650,000 shares of common stock of Savara at a price per share equal to 90% of the volume weighted average price of Savara's common stock for the five (5) trading days ending on the date that Serenova elects to purchase such shares. Management determined that this call option should be separated and accounted for as a derivative. Since this call option meets the net settlement criterion and the settlement provisions are consistent with the fixed-for-fixed equity instrument and indexed to the Company's stock, the derivative instrument is equity-classified. As such, the call option was valued at $.3 million using the Black-Scholes option pricing model with the following assumptions: volatility 11.08%, expected term of ninety days, risk-free interest rate of 1.04%, and a zero dividend yield.

Risk Management

The Company maintains various forms of insurance that the Company's management believes are adequate to reduce the exposure to these risks to an acceptable level.

Employment Agreements

Certain executive officers are entitled to payments if they are terminated without cause or as a result of a change in control. Upon termination without cause, and not as a result of death or disability, each of such officers is entitled to receive a payment of base salary for three to twelve months following termination of employment and such officer will be entitled to continue to receive coverage under medical and dental benefit plans for three to twelve months or until such officer is covered under a separate plan from another employer. Upon a termination other than for cause or for good reason within twelve months following a change in control, each of such officers will be entitled to the same benefits as upon termination without cause and will also be entitled to certain acceleration of such officer's outstanding unvested options at the time of such termination.

13. Related Party Transactions

Pursuant to the public offering on June 7, 2017 (Note 11), Zambon SpA purchased 4,693,540 shares of the Company's common stock and holds approximately 19.2% of the Company's outstanding shares and voting interests of the Company as of September 30, 2017.

14. Stock-Based Compensation

A. 2008 Stock Option Plan

The Company adopted the Savara Inc. Stock Option Plan (the "2008 Plan"), pursuant to which the Company had reserved shares for issuance to employees, directors, and consultants. The 2008 Plan includes 1) the option grant program providing for both incentive and non-qualified stock options, as defined by the Internal Revenue Code, and 2) the stock issuance program providing for the issuance of awards that are valued based upon common stock, including restricted stock, dividend equivalents, stock appreciation rights, phantom stock, and performance units. The 2008 Plan also allows eligible persons to purchase shares of common stock at an amount determined by the Plan Administrator. Upon a participant's termination, the Company retains the right to repurchase unvested shares issued in conjunction with the stock issuance program at the fair market value per share as of the date of termination.

Prior to the closing of the Merger, the Company had issued incentive and non-qualified options and restricted stock to employees and non-employees under the 2008 Plan. The terms of the stock options, including the exercise price per share and vesting provisions, are determined by the board of directors. Stock options were granted at exercise prices not less than the estimated fair market value of the Company's common stock at the date of grant based upon objective and subjective factors including: third-party valuations, preferred stock transactions with third parties, current operating and financial performance, management estimates and future expectations. Stock option grants typically vest quarterly over three to four years and expire ten years from the grant date, and restricted stock grants vest on a quarterly basis over four years and expire ten years from the grant date. As of September 30, 2017, 562,596 shares of restricted stock had been issued excluding forfeited shares of restricted stock and after giving effect to the Exchange Ratio.

Restricted Stock

The Company values stock-based compensation related to grants of its restricted stock, which were issued prior to the Merger date, based on the fair value of the Company's common stock as of the grant date and recognizes the expense over the requisite service period, usually four years, adjusted for estimated forfeitures. To determine the value of its common stock, the Company utilized the Option Pricing Method. The valuation methodology includes estimates and assumptions that require the Company's judgment. Inputs used to determine the estimated fair value of the Company's common stock include the equity value of the Company, expected timing to a liquidity event, a risk-free interest rate and the expected volatility. Generally, increases or decreases in these unobservable inputs would result in a directionally similar impact on the fair value measurement of the Company's common stock.

During the nine months ended September 30, 2017 and 2016, the Company did not issue any shares of restricted stock to employees under the 2008 Plan.

Stock Options

The Company values stock options using the Black-Scholes option-pricing model, which requires the input of subjective assumptions, including the risk-free interest rate, expected life, expected stock price volatility and dividend yield. The risk-free interest rate assumption is based upon observed interest rates for constant maturity U.S. Treasury securities consistent with the expected term of the Company's employee stock options. The expected life represents the period of time the stock options are expected to be outstanding and is based on the simplified method. The Company uses the simplified method due to the lack of sufficient historical exercise data to provide a reasonable basis upon which to otherwise estimate the expected life of the stock options. Expected volatility is based on historical volatilities for publicly traded stock of comparable companies over the estimated expected life of the stock options. The Company assumes no dividend yield because dividends are not expected to be paid in the near future, which is consistent with the Company's history of not paying dividends. The valuation of stock options is also impacted by the valuation of common stock. Refer to the section above for further information on the valuation methodology utilized by the Company to determine the value of its common stock.

Changes in 2008 Plan

Subsequent to the Merger, the Company no longer issues stock based awards under the 2008 Plan.

B. 2015 Omnibus Incentive Option Plan

The Company operates the 2015 Omnibus Incentive Plan (the "2015 Plan"), which was amended and approved by stockholders in June 2015. The 2015 Plan provides for the grant of incentive and non-statutory stock options, as well as share appreciation rights, restricted shares, restricted share units ("RSUs"), performance units, shares and other share-based awards. Share-based awards are subject to terms and conditions established by our board of directors or the compensation committee of our board of directors. As of September 30, 2017, the number of shares of our common stock available for grant under the 2015 Plan was 453,382 shares.

C. Stock-Based Award Activity

The following table provides a summary of stock-based awards for the 2008 Plan and 2015 Plan (the "Plans") for the nine months ended September 30, 2016 and 2017, after giving effect of the Reverse Stock Split and Exchange Ratio:

	Nine months ended September 30, 2017			Nine months ended September 30, 2016		
	Stock Options	RSUs	Total	Stock Options	RSUs	Total
Outstanding as of December 31	**2,129,856**	—	**2,129,856**	**1,079,674**	—	**1,079,674**
Granted	42,500	122,588	165,088	137,838	—	137,838
Exercised	(118,213)	(72,361)	(190,574)	(823)	—	(823)
Forfeited	(447,065)	(227)	(447,292)	(188,290)	—	(188,290)
Outstanding as of September 30	**1,607,078**	**50,000**	**1,657,078**	**1,028,399**	—	**1,028,399**

D. Stock-Based Compensation

Stock-based compensation expense is included in the following line items in the accompanying statements of operations and comprehensive loss for the three months ended September 30, 2017 and 2016 and nine months ended September 30, 2017 and 2016 (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2017	September 30, 2016	September 30, 2017	September 30, 2016
Research and development	$ 38	$ 22	$ 112	$ 67
General and administrative	76	20	238	87
Total stock-based compensation	$ 114	$ 42	$ 350	$ 154

15. Net Loss per Share

Basic net loss per share is computed by dividing the net loss by the weighted-average number of common shares outstanding. Diluted net loss per share is computed similarly to basic net loss per share except that the denominator is increased to include the number of additional common shares that would have been outstanding if the potential common shares had been issued and if the additional common shares were dilutive. Diluted net loss per share is the same as basic net loss per common share, since the effects of potentially dilutive securities are antidilutive.

As of September 30, 2017 and 2016, potentially dilutive securities include:

	Nine Months Ended	
	September 30, 2017	September 30, 2016
Awards under equity incentive plan	1,607,078	1,028,399
Unvested restricted shares	78,396	126,511
Series A Contingent Redeemable Preferred Stock	—	1,054,745
Series B Contingent Redeemable Preferred Stock	—	3,325,777
Series C Contingent Redeemable Preferred Stock	—	2,653,726
2016 Series C Convertible Note	—	499,540
Warrants to purchase Series B Contingent Redeemable Preferred Stock	—	169,920
Derivative call option	650,000	
Warrants to purchase Series C Contingent Redeemable Preferred Stock	—	74,992
Warrants to purchase common stock	1,293,684	—
Total	**3,629,158**	**8,933,610**

The following table reconciles basic earnings per share of common stock to diluted earnings per share of common stock for the three months ended September 30, 2017 and 2016 and nine months ended September 30, 2017 and 2016.

	Three Months Ended		Nine Months Ended	
	September 30, 2017	September 30, 2016	September 30, 2017	September 30, 2016
Net loss	$ (6,817)	$ (3,227)	$ (23,293)	$ (6,955)
Accretion of convertible redeemable preferred stock	—	(44)	(578)	(70)
Deemed dividend on beneficial conversion feature	—	—	(404)	—
Net loss attributable to common stockholders	(6,817)	(3,271)	(24,275)	(7,025)
Undistributed earnings and net loss attributable to common stockholders, basic and diluted	(6,817)	(3,271)	(24,275)	(7,025)
Weighted average common shares outstanding, basic and diluted	24,209,517	2,707,055	13,770,032	1,596,123
Basic and diluted EPS	**$ (0.28)**	**$ (1.21)**	**$ (1.76)**	**$ (4.40)**

16. Subsequent Events

On October 27, 2017, the Company completed an underwritten public offering consisting of 5,250,000 shares of its common stock, in addition to pre-funded warrants to purchase 775,000 shares of its common stock. Under the offering, the underwriter was granted an option to purchase 787,500 additional shares of Savara common stock at the public offering price, less the underwriting discounts and commissions. The underwriters' option to purchase the remaining balance of additional shares expires 30 days from the date of the offering, or on November 24, 2017. On November 2, 2017, the underwriters exercised their option to purchase the 787,500 additional shares resulting in net proceeds of approximately $5.7 million. The net proceeds from the offering, including the option to purchase additional shares, after deducting the underwriting discounts and commissions and offering expenses, were approximately $50 million. Savara intends to use the net proceeds from this offering for working capital and general corporate purposes, which include, but are not limited to, the funding of clinical development of and pursuing regulatory approval for its product candidates including an indication expansion for Molgradex for the treatment of Nontuberculous Mycobacteria ("NTM") lung infection, and general and administrative expenses. The public offering was executed under an existing shelf registration statement as previously filed with the Securities and Exchange Commission on August 12, 2015 and declared effective on August 19, 2015. In connection with the offering, on October 12, 2017, the Company suspended its activity under the "At The Market" Sales Agreement.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Any statements contained herein that involve risks and uncertainties, such as Savara's plans, objectives, expectations, intentions and beliefs should be considered forward-looking statements. Savara's actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the section entitled "Risk Factors" in this Quarterly Report on pages 35 through 56.

Overview

Savara is an orphan lung disease company. Our pipeline comprises: Molgradex, an inhaled granulocyte-macrophage colony-stimulating factor, or GM-CSF, in Phase 3 development for pulmonary alveolar proteinosis ("PAP"); AeroVanc, a Phase 3 stage inhaled vancomycin for treatment of persistent methicillin-resistant *Staphylococcus aureus* ("MRSA"), infection in cystic fibrosis; and, Aironite, an inhaled sodium nitrite for heart failure with preserved ejection fraction ("HFpEF"), in Phase 2 development. Savara has recently expanded the use Molgradex for Phase 2a development for nontuberculous mycobacterial, ("NTM"), lung infection. Savara's strategy involves expanding its pipeline of potentially best-in-class products through indication expansion, strategic development partnerships and product acquisitions, with the goal of becoming a leading company in its field. Savara operates in one segment and has its principal offices in Austin, Texas. Since inception, Savara has devoted substantially all of its efforts and resources to identifying and developing its product candidates, recruiting personnel, and raising capital. Savara has incurred operating losses and negative cash flow from operations and has no material product revenue from inception to date as Savara has not yet commenced commercial operations. From inception of Savara, as a private company prior to the Merger, to September 30, 2017, Savara has raised net cash proceeds of approximately $102.9 million, from a public offering and private placements of convertible preferred stock, note financings and debt financings.

Savara has never been profitable and has incurred operating losses in each year since inception. Savara's net losses were $23.3 million for the nine months ended September 30, 2017 and $10.9 million for the year ended December 31, 2016. As of September 30, 2017, Savara had an accumulated deficit of $61.7 million. Substantially all of Savara's operating losses resulted from expenses incurred in connection with its research and development programs and from general and administrative costs associated with its operations.

Savara has chosen to operate by outsourcing its manufacturing and most of its clinical operations. Savara expects to incur significant additional expenses and increasing operating losses for at least the next several years as it initiates and continues the clinical development of, and seeks regulatory approval for, its product candidates and adds personnel necessary to operate as a public company with an advanced clinical candidate pipeline of products. In addition, Savara operating as a publicly traded company, following the Merger, will involve the hiring of additional financial and other personnel, upgrading financial information systems and incurring costs associated with operating as a public company. Savara expects that its operating losses will fluctuate significantly from quarter to quarter and year to year due to timing of clinical development programs and efforts to achieve regulatory approval.

As of September 30, 2017, Savara had cash of $19.8 million and short-term investments of $33.5 million. Savara will continue to require substantial additional capital to continue its clinical development and potential commercialization activities. Accordingly, Savara will need to raise substantial additional capital to continue to fund its operations. The amount and timing of its future funding requirements will depend on many factors, including the pace and results of its clinical development efforts. Failure to raise capital as and when needed, on favorable terms or at all, would have a negative impact on its financial condition and its ability to develop its product candidates and its indication expansion of Molgradex for NTM.

Recent Events

On April 27, 2017, Savara completed its business combination with Mast in accordance with the terms of the Merger Agreement, dated January 6, 2017. In connection with and immediately prior to the effective time of the Merger, Mast implemented a reverse stock split at a ratio of one new share for every 70 shares of its common stock outstanding. Under the terms of the Merger Agreement, each outstanding share of Savara common stock was then converted into Mast common stock at the Exchange Ratio. As a result of the Merger, the Mast equity holders owned approximately 23% of the combined company, and Savara's pre-existing equity holders owned approximately 77%.

On April 28, 2017, Savara entered into a Common Stock Sales Agreement (the "Sales Agreement") with H.C. Wainwright & Co., LLC, as sales agent ("Wainwright"), pursuant to which Savara may offer and sell, from time to time, through Wainwright, shares of its common stock (the "Shares"), having an aggregate offering price of not more than $18.0 million. The shares will be offered and sold pursuant to Savara's shelf registration statement on Form S-3. Subject to the terms and conditions of the Sales Agreement, Wainwright will use its commercially reasonable efforts to sell the Shares from time to time, based upon Savara's instructions. Savara has provided Wainwright with customary indemnification rights, and Wainwright will be entitled to a commission at a fixed

commission rate equal to 3.0% of the gross proceeds per share sold. Sales of the Shares, if any, under the Sales Agreement may be made in transactions that are deemed to be "at the market offerings" ("ATM") as defined in Rule 415 under the Securities Act of 1933, as amended. Savara has no obligation to sell any of the Shares, and may at any time suspend sales under the Sales Agreement or terminate the Sales Agreement.

On June 7, 2017, Savara completed an underwritten public offering consisting of 9,034,210 shares of our common which included 613,157 shares upon the partial exercise of the underwriters' option to purchase additional shares of Savara common stock at the public offering price, less the underwriting discounts and commissions. The underwriters' option to purchase the remaining balance of additional shares expired as of June 30, 2017. The net proceeds from the offering, after deducting the underwriting discounts and commissions and offering expenses, were approximately $39.5 million.

On October 27, 2017, Savara completed an underwritten public offering consisting of 5,250,000 shares of our common stock, in addition to pre-funded warrants to purchase 775,000 shares of its common stock. Under the offering, the underwriter was granted an option to purchase 787,500 additional shares of Savara common stock (the "Optional Shares") at the public offering price, less the underwriting discounts and commissions. The underwriters' option to purchase Optional Shares expires 30 days from the date of the offering, or on November 24, 2017. On November 2, 2017, the underwriters exercised their option to purchase the Optional Shares, and such transaction closed on November 6, 2017, resulting in net proceeds of approximately $5.8 million. The net proceeds from the offering, including the option to purchase additional shares, after deducting the underwriting discounts and commissions and offering expenses, were approximately $50.0 million. Savara intends to use proceeds from the June 2017 and October 2017 offerings for working capital and general corporate purposes, which include, but are not limited to, the funding of clinical development of and pursuing regulatory approval for its product candidates including an indication expansion for Molgradex for the treatment of NTM lung infections, and general and administrative expenses. The June 2017 and October 2017 offerings were executed under an existing shelf registration statement as previously filed with the Securities and Exchange Commission on August 12, 2015 and declared effective on August 19, 2015. In connection with the offering, on October 12, 2017, the Company suspended its activity under the ATM Sales Agreement.

On October 24, 2017, Savara announced that it plans to expand the development of its lead product candidate Molgradex to include the treatment of NTM lung infection. The Company is planning to initiate a Phase 2a open-label clinical trial in subjects with antibiotic-resistant NTM lung infection in early 2018. The clinical trial will investigate the efficacy of Molgradex on NTM sputum culture conversion to negative, reduction of NTM bacterial load in sputum, exercise capacity as well as its effect on patient reported outcomes, and safety.

Financial Operations Overview

Research and Development Expenses

Research and development expenses represent costs incurred to conduct research and development, such as the development of Savara's product candidates. Savara recognizes all research and development costs as they are incurred. Research and development expenses consist primarily of the following:

- expenses incurred under agreements with consultants and clinical trial sites that conduct research and development activities on Savara's behalf;
- laboratory and vendor expenses related to the execution of clinical trials;
- contract manufacturing expenses, primarily for the production of clinical supplies; and
- internal costs that are associated with activities performed by Savara's research and development organization and generally benefit multiple programs.

Where appropriate, these costs are allocated by product candidate. Any unallocated internal research and development costs consist primarily of:

- personnel costs, which include salaries, benefits and stock-based compensation expense;
- allocated facilities and other expenses, which include expenses for rent and maintenance of facilities and depreciation expense; and
- regulatory expenses and technology license fees related to development activities.

The largest component of Savara's operating expenses has historically been its investment in research and development activities. The following table shows Savara's research and development expenses for the three months ended September 30, 2017 and 2016 and nine months ended September 30, 2017 and 2016:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
	(in thousands)		(in thousands)	
Product candidates:				
AeroVanc	$ 1,991	$ 1,751	$ 4,866	$ 4,303
Molgradex	2,490	$ 391	6,598	391
Aironite	485	$ —	612	—
Total research and development expenses	$ 4,966	$ 2,142	$ 12,076	$ 4,694

Savara expects research and development expenses will increase in the future as Savara advances its product candidates into and through clinical trials and pursues regulatory approvals, which will require a significant increased investment in regulatory support and contract manufacturing and inventory build-up related costs. In addition, Savara continues to evaluate opportunities to acquire or in-license other product candidates and technologies, which may result in higher research and development expenses due to license fee and/or milestone payments.

The process of conducting clinical trials necessary to obtain regulatory approval is costly and time consuming. Savara may never succeed in timely developing and achieving regulatory approval for its product candidates. The probability of success of Savara's product candidates may be affected by numerous factors, including clinical data, competition, intellectual property rights, manufacturing capability and commercial viability. As a result, Savara is unable to accurately determine the duration and completion costs of Savara's development projects or when and to what extent Savara will generate revenue from the commercialization and sale of any of its product candidates.

General and Administrative Expenses

General and administrative expenses consist of personnel costs, facility expenses, expenses for outside professional services, including legal, audit and accounting services, and changes in the fair value of certain contingent consideration. Personnel costs consist of salaries, benefits and stock-based compensation. Facility expenses consist of rent and other related costs. General and administrative costs also include depreciation expense and other supplies. Savara has incurred additional expenses as a result of becoming a public company as a result of the Merger, including expenses related to compliance with the rules and regulations of the SEC and Nasdaq, additional insurance, investor relations, and other administrative expenses and professional services.

Critical Accounting Policies and Estimates

Savara's management's discussion and analysis of financial condition and results of operations is based on its condensed consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these financial statements requires Savara to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses. On an ongoing basis, Savara evaluates these estimates and judgments. Savara bases its estimates on historical experience and on various assumptions that Savara believes to be reasonable under the circumstances. These estimates and assumptions form the basis for making judgments about the carrying values of assets and liabilities and the recording of expenses that are not readily apparent from other sources. Actual results may differ materially from these estimates. Savara believes that the accounting policies discussed below are critical to understanding its historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Accrued Research and Development Expenses

Savara records accrued expenses for estimated costs of its research and development activities conducted by external service providers, which include the conduct of clinical trial and contract formulation and manufacturing activities. Savara records the estimated costs of development activities based upon the estimated amount of services provided but not yet invoiced, and includes these costs in accrued liabilities in the consolidated balance sheet and within development expense in the consolidated statement of operations and comprehensive loss. These costs are a significant component of Savara's research and development expenses. Savara records accrued expenses for these costs based on the estimated amount of work completed and in accordance with agreements established with these external service providers.

Savara estimates the amount of work completed through discussions with internal personnel and external service providers as to the progress or stage of completion of the services and the agreed-upon fee to be paid for such services. Savara makes significant judgments and estimates in determining the accrued balance in each reporting period. As actual costs become known, Savara adjusts its accrued estimates.

Stock-based Compensation

Savara recognizes stock-based awards to employees and directors, including stock options, based on the fair value on the grant date using the Black-Scholes option pricing model. The related stock-based compensation is recognized as expense on a straight line-basis over the employee's or director's requisite service period (generally the vesting period). Noncash stock compensation expense is based on awards ultimately expected to vest and is reduced by forfeitures, if necessary.

Savara accounts for stock-based compensation arrangements with non-employees using a fair value approach. The fair value of options granted to non-employees is measured using the Black-Scholes option pricing model reflecting similar assumptions for employees except that the expected term is based on the options' remaining contractual term instead of the simplified method in each of the reported periods. The compensation costs of these arrangements are subject to remeasurement over the vesting terms as earned.

In determining the fair value of the stock-based awards, Savara uses the Black-Scholes option-pricing model and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment to determine.

Fair Value of Common Stock. Prior to the Merger, the fair value of the shares of common stock underlying stock options had been determined by Savara's board of directors. In order to determine the fair value of the common stock at the time of grant of the option, the Savara board of directors considered, among other things, valuations performed by an independent third-party. Because there had been no public market for Savara's common stock, the Savara board of directors exercised reasonable judgment and considered a number of objective and subjective factors to determine the best estimate of the fair value of Savara's common stock, including important developments in Savara's operations, sales of convertible preferred stock, actual operating results and financial performance, the conditions in the life sciences industry and the economy in general, the stock price performance and volatility of comparable public companies, and the lack of liquidity of its common stock, among other factors. Since April 28, 2017, the fair value of our common stock has been determined by the closing price of our common stock listed on the Nasdaq exchange as of the date of the grant.

Expected Term. Savara's expected term represents the period that their stock-based awards are expected to be outstanding and is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term) for employee options and the contractual term for non-employee options.

Expected Volatility. Prior to April 27, 2017, Savara was privately held and did not have any trading history for its common stock, the expected volatility was estimated based on the average volatility for comparable publicly traded biotechnology companies over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, or stage in the life cycle. Until Savara has enough history of its own publicly listed common stock, it will continue using the same methodology.

Risk-Free Interest Rate. The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of option.

Expected Dividend. Savara has never paid dividends on its common stock and has no plans to pay dividends on its common stock. Therefore, Savara used an expected dividend yield of zero. For the nine months ended September 30, 2017 and 2016, stock-based compensation expense was approximately $0.4 million and $0.2 million, respectively.

Results of Operations — Comparison of Three Months Ended September 30, 2017 and 2016

	Three Months Ended September 30,		Dollar Change
	2017	2016	
	(in thousands)		
Grant revenue	$ —	$ —	$ —
Operating expenses:			
Research and development	$ 4,966	$ 2,142	$ 2,824
General and administrative	1,486	1,002	484
Depreciation	91	86	5
Total operating expenses	6,543	3,230	3,313
Loss from operations	(6,543)	(3,230)	(3,313)
Other income (expense)	$ (391)	$ 3	$ (394)
Net loss before income taxes	(6,934)	(3,227)	(3,707)
Income tax benefit	$ 117	$ —	$ 117
Net loss	$ (6,817)	$ (3,227)	$ (3,590)

Research and development

Research and development expenses increased by $2.8 million, or 132%, to $5.0 million for the three months ended September 30, 2017 from $2.1 million for the three months ended September 30, 2016. The increase was primarily due to $2.1 million in increased development costs associated with the development of Molgradex, a $0.5 million increase in costs related to the Aironite study, as it pertains to patient enrollment milestones, and a slight increase of $0.2 million in AeroVanc study costs.

General and administrative

General and administrative expenses increased by $.5 million, or 48%, to $1.5 million for the three months ended September 30, 2017 from $1.0 million for the three months ended September 30, 2016. The increase was primarily due to an increase of $0.4 million in insurance, legal and accounting costs associated with public company requirements and activities, and a slight increase of $0.1 million due to increased administrative personnel costs.

Other expense

Other expense increased by $0.4 million for the three months ended September 30, 2017. The increase was primarily due to $0.2 million in change in foreign currency exchange with the remainder related to interest expense and change in fair value of financial instruments.

Income tax benefit

Income tax benefit in 2017 represents a tax benefit provided by the Danish government in the form of a refundable research credit associated with research and development expenditures of Savara's subsidiary, Savara ApS. There was minimal benefit in the third quarter of 2016, as the subsidiary was not acquired until July 2016.

Results of Operations — Comparison of Nine Months Ended September 30, 2017 and 2016

	Nine Months Ended September 30,		Dollar Change
	2017	2016	
		(in thousands)	
Grant revenue	$ —	$ —	$ —
Operating expenses:			
Research and development	$ 12,076	$ 4,694	$ 7,382
General and administrative	8,410	1,955	6,455
Depreciation	272	256	16
Total operating expenses	20,758	6,905	13,853
Loss from operations	(20,758)	(6,905)	(13,853)
Other expense	$ (3,359)	$ (50)	$ (3,309)
Net loss before income taxes	(24,117)	(6,955)	(17,162)
Income tax benefit	$ 824	$ —	$ 824
Net loss	$ (23,293)	$ (6,955)	$ (16,338)

Research and development

Research and development expenses increased by $7.4 million, or 157%, to $12.1 million for the nine months ended September 30, 2017 from $4.7 million for the nine months ended September 30, 2016. The increase was primarily due to $6.2 million in increased development costs associated with the development of Molgradex which was not part of the Savara development plan until mid-July 2016 and an increase of $0.5 million in AeroVanc CMC and study costs as initiated our Phase III clinical trial. Additionally, in April 2017 we began incurring costs for our Aironite program which totaled $0.6 million for the nine months ended September 30, 2017 versus $0 for the nine months ended September 30, 2016.

General and administrative

General and administrative expenses increased by $6.5 million, or 330%, to $8.4 million for the nine months ended September 30, 2017 from $2.0 million for the nine months ended September 30, 2016. The increase was due to $2.1 million of expense in connection with the changes in fair value of the contingent consideration associated with the Serendex acquisition and approximately $2.6 million of expense in connection with the Merger and financing activities and related costs including legal and accounting expenditures. Savara personnel costs increased $0.7 million due to increased administrative personnel costs including bonuses. In 2017, Savara

incurred increased costs associated with being a public company. These costs included certain legal, accounting and filing costs, as well as public company insurance costs, all of which totaled approximately $0.5 million. Additionally, administrative costs of Savara ApS (Denmark) totaled $.6 million during the nine months ended September 30, 2017 and such entity was not part of Savara until July 15, 2016, and had costs of only $0.1 million for the two and a half months under our ownership through September 30, 2016.

Other expense

Other expense increased by $3.3 million for the nine months ended September 30, 2017. The increase was primarily due to $1.8 million of expense associated with the extinguishment of the 2016 Notes and 2017 Notes, $0.8 million in interest expense, and $0.4 million in the change in fair value of financial instruments.

Income tax benefit

Income tax benefit in 2017 represents a tax benefit provided by the Danish government in the form of a refundable research credit associated with research and development expenditures of Savara's subsidiary, Savara ApS. There was no tax benefit in the first half of 2016 and minimal tax benefit in the third quarter of 2016, as the subsidiary was not acquired until July 2016.

Liquidity and Capital Resources

As of September 30, 2017, Savara had $19.8 million in cash, $33.5 million in short-term investments and an accumulated deficit of $61.7 million. Savara expects that its research and development and general and administrative expenses will increase, and, as a result, Savara anticipates that it will continue to incur increasing losses in the foreseeable future. Therefore, Savara will need to raise additional capital to fund its operations, which may be through the issuance of additional equity, and potentially through borrowings.

Loan Agreement

On April 28, 2017, Savara entered into a loan and security agreement with Silicon Valley Bank (the "Loan Agreement"). The Loan Agreement provides for a $15 million debt facility, of which the first tranche, or $7.5 million, was immediately available to Savara upon completion of the Merger. Savara executed the first tranche in early May 2017. The primary use of the capital was for the repayment of $3.7 million of principal debt and fees of Mast assumed in the Merger. The residual capital will be utilized to fund ongoing development programs of Savara and for general corporate purposes. Under the terms of the Loan Agreement, Savara may, but is not obligated to draw a second tranche of $7.5 million available through June 30, 2017, subject to the achievement of certain corporate milestones specifically a minimum new capital raise with combined proceeds of at least $40 million through a secondary offering, private investment in public entity (PIPE), ATM, partnerships or grant to be received within twelve months of signing the agreement.

On June 15, 2017, Savara executed the second tranche of the Loan Agreement for $7.5 million as the financing conditions under the Loan Agreement had been met.

The Loan Agreement contains customary affirmative and negative covenants, including among others, covenants limiting our ability and our subsidiaries to dispose of assets, permit a change in control, merge or consolidate, make acquisitions, incur indebtedness, grant liens, make investments, make certain restricted payments and enter into transactions with affiliates, in each case subject to certain exceptions.

The Loan Agreement bears interest at the prime rate reported in The Wall Street Journal, plus a spread of 4.25%. Interest only payments are due through September 2018 followed by monthly payments of principal plus interest over the following thirty (30) months. Since the second tranche was fully extended, the interest only period was extended for an additional six (6) months, through March 2019 followed by monthly payments of principal plus interest over the following twenty-four (24) months through the maturity date of March 1, 2021. We were obligated to pay customary closing fees and are obligated to pay a final payment of 6.0% of the aggregate principal amount of term loans advanced under the facility. The end of term charge of $.9 million will be due on the scheduled maturity date and is being recognized as an increase to the principal with a corresponding charge to interest expense over the term of the facility using the effective interest method.

In connection with the Loan Agreement, we paid $.1 million in legal costs directly attributable to issuing the debt instrument. Such charges were accounted for as debt issuance costs and are being amortized to interest expense using the effective interest method through the scheduled maturity date.

Upon funding the first tranche of the Loan Agreement, Savara was obligated to issue warrants to purchase shares of its common stock equal to 3.0% of the funded amount divided by the exercise price to be set based on the average price per share over the preceding 10 trading days prior to closing. The number of shares under the warrant agreement for the first tranche was 24,725 shares of the Savara's common stock at an exercise price of $9.10 per share, with a ten year life, expiring on April 28, 2027.

Upon funding the second tranche of the Loan Agreement, the Company was obligated to issue warrants to purchase shares of its common stock equal to 3.0% of the funded amount divided by an exercise price to be set based on the average price per share over the preceding 10 trading days prior to funding or the price per share prior to the day of funding. As such, Savara issued a second warrant for 41,736 shares at an exercise price of $5.39 with a ten year life, expiring on June 15, 2027.

Cash Flows

The following table summarizes Savara's cash flows for the periods indicated:

	Nine Months Ended September 30,	
	2017	2016
	(in thousands)	
Cash used in operating activities	$ (18,764)	$ (6,180)
Cash provided by / (used in) investing activities	(30,062)	(8)
Cash provided by financing activities	55,333	5,017
Effect of exchange rate changes	(67)	—
Net increase / (decrease) in cash	$ 6,440	$ (1,171)

Cash flows from operating activities

Cash used in operating activities for the nine months ended September 30, 2017 was $18.8 million, consisting of a net loss of $23.3 million, which was partially offset by noncash charges of $6.0 million, mainly comprised of depreciation, noncash interest, fair value changes, loss on debt extinguishment, accretion of discount to convertible promissory notes, and stock-based compensation, and by a net decrease in assets and liabilities of $1.5 million. The change in Savara's net operating assets and liabilities was primarily due to an increase accrued liabilities mostly related to research and development costs for both AeroVanc and Molgradex.

Cash used in operating activities for the nine months ended September 30, 2016 was $6.2 million, consisting mainly of a net loss of $7.0 million.

Cash flows from investing activities

Cash used by investing activities for the nine months ended September 30, 2017 was the result of the cash used to purchase available-for-sale securities partially offset by the cash acquired related to the Merger.

Cash flows from financing activities

Cash provided by financing activities for the nine months ended September 30, 2017 was primarily related to proceeds from the issuance of $39.5 million (net) of common stock, $14.9 million in net proceeds from our new debt facility with Silicon Valley Bank, $3.6 million related to proceeds from the issuance of a convertible promissory note, as well as, $1.0 million from the ATM Sales Agreement.

Cash provided by financing activities for the nine months ended September 30, 2016 was related to proceeds from the issuance of Series C preferred stock and a convertible promissory note.

Future Funding Requirements

Savara has not generated any revenue from product sales. Savara does not know when, or if, it will generate any revenue from product sales. Savara does not expect to generate any revenue from product sales unless and until it obtains regulatory approval for and commercializes any of its product candidates. At the same time, Savara expects its expenses to increase in connection with its ongoing development and manufacturing activities, particularly as Savara continues the research, development, manufacture and clinical trials of, and seeks regulatory approval for, its product candidates. Savara expects to continue to incur additional costs associated with operating as a public company. In addition, subject to obtaining regulatory approval of any of its product candidates, Savara anticipates that it will need additional funding in connection with its continuing operations.

As of September 30, 2017, Savara had cash of $19.8 million and short-term investments of $33.5 million. Savara will continue to require additional capital to continue its clinical development and potential commercialization activities. Accordingly, Savara will need to raise additional capital to continue to fund its operations. The amount and timing of its future funding requirements will depend on many factors, including the pace and results of its clinical development efforts. Failure to raise capital as and when needed, on favorable terms or at all, would have a negative impact on its financial condition.

On October 27, 2017, Savara completed an underwritten public offering consisting of 5,250,000 shares of its common stock, in addition to pre-funded warrants to purchase 775,000 shares of its common stock. Under the offering, the underwriter was granted an option to purchase 787,500 additional shares of Savara common stock at the public offering price, less the underwriting discounts and commissions which was exercised on November 2, 2017. The net proceeds from the offering, including the option to purchase additional shares, after deducting the underwriting discounts and commissions and offering expenses, were approximately $50 million.

Until Savara can generate a sufficient amount of product revenue to finance its cash requirements, Savara expects to finance future cash needs primarily through the issuance of additional equity and potentially through borrowings, grants and strategic alliances with partner companies. To the extent that Savara raises additional capital through the issuance of additional equity or convertible debt securities, the ownership interest of Savara's stockholders will be diluted.

Contractual Obligations

The following provides information supplemental to the tabular summary of contractual obligations as of December 31, 2016 presented in our annual report on Form 10-K filed with the SEC on March 6, 2017, as updated by our quarterly report on Form 10-Q filed on May 9, 2017, our report on Form 8-K filed on May 10, 2017, and our Form 10-Q filed on August 9, 2017:

License and Royalty Agreements

Savara is subject to certain contingent payments to the Cystic Fibrosis Foundation Therapeutics (CFFT) in connection with a $1.7 million award from the CFFT that was provided to Savara in support of AeroVanc research (CFF Award). A payment is due to the CFFT equal to three (3) times the amount of the CFF Award upon approval of AeroVanc for commercial use. The payment is owed in equal installments of 33% due 60 days after first commercial sale; 33% due 90 days of the first anniversary of the first commercial sale; and 34% due within 90 days of second anniversary of first commercial sale. As Savara's product has not yet been approved for commercial use, Savara has not recorded a liability for the commercial approval payment.

In addition, if net sales exceed $50 million for any calendar year occurring during the first five years after the first commercial sale, Savara must remit payment to the CFFT equal to one (1) times the CFF Award. Furthermore, if net sales exceed $100 million for any calendar year occurring during the first five years after first commercial sale, Savara must remit an additional payment to the CFFT equal to one (1) times the CFF Award. Given Savara has not recognized any sales from AeroVanc, Savara has not recorded a liability for any amounts due as additional royalties.

Manufacturing Commitments and Contingencies

Savara is subject to various manufacturing royalties and payments related to its product candidate, Molgradex. Upon the successful development, registration and attainment of approval by the proper health authorities, such as the FDA, in any territory except Latin America, Central America and Mexico, Savara must pay a royalty of three percent (3%) on annual net sales to the manufacturer of its Active Pharmaceutical Ingredients ("API"). Under this agreement with the API manufacturer, no signing fee or milestones are included in the royalty payments, and there is no minimum royalty. Additionally, Savara amended its agreement with the API manufacturer in the third quarter of 2017 under which Savara is subject to certain contingent milestone payments totaling $2.6 million if such milestones are achieved by the API manufacturer. As a result, this amendment eliminated the previously disclosed purchase commitment to acquire a working cell bank and master cell bank for $2.0 million from this API manufacturer in the third quarter of 2017. Savara is also subject to certain contingent milestone payments up to approximately seven million euros (approximately $8.0 USD) based upon various development activities and regulatory approvals payable to Savara's manufacturer of its nebulizer used to administer Molgradex. In addition to these milestones, Savara will owe a royalty to the manufacturer of its nebulizer based on net sales. The royalty rate ranges from three and a half percent (3.5%) to five percent (5%) depending on the device technology used by Savara to administer the product.

Acquisition of Serendex Pharmaceuticals

On July 15, 2016, Savara closed on a Business Transaction Agreement ("BTA") under which Savara acquired certain assets, liabilities, employees, and subsidiaries of Serendex Pharmaceuticals A/S ("Serendex"), a limited liability company incorporated under the laws of Denmark which delisted from the Oslo Axxes ("Oslo Stock Exchange") on or about May 4, 2016. Serendex's wholly owned subsidiaries include Pharmaorigin ApS and Drugrecure ApS (the "Subsidiaries") which are limited liability companies incorporated under the laws of Denmark. Serendex was a biopharmaceutical development company which, directly and through the Subsidiaries, advanced a pipeline and portfolio of novel inhalation therapies and related technologies for the treatment of severe pulmonary conditions. Its primary focus was on the medicinal product Molgradex. The purchase price consisted of 1,965,400 shares, after giving effect to the Exchange Ratio, of Savara's common stock, subject to a hold back of 393,080 shares, after giving effect to the Exchange Ratio, of Savara's common stock in the name of the Seller as security for the Seller's obligations under the BTA until the lapse of the deadline for submission of claims, and $21.5 million of contingent cash consideration based upon the achievement of certain milestones.

Other Contracts

Savara enters into contracts in the normal course of business with various third parties for research studies, clinical trials, testing and other services. These contracts generally provide for termination upon notice, and therefore Savara believes that its non-cancelable obligations under these agreements are not material except for certain obligations under its agreement for its capitalized lease asset.

Settlement Agreement

On June 29, 2017, Savara executed a Memorandum of Understanding ("MOU") with TFS Trial Form Support International AB ("TFS") and DOT World Co., Ltd. ("DOT") in order to resolve the issue of outstanding payment for services owed to DOT by Serendex in connection with the Molgradex clinical trial conducted prior to our acquisition of Serendex in July 2016. As part of this MOU, Savara agreed to pay TFS approximately 53 million Japanese Yen (approximately $.5 million) based on an installment payment schedule through December 31, 2017, if Serenova A/S ("Serenova"), the successor to Serendex, failed to pay the parties in full by June 30, 2017. Serenova failed to pay TFS in full by June 30, 2017, and Savara accrued the full settlement amount. During the three months ended September 30, 2017, Savara paid $.2 of the accrued settlement amount and continued to pursue collection from Serenova.

On September 1, 2017, Savara and Serenova entered into a settlement agreement with respect to the matter under which Serenova agreed to make a cash settlement payment to Savara of $0.3 million. Additionally, under the terms of the settlement agreement, within ninety days following the cash settlement payment to Savara, which occurred on September 11, 2017, Serenova was provided the right, but not the obligation, to purchase up to 650,000 shares of common stock of Savara at a price per share equal to 90% of the volume weighted average price of Savara's common stock for the five (5) trading days ending on the date that Serenova elects to purchase such shares. Management determined that this call option should be separated and accounted for as an equity-classified derivative of $.3 million.

Off-Balance Sheet Arrangements

Savara has not entered into any off-balance sheet arrangements and does not have any holdings in variable interest entities.

Recent Accounting Pronouncements

In February 2016, the FASB issued Accounting Standards Update 2016-02, "Leases" ("ASU 2016-02"). The update aims at making leasing activities more transparent and comparable, and requires substantially all leases to be recognized by lessees on their balance sheet as a right-of-use asset and a corresponding lease liability, including leases currently accounted for as operating leases. The update also requires improved disclosures to help users of financial statements better understand the amount, timing and uncertainty of cash flows arising from leases. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018 with early adoption permitted. Savara is currently evaluating the impact of the adoption of ASU 2016-02 on its financial statements.

In August 2016, the FASB issued Accounting Standards Update 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments" ("ASU 2016-15"), which intended to add or clarify guidance on the classification of certain cash receipts and payments on the statement of cash flows. The new guidance addresses cash flows related to the following: debt prepayment or extinguishment costs, settlement of zero-coupon bonds, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims, proceeds from the settlement of corporate-owned life insurance policies and bank-owned life insurance policies, distributions received from equity method investees, beneficial interest in securitization transactions, and the application of predominance principle to separately identifiable cash flows. ASU 2016-15 is effective for Savara for annual periods beginning after December 15, 2017, and interim periods within those fiscal years with early adoption permitted. Savara is currently evaluating the effect of this new guidance on its financial statements

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

As of September 30, 2017, Savara had cash of $19.8 million, which consisted of bank deposits. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations of interest income have not been significant. Savara has not been exposed nor does it anticipate being exposed to material risks due to changes in interest rates. A hypothetical 1% change in interest rates during any of the periods presented would not have had a material impact on Savara's condensed consolidated financial statements.

Savara has ongoing operations in Denmark as a result of its acquisition of Serendex and pays those vendors in local currency (Danish Krone) or Euros. Savara seeks to limit the impact of foreign currency fluctuations through the use of derivative instruments, short-term foreign currency forward exchange contracts not designated as hedging instruments. Savara did not recognize any significant exchange rate losses during the nine-month period ended September 30, 2017. A 10% change in the krone-to-dollar or euro-to-dollar exchange rate on September 30, 2017 would not have had a material effect on Savara's results of operations or financial condition.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed by us in the reports we file or submit under the Securities Exchange Act of 1934, as amended, (the “Exchange Act”) is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives, and in reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we have evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of September 30, 2017. Based on that evaluation, our principal executive officer and principal financial officer have concluded that as of September 30, 2017 these disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

As described in Note 1 to our consolidated condensed financial statements, on April 27, 2017, we completed our business combination with Mast Therapeutics, Inc. ("Mast"), a publicly held company, in accordance with the terms of the Agreement and Plan of Merger and Reorganization dated January 6, 2017 (the “Merger”) and the Merger was accounted for as a reverse acquisition. Immediately prior to the closing of the Merger, Mast had very limited operations and only six full-time and three part-time employees providing transitional services, and, upon the closing of the Merger, all of such employees were terminated. The assets, liabilities and operations of Mast prior to the Merger are insignificant compared to our consolidated assets, liabilities and operations after the Merger closing. We estimate that approximately 97%, 100% and 96% of our assets, revenues and expenses, respectively, will relate to the business of privately held Savara (“Private Savara”) for the year ended December 31, 2017 and our operations after the Merger are almost entirely those of Private Savara. As a result, our internal controls prior to the Merger (i.e., the internal controls of Mast) no longer exist and none of the finance and accounting staff and other members of management of Mast prior to the Merger remained as employees after the Merger, and the system of internal controls in place following the Merger is that of Private Savara. Further, all of the material IT systems currently used by us are those of Private Savara.

Except for the material changes described above resulting from the Merger, there was no change in our internal control over financial reporting identified in connection with the evaluation required by Rules 13a-15(d) and 15d-15(d) under the Exchange Act that occurred during the quarterly period covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

From time to time, we may become involved in various claims and legal proceedings. Regardless of outcome, litigation and other legal and administrative proceedings can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors. We are not currently a party to any material pending litigation or other material legal proceeding.

Item 1A. Risk Factors.

Investment in our common stock involves a high degree of risk and uncertainty. Our business, operating results, growth prospects and financial condition are subject to various risks, many of which are not exclusively within our control, that may cause actual performance to differ materially from historical or projected future performance. We urge investors to consider carefully the risks described below, together with all of the information in this report and our other public filings, before making investment decisions regarding our securities. Each of these risk factors, as well as additional risks not presently known to us or that we currently deem immaterial, could adversely affect our business, operating results, growth prospects or financial condition, as well as the trading price of our common stock, in which case you may lose all or part of your investment.

Risks Related to Our Capital Requirements and Financial Condition

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

We are a clinical development-stage biopharmaceutical company with a limited operating history upon which to evaluate our business and prospects. We have not been profitable since we commenced operations, and may not ever achieve profitability. In addition, we have limited history as an organization and have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biopharmaceutical industry. Drug development is a highly speculative undertaking and involves a substantial degree of risk. To date, we have not obtained any regulatory approvals for any of our product candidates, commercialized any of our product candidates or generated any product revenue. We have devoted significant resources to research and development and other expenses related to our ongoing clinical trials and operations, in addition to acquiring product candidates.

For the nine months ended September 30, 2017, we incurred a net loss of $23.3 million, and net cash used in operating activities was $18.8 million. At September 30, 2017, our cash, cash equivalents and short-term investment securities were $53.3 million, and working capital was $49.4 million. At September 30, 2017, we had an accumulated deficit of $61.7 million. We expect to continue to incur substantial operating losses for the next several years as we seek to advance our product candidates through clinical development, global regulatory approvals, and commercialization. No revenue from operations will likely be available until, and unless, one of our product candidates is approved by the FDA or another regulatory agency and successfully marketed, or we enter into an arrangement that provides for licensing revenue or other partnering-related funding, outcomes which we may not achieve.

We will require additional financing to obtain regulatory approval for AeroVanc, Molgradex and Aironite, and a failure to obtain this necessary capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our product development efforts or other operations.

Since our Aravas subsidiary was formed in 2008, most of our resources have been dedicated to the development and acquisition of our product candidates, AeroVanc and Molgradex. As part of the Merger, we acquired the Aironite program, which we plan to continue developing. We believe that our existing capital resources will be sufficient to fund our planned operations into 2020. However, we may raise additional capital from new investors, including through our “at the market” (ATM) offering program, to fund new studies, programs, acquisitions, or to address changes in our existing development programs. We cannot estimate with reasonable certainty the actual amounts necessary to successfully complete the development and commercialization of our product candidates and there is no certainty that we will be able to raise the necessary capital on reasonable terms or at all.

Our capital requirements for the foreseeable future will depend in large part on, and could increase significantly as a result of, our expenditures on our development programs. Future expenditures on our development programs are subject to many uncertainties, and will depend on, and could increase significantly as a result of, many factors, including:

- the number, size, complexity, results and timing of our drug development programs;
- the timing and terms of any collaborative or other strategic arrangement that we may establish;
- the number of clinical and nonclinical studies necessary to demonstrate acceptable evidence of the safety and efficacy of our product candidates;

- changes in standards of care which could increase the size and complexity of clinical studies;
- the number of patients who participate, the rate of enrollment, and the ratio of randomized to evaluable patients in each clinical study;
- the ability to locate patients to participate in a study given the limited number of patients available for orphan or ultra-orphan indications;
- the number and location of sites and the rate of site initiation in each study;
- the duration of patient treatment and follow-up;
- the potential for additional safety monitoring or other post-marketing studies that may be requested by regulatory agencies;
- the time and cost to manufacture clinical trial material and commercial product, including process development and scale-up activities, and to conduct stability studies, which can last several years;
- the degree of difficulty and cost involved in securing alternate manufacturers or suppliers of drug product, components or delivery devices, as necessary to meet FDA requirements and/or commercial demand;
- the costs, requirements, timing of, and the ability to, secure regulatory approvals;
- the extent to which we increase our workforce and the costs involved in recruiting, training and incentivizing new employees;
- the costs related to developing, acquiring and/or contracting for sales, marketing and distribution capabilities, supply chain management capabilities, and regulatory compliance capabilities, if we obtain regulatory approval for a product candidate and commercialize it without a partner;
- the costs involved in evaluating competing technologies and market developments or the loss in sales in case of such competition; and
- the costs involved in establishing, enforcing or defending patent claims and other proprietary rights.

Additional capital may not be available when we need it, on terms that are acceptable to us or at all. If adequate funds are not available to us on a timely basis, we will be required to delay, limit, reduce or terminate our establishment of sales and marketing, manufacturing or distribution capabilities, development activities or other activities that may be necessary to commercialize our product candidates, conduct preclinical or clinical studies, or other development activities.

If we raise additional capital through marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish certain valuable rights to our product candidates, technologies, future revenue streams or research programs or grant licenses on terms that may not be favorable. If we raise additional capital through public or private equity offerings, the ownership interest of our stockholders will be diluted and the terms of any new equity securities may have preferential rights over our common stock. If we raise additional capital through debt financing, it may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt or making capital expenditures, or subject to specified financial ratios, any of which could restrict our ability to develop and commercialize our product candidates or operate as a business.

Our loan agreement contains covenants which may adversely impact our business; the failure to comply with such covenants could cause our outstanding debt to become immediately payable.

On April 28, 2017, we entered into a Loan and Security Agreement between us and Aravas, as co-borrowers, and Silicon Valley Bank, which we refer to as the Loan Agreement. The Loan Agreement includes a number of restrictive covenants, including restrictions on incurring additional debt, making investments, granting liens, disposing of assets, paying dividends and redeeming or repurchasing capital stock, subject to certain exceptions. Collectively, these covenants could constrain our ability to grow our business through acquisitions or engage in other transactions. In addition, the Loan Agreement includes covenants requiring, among other things, that we provide financial statements, comply with all laws, pay all taxes and maintain insurance. If we are not able to comply with these covenants, the loans under the Loan Agreement could become immediately due and payable and would have a material adverse effect on our liquidity, financial condition, operating results, business, and prospects and cause the price of our common stock to decline.

We have significant goodwill and IPR&D and impairment of goodwill and IPR&D may have a significant adverse impact on our future financial condition and results of operations.

As of September 30, 2017, we had goodwill and IPR&D of approximately $61.8 million. These intangible assets are subject to an impairment analysis whenever an event or change in circumstances indicates the carrying amount of such an asset may not be

recoverable. We test our goodwill and IPR&D for impairment annually, or more frequently if an event or change in circumstances indicates that the asset may be impaired. If an impairment is identified, we would be required to record an impairment charge with respect to the impaired asset to our consolidated statements of operations and comprehensive loss. A significant impairment charge could have a material negative impact on our financial condition and results of operations.

We will continue to evaluate our intangible assets for potential impairment in accordance with our accounting policies. If additional impairments are identified, we would be required to record an impairment charge with respect to the impaired asset to our consolidated statements of operations and comprehensive loss. A significant impairment charge could have a material negative impact on our financial condition and results of operations.

Events giving rise to impairment are difficult to predict and are an inherent risk in the pharmaceutical industry. Some of the potential risks that could result in impairment of our goodwill and IPR&D include negative clinical study results, adverse regulatory developments, delay or failure to obtain regulatory approval, additional development costs, changes in the manner of our use or development of our product candidates, competition, earlier than expected loss of exclusivity, pricing pressures, higher operating costs, changes in tax laws, prices that third parties are willing to pay for our IPR&D or similar assets in an arm's-length transaction being less than the carrying value of our IPR&D, and other market and economic environment changes or trends. Events or changes in circumstances may lead to significant impairment charges on our goodwill and/or IPR&D in the future, which could materially adversely affect our financial condition and results of operations.

Risks Related to Our Business Strategy and Operations

We are substantially dependent upon the clinical, regulatory and commercial success of our product candidates, AeroVanc, Molgradex and Aironite. Clinical drug development involves a lengthy and expensive process with an uncertain outcome, results of earlier studies and trials may not be predictive of future trial results, and our clinical trials may fail to adequately demonstrate to the satisfaction of regulatory authorities the safety and efficacy of our product candidates.

The success of our business is dependent on our ability to advance the clinical development of AeroVanc for the treatment of persistent methicillin-resistant *Staphylococcus aureus* (MRSA) infections in the lungs of cystic fibrosis patients, and Molgradex for the treatment of patients with pulmonary alveolar proteinosis (PAP), including its expansion into NTM, and Aironite for the treatment of heart failure with preserved ejection fraction, or HFpEF, also known as diastolic heart failure or heart failure with preserved systolic function. The AeroVanc Phase 3 study recently started in the United States and Canada in the third quarter of 2017, the Molgradex Phase 3 clinical study (IMPALA) is ongoing in Europe and Japan, and Aironite is in Phase 2 clinical development. We expect to announce top-line results from the Phase 3 study of Molgradex in the fourth quarter of 2018.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. A failure of one or more of our clinical trials can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. There is a high failure rate for drugs proceeding through clinical trials, and product candidates in later stages of clinical trials may fail to show the required safety and efficacy despite having progressed through preclinical studies and initial clinical trials. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier clinical trials, and we cannot be certain that we will not face similar setbacks. Even if our clinical trials are completed, the results may not be sufficient to obtain regulatory approval for our product candidates.

Given the development nature of our product candidates, we are subject to risks associated with initiating, completing and achieving positive outcomes from our current and future clinical trials, including:

- slow implementation, enrollment and completion of the clinical trials;
- inability to enroll enough patients in the clinical trials;
- low patient compliance and adherence to dosing and reporting requirements, for example incomplete reporting of patient reported outcomes in the clinical trials or missed doses;
- lack of safety and efficacy in the clinical trials;
- delays in manufacture of supplies for both drug and device components due to delays in formulation, process development, or manufacturing activities;
- requirements for additional nonclinical or clinical studies based on changes to formulation and/or changes to regulatory requirements; and
- requirements for additional clinical studies based on inconclusive clinical results or changes in market, standard of care, and/or regulatory requirements.

If we successfully complete the necessary clinical trials for our product candidates, our success will be subject to the risks associated with obtaining regulatory approvals, product launch, and commercialization, including:

- FDA rejection of our NDA submissions for our product candidates;
- regulatory rejection in the EU, Japan, and other markets;
- delays during regulatory review and/or requirements for additional CMC, nonclinical, or clinical studies, resulting in increased costs and/or delays in marketing approval and subsequent commercialization of the product candidates in the United States and other markets;
- inability to consistently manufacture commercial supplies of drug and delivery devices resulting in slowed market development and lower revenue;
- poor commercial sales due to:
    - the ability of our future sales organization or our potential commercialization partners to effectively sell the product candidates;
    - our lack of success in educating physicians and patients about the benefits, administration and use of our product candidates;
    - the availability, perceived advantages, relative cost, relative safety and relative efficacy of other products or treatments for the targeted indications of the product candidates;
    - low patient demand for the product candidates;
    - poor prescription coverage and inadequate reimbursement for our product candidates;
- our inability to enforce our intellectual property rights in and to our product candidates; and
- reduction in the safety profile of our product candidates following approval.

Many of these clinical, regulatory and commercial matters are beyond our control and are subject to other risks described elsewhere in this “Risk Factors” section. Accordingly, we cannot assure that we will be able to advance our product candidates further through final clinical development, or obtain regulatory approval of, commercialize or generate significant revenue from them. If we cannot do so, or are significantly delayed in doing so, our business will be materially harmed.

If we fail to attract and retain senior management and key scientific personnel, we may be unable to successfully develop and commercialize our product candidates.

We have historically operated with a limited number of employees that manage third-parties for most development activities. Institutional knowledge is concentrated within a small number of employees. Our success depends on our continued ability to attract, retain and motivate highly qualified management, clinical and scientific personnel. Our future success is highly dependent upon the contributions of our senior management, as well as our senior scientists and other members of our senior management team. The loss of services of any of these individuals, who all have at-will employment arrangements with us, could delay or prevent the successful development of our product pipeline, completion of our planned clinical trials or the commercialization of our product candidates.

Replacing key employees may be a difficult, costly and protracted process, and we may not have other personnel with the capacity to assume all the responsibilities of a key employee upon his/her departure. Transition periods can be difficult to manage and may cause disruption to our business. In addition, there may be intense competition from other companies and organizations for qualified personnel. Other companies and organizations with which we compete for personnel may have greater financial and other resources and different risk profiles than us, and a history of successful development and commercialization of our product candidates. If we cannot attract and retain skilled personnel, as needed, we may not achieve our development and other goals.

In addition, the success of our business will depend on our ability to develop and maintain relationships with respected service providers and industry-leading consultants and advisers. If we cannot develop and maintain such relationships, as needed, the rate and success at which we can develop and commercialize product candidates may be limited. In addition, our outsourcing strategy, which has included engaging consultants that spend considerable time to manage key functional areas, may subject us to scrutiny under labor laws and regulations, which may divert management time and attention and have an adverse effect on our business and financial condition.

We do not have, and do not have plans to establish manufacturing facilities. We completely rely on third parties for the manufacture and supply of our clinical trial drug and delivery device supplies and, if approved, commercial product materials. The loss of any of these vendors or a vendor's failure to provide us with an adequate supply of clinical trial or commercial product material in a timely manner and on commercially acceptable terms, or at all, could harm our business.

We outsource the manufacture of our product candidates and do not plan to establish our own manufacturing facilities. To manufacture our product candidates, we have made numerous custom modifications at CMOs, making us highly dependent on these CMOs. For clinical and commercial supplies, if approved, we have supply agreements with third party CMOs for drug substance, finished drug product, drug delivery devices and other necessary components of our product candidates. While we have secured long-term commercial supply agreements with many of the third party CMOs, we would need to negotiate agreements for commercial supply with several important CMOs, and we may not be able to reach agreement on acceptable terms. In addition, we rely on these third parties to conduct or assist us in key manufacturing development activities, including qualification of equipment, developing and validating methods, defining critical process parameters, releasing component materials and conducting stability testing, among other things. If these third parties are unable to perform their tasks successfully in a timely manner, whether for technical, financial or other reasons, we may be unable to secure clinical trial material, or commercial supply material if approved, which likely would delay the initiation, conduct or completion of our clinical studies or prevent us from having enough commercial supply material for sale, which would have a material and adverse effect on our business.

All manufacturers of our clinical trial material and, if approved, commercial product, including drug substance manufacturers, must comply with cGMP requirements enforced by the FDA through its facilities inspection program and applicable requirements of foreign regulatory authorities. These requirements include quality control, quality assurance and the maintenance of records and documentation. Manufacturers of our clinical trial material may be unable to comply with these cGMP requirements and with other FDA, state and foreign regulatory requirements. While we and our representatives generally monitor and audit our manufacturers' systems, we do not have full control over their ongoing compliance with these regulations. And while the responsibility to maintain cGMP compliance is shared between us and the third-party manufacturer, we bear ultimately responsibility for our supply chain and compliance with regulatory standards. Failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay or failure to obtain product approval, product seizure or recall, or withdrawal of product approval.

Currently, we do not have alternative vendors to back up our primary vendors of clinical trial material or, if approved, commercial supply material. Identification of and discussions with other vendors may be protracted and/or unsuccessful, or these new vendors may be unsuccessful in producing the same results as the current primary vendors producing the material. Therefore, if our primary vendors become unable or unwilling to perform their required activities, we could experience protracted delays or interruptions in the supply of clinical trial material and, ultimately, product for commercial sale, which would materially and adversely affect our development programs, commercial activities, operating results and financial condition. In addition, the FDA or regulatory authorities outside of the United States may require that we have an alternate manufacturer of a drug product before approving it for marketing and sale in the United States or abroad and securing such alternate manufacturer before approval of an NDA could result in considerable additional time and cost prior to NDA approval.

Any new manufacturer or supplier of finished drug product or its component materials, including drug substance and delivery devices, would be required to qualify under applicable regulatory requirements and would need to have sufficient rights under applicable intellectual property laws to the method of manufacturing of such product or ingredients required by us. The FDA or foreign regulatory agency may require us to conduct additional clinical studies, collect stability data and provide additional information concerning any new supplier, or change in a validated manufacturing process, including scaling-up production, before we could distribute products from that manufacturer or supplier or revised process. For example, if we were to engage a third party other than our current CMOs to supply the drug substance or drug product for future clinical trial, or commercial product, the FDA or regulatory authorities outside of the United States may require us to conduct additional clinical and nonclinical studies to ensure comparability of the drug substance or drug product manufactured by our current CMOs to that manufactured by the new supplier. Changing of suppliers or equipment is particularly challenging for companies like us, with inhalation products, because any change could alter the drug product of its performance. The manufacturing of the drug substance of Molgradex, molgramostim, a biological drug substance, as well as the drug product, Molgradex, is currently being transferred to a new manufacturing site. Producing a pharmaceutically and biologically similar product may prove to be challenging, and may take more time and resources than currently anticipated. The transfer of the manufacturing to the new site may also cause regulatory agencies, including the FDA, to require additional nonclinical or clinical studies, which may cause delay or failure to obtain regulatory approval, and incur substantial additional cost.

The manufacture of pharmaceutical products requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of pharmaceutical products often encounter difficulties in production, particularly in scaling-up initial production. These problems include difficulties with production costs and yields, quality control, including stability of the product candidate and quality assurance testing, and shortages of qualified personnel. Some of our product candidates have not been manufactured at the scale we believe will be necessary to maximize its commercial value and, accordingly, we may encounter difficulties in attempting to scale-up production and may not succeed in that effort on a timely basis or at all. In addition, the FDA or other regulatory authorities may impose additional requirements as we scale up initial production capabilities, which may delay our scale-up activities and/or add expense.

If our manufacturers encounter any of the aforementioned difficulties or otherwise fail to comply with their contractual obligations or there are delays entering commercial supply agreements due to capital constraints, we may have insufficient quantities of material to support ongoing and/or planned clinical studies or to meet commercial demand, if approved. In addition, any delay or interruption in the supply of materials necessary or useful to manufacture our product candidates could delay the completion of our clinical studies, increase the costs associated with our development programs and, depending upon the period of delay, require us to commence new clinical studies at significant additional expense or terminate the studies completely. Delays or interruptions in the supply of commercial product could result in increased cost of goods sold and lost sales. We cannot provide assurance that manufacturing or quality control problems will not arise in connection with the manufacture of our clinical trial material or commercial product, if approved, or that third-party manufacturers will be able to maintain the necessary governmental licenses and approvals to continue manufacturing such clinical trial material or commercial product, as applicable. In addition, AeroVanc and Molgradex are currently manufactured entirely or partially outside the United States and, as a result, we may experience interruptions in supply due to shipping or customs difficulties or regional instability. Furthermore, changes in currency fluctuations, shipping costs, or import tariffs could adversely affect cost of goods sold. Any of the above factors could cause us to delay or suspend anticipated or ongoing trials, regulatory submissions or commercialization of our product candidates, entail higher costs or result in being unable to effectively commercialize our products. Our dependence upon third parties for the manufacture of our clinical trial material may adversely affect our future costs and our ability to develop and commercialize our product candidates on a timely and competitive basis.

We rely significantly on third parties to conduct our nonclinical testing and clinical studies and other aspects of our development programs and if those third parties do not satisfactorily perform their contractual obligations or meet anticipated deadlines, the development of our product candidates could be adversely affected.

We do not employ personnel or possess the facilities necessary to conduct many of the activities associated with our programs. We engage consultants, advisors, CROs, CMOs and others to assist in the design and conduct of nonclinical and clinical studies of our product candidates, with interpretation of the results of those studies and with regulatory activities, and we expect to continue to outsource all or a significant amount of such activities. As a result, many important aspects of our development programs are and will continue to be outside our direct control, and our third-party service providers may not perform their activities as required or expected including the maintenance of GCP, GLP and GMP compliance, which are ultimately our responsibility to ensure. Further, such third parties may not be as committed to the success of our programs as our own employees and, therefore, may not devote the same time, thoughtfulness or creativity to completing projects or problem-solving as our own employees would. To the extent we are unable to successfully manage the performance of third-party service providers, our business may be adversely affected.

The CROs that we engage to execute our clinical studies play a significant role in the conduct of the studies, including the collection and analysis of study data, and we likely will depend on CROs and clinical investigators to conduct future clinical studies and to assist in analyzing data from completed studies and developing regulatory strategies for our product candidates. Individuals working at the CROs with which we contract, as well as investigators at the sites at which our studies are conducted, are not our employees, and we have limited control over the amount or timing of resources that they devote to their programs. If our CROs, study investigators, and/or third-party sponsors fail to devote sufficient time and resources to studies of our product candidates, if we and/or our CROs do not comply with all GLP and GCP regulatory and contractual requirements, or if their performance is substandard, we may delay commencement and/or completion of these studies, submission of applications for regulatory approval, regulatory approval, and commercialization of our product candidates. Failure of CROs to meet their obligations to us could adversely affect development of our product candidates.

In addition, CROs we engage may have relationships with other commercial entities, some of which may compete with us. Through intentional or unintentional means, our competitors may benefit from lessons learned on the Savara project that could ultimately harm our competitive position. Moreover, if a CRO fails to properly, or at all, perform our activities during a clinical study, we may not be able to enter into arrangements with alternative CROs on acceptable terms or in a timely manner, or at all. Switching CROs may increase costs and divert management time and attention. In addition, there likely would be a transition period before a new CRO commences work. These challenges could result in delays in the commencement or completion of our clinical studies, which could materially impact our ability to meet our desired and/or announced development timelines and have a material adverse impact on our business and financial condition.

We currently have limited marketing capabilities and no sales organization. If we are unable to establish sales and marketing capabilities on our own or through third parties, we will be unable to successfully commercialize our products, if approved, or generate product revenue.

To commercialize our products, if approved, in the United States and other jurisdictions we seek to enter, we must build our marketing, sales, managerial and other non-technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. If our products receive regulatory approval, we expect to market such products in the United States through a focused, specialized sales force, which will be costly and time consuming. We have no prior experience in the marketing and sale of pharmaceutical products and there are significant risks involved in building and managing a sales organization, including our ability to hire, retain and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to

sales and marketing personnel and effectively manage a geographically dispersed sales and marketing team. Outside of the United States, we may consider collaboration arrangements. If we are unable to enter into such arrangements on acceptable terms or at all, we may not be able to successfully commercialize our products in certain markets. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of our products. If we are not successful in commercializing our products, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we would incur significant additional losses.

We are in the process of integrating the systems, products and contracts from the recent merger with Mast and the complete scope and impact of the integration is unknown.

The Merger has inherent risks, including risks associated with the integration of systems, products and contracts. We have devoted resources towards the successful integration of the companies, but there is potential exposure to unknown or contingent liabilities, liability associated with the assumption of legacy agreements, and many other such risks typical for such mergers.

Any future acquisitions that we make could disrupt our business and harm our financial condition.

We expect to evaluate, from time to time, potential strategic acquisitions of complementary businesses, products or technologies. In addition, we expect to evaluate joint ventures, licensing and other collaborative projects. We may not be able to identify appropriate acquisition candidates or strategic partners, or successfully negotiate, finance or integrate acquisitions of any businesses, products or technologies. Furthermore, the integration of any acquisition and management of any collaborative project may divert our management's time and resources from our core business and disrupt our operations. Any cash acquisition we pursue would diminish the funds otherwise available to us for other uses. Any stock acquisition would dilute our stockholders' ownership.

To establish a sales and marketing infrastructure and expand our manufacturing capabilities, we will need to increase the size of our organization, and we may experience difficulties in managing this growth.

As of September 30, 2017, we had 17 full-time employees, including 9 employees engaged in research and development. As we advance our product candidates through the development process and to commercialization, we will need to continue to expand our development, regulatory, quality, managerial, sales and marketing, operational, finance and other resources to manage our operations and clinical trials, continue our development activities and commercialize our product candidates, if approved. As our operations expand, we expect that we will need to manage additional relationships with various manufacturers and collaborative partners, suppliers and other organizations.

Due to our limited financial resources and our limited experience in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. In addition, the physical expansion of our operations may lead to significant costs and may divert our management attention and resources. Any inability to manage growth could delay the execution of our development and strategic objectives, or disrupt our operations, which could materially impact our business, revenue and operating results.

Our product candidates may cause undesirable side effects or adverse events, or have other properties that could delay or prevent our clinical development, regulatory approval or commercialization.

Undesirable side effects or adverse events caused by our product candidates could interrupt, delay or halt clinical studies and could result in the denial of regulatory approval by the FDA or other regulatory authorities for any or all indications, and in turn prevent us from commercializing our product candidates. A significant challenge in clinical development is that the patient population in early studies, where small numbers of patients are required, is different from the patient population observed in later stage studies, where larger groups of patients are required. For example, patients in earlier stage studies may be more sick, compliant, or otherwise motivated than patients in larger studies. As such, efficacy or safety results may differ significantly between studies. Side-effects seen at high doses in earlier studies of AeroVanc, such as bronchoconstriction or other airway irritation, may be seen in significant numbers at the lower doses selected for later studies. Also, for AeroVanc, while not observed in the Phase 2 clinical study, the emergence of vancomycin-resistant MRSA could occur during the longer dosing period of AeroVanc that is currently implemented in the Phase 3 clinical study. If this or other undesirable side effects occur, they could possibly prevent approval, which would have a material and adverse effect on our business.

If any of our product candidates receive marketing approval and we or others later identify undesirable side effects caused by the product:

- regulatory authorities may require the addition of labeling statements, such as a "black box" warning or a contraindication;
- regulatory authorities may withdraw its approval of the product;

- we may be required to change the way the product is administered, conduct additional clinical studies or change the labeling of the product; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product or could substantially increase the costs and expenses of commercializing the product, which in turn could delay or prevent us from generating significant revenue from its sale.

We may not achieve our projected development goals in the time frames we have announced.

We have set goals for accomplishing certain objectives material to the successful development of our product candidates. The actual timing of these events may vary due to many factors, including delays or failures in our nonclinical testing, clinical studies and manufacturing and regulatory activities and the uncertainties inherent in the regulatory approval process. From time to time we create estimates for the completion of enrollment of or announcement of data from clinical studies of our product candidates. However, predicting the rate of enrollment or the time from completion of enrollment to announcement of data for any clinical study requires us to make significant assumptions that may prove to be incorrect. As discussed in other risk factors above, our estimated enrollment rates and the actual rates may differ materially and the time required to complete enrollment of any clinical study may be considerably longer than we estimate. Such delays may adversely affect our financial condition and results of operations.

Even if we complete a clinical study with successful results, we may not achieve our projected development goals in the time frames we initially anticipate or announce. If a development plan for a product candidate becomes more extensive and costly than anticipated, we may determine that the associated time and cost are not financially justifiable and, as a result, may discontinue development in a particular indication or of the product candidate as a whole. In addition, even if a study did complete with successful results, changes may occur in regulatory requirements or policy during the period of product development and/or regulatory review of an NDA that relate to the data required to be included in NDAs which may require additional studies that may be costly and time consuming. Any of these actions may be viewed negatively, which could adversely impact our financial condition.

Further, throughout development, we must provide adequate assurance to the FDA and other regulatory authorities that we can consistently develop and produce our product candidates in conformance with GLP, GCP, cGMP, and other regulatory standards. As discussed above, we rely on CMOs for the manufacture of clinical, and future commercial, quantities of our product candidates. If future FDA or other regulatory authority inspections identify cGMP compliance deficiencies at these third-party facilities, production of our clinical trial material or, in the future, commercial product, could be disrupted, causing potentially substantial delay in or failure of development or commercialization of our product candidates.

Our employees, independent contractors and consultants, principal investigators, CROs, CMOs and other vendors, and any future commercial partners may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could cause significant liability for us and harm our reputation.

We are exposed to the risk that our employees, independent contractors and consultants, principal investigators, CROs, CMOs and other vendors, and any future commercial partners may engage in fraudulent conduct or other misconduct, including intentional failures to comply with FDA regulations or similar regulations of comparable foreign regulatory authorities, to provide accurate information to the FDA or comparable foreign regulatory authorities, to comply with manufacturing standards required by cGMP or our standards, to comply with federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable foreign regulatory authorities, and to report financial information or data accurately or disclose unauthorized activities to them. The misconduct of our employees and other service providers could involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. Although we have adopted a code of business ethics and conduct, it is not always possible to identify and deter such misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against them, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant fines or other sanctions. For example, if one of our manufacturing partners was placed under a consent decree, we may be hampered in our ability to manufacture clinical or commercial supplies.

Our business and operations would suffer in the event of third-party computer system failures, cyber-attacks on third-party systems or deficiency in our cyber security.

We rely on information technology systems, including third-party “cloud based” service providers, to keep financial records, maintain laboratory, clinical data and corporate records, communicate with staff and external parties and operate other critical functions. This includes critical systems such as email, other communication tools, electronic document repositories, and archives. If any of these

third-party information technology (IT) providers are compromised due to computer viruses, unauthorized access, malware, natural disasters, fire, terrorism, war and telecommunication failures, electrical failures, cyber-attacks or cyber-intrusions over the internet, then sensitive emails or documents could be exposed or deleted. Similarly, we could incur business disruption if our access to the internet is compromised and we are unable to connect with third-party IT providers. The risk of a security breach or disruption, particularly through cyber-attacks or cyber intrusion, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. In addition, we rely on those third parties to safeguard important confidential personal data regarding our employees and patients enrolled in our clinical trials. If a disruption event were to occur and cause interruptions in a third-party IT provider's operations, it could result in a disruption of our drug development programs. For example, the loss of clinical trial data from completed, ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach results in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and development of our product candidates could be delayed, or could fail.

Our operations might be interrupted by the occurrence of a natural disaster or other catastrophic event.

Our corporate headquarters is located in a single commercial facility in Austin, Texas, USA. We maintain a second office in a single commercial facility in Denmark where many of our product development staff are located. Important documents and records, including copies of our regulatory documents and other records for our product candidates, are located both at a secure offsite document storage facility as well at our own facilities and we depend on our facilities for the continued operation of our business. Natural disasters and other catastrophic events, such as wildfires and other fires, earthquakes and extended power interruptions and terrorist attacks or severe weather conditions, could significantly disrupt our operations and result in additional, unplanned expense. As a small company with limited resources, we have not prepared or implemented a formal business continuity or disaster recovery plan and any natural disaster or catastrophic event could disrupt our business operations and result in setbacks to our development programs. Even though we believe we carry commercially reasonable insurance, we might suffer losses that are not covered by or exceed the coverage available under these insurance policies.

Risks Related to Drug Development and Commercialization

We depend on the successful completion of clinical studies of our product candidates, and any positive results in prior clinical studies do not ensure that ongoing or future clinical studies will be successful.

Pharmaceutical products are subject to stringent regulatory requirements covering quality, safety, and efficacy. The burden of proof is on the manufacturer, such as Savara, to show with substantial clinical data that the risk/benefit profile for any new drug is favorable. Only after successfully completing extensive pharmaceutical development, nonclinical testing, and clinical studies may a product be considered for regulatory approval.

Clinical studies are expensive, difficult to design and implement, they can take many years to complete, and outcomes are inherently uncertain. A drug product may fail to demonstrate positive results at any stage of testing despite having progressed satisfactorily through nonclinical testing and initial clinical studies. There is significant risk in clinical development where later stage clinical studies are designed and powered based on the analysis of data from earlier studies, with these earlier studies involving a smaller number of patients, and the results of the earlier studies being driven primarily by a subset of responsive patients. In addition, interim results of a clinical study do not necessarily predict final results. Further, clinical study data frequently are susceptible to varying interpretations. Medical professionals and/or regulatory authorities may analyze or weigh study data differently than the sponsor company, resulting in delay or failure to obtain marketing approval for a product candidate. Additionally, the possible lack of standardization across multiple investigative sites may induce variability in the results which can interfere with the evaluation of treatment effects.

If we license rights to develop our product candidates to independent third parties or otherwise permit such third parties to evaluate our product candidates in clinical studies, we may have limited control over those clinical studies. Any safety or efficacy concern identified in a third-party sponsored study could adversely affect our or another licensee's development of our product candidate and prospects for its regulatory approval, even if the data from that study are subject to varying interpretations and analyses.

There is significant risk that ongoing and future clinical studies of our product candidates are unsuccessful. Negative or inconclusive results could cause the FDA and other regulatory authorities to require us to repeat or conduct additional clinical studies, which could significantly increase the time and expense associated with development of that product candidate or cause us to elect to discontinue one or more clinical programs. Failure to complete a clinical study of a product candidate or an unsuccessful result of a clinical study could have a material adverse effect on our business.

AeroVanc and Molgradex have received Orphan Drug Designation by the Food and Drug Administration (FDA) and Molgradex has received Orphan Drug Designation also in Europe. While orphan designation provides certain benefits there are also associated risks.

AeroVanc has been granted Orphan Drug Designation in the United States by the FDA for the treatment of persistent methicillin-resistant *Staphylococcus aureus* (MRSA) lung infection in patients with cystic fibrosis and Molgradex has received Orphan Drug Designation in the United States by the FDA and in Europe by the European Medicines Agency for the treatment of pulmonary alveolar proteinosis (PAP). Orphan Drug Designation will not shorten the regulatory review or reduce the clinical data requirements needed to obtain approval. If approval is received to market either AeroVanc or Molgradex for the respective indications, FDA will not approve a similar product, with the same active ingredient, to AeroVanc or Molgradex for seven years and the European Medicines Agency will not approve a similar product to Molgradex for ten years, unless we are unable to produce enough supply to meet demand in the marketplace or another similar product, with the same active ingredient, is deemed clinically superior. Similar product candidates, with the same active ingredient and route of delivery, may be granted Orphan Drug Designation during the development of the respective products, but the Orphan Drug exclusivity is granted only to the first of such products approved, which means there is risk that a competitor product candidate may receive approval and Orphan Drug exclusivity before us, thus preventing us from marketing one or more of our product candidates until the exclusivity of the competing product expires. Also, the Orphan Drug status will not prevent a competitor with a different active ingredient from competing with our product candidates. If we are prevented from marketing one or more product candidates due to a competitor's Orphan Drug exclusivity, this would have a material adverse effect on our business.

Delays in commencement and completion of clinical studies are common and have many causes. Delays in clinical studies of our product candidates could increase overall development costs and jeopardize our ability to obtain regulatory approval and successfully commercialize any approved products.

Clinical testing typically is expensive, can take many years to complete, and its outcome is inherently uncertain. Clinical studies may not commence on time or be completed on schedule, if at all. The commencement and completion of clinical studies can be delayed for a variety of reasons, including:

- inability to raise sufficient funding to initiate or continue a clinical study;
- delays in obtaining regulatory approval to commence a clinical study;
- delays in identifying and reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical study sites and investigators, which agreements can be subject to extensive negotiation and may vary significantly among study sites;
- delays in obtaining regulatory approval in a prospective country;
- delays in obtaining ethic committee approval to conduct a clinical study at a prospective site;
- delays in reaching agreements on acceptable terms with prospective contract manufacturing organizations, or CMOs, or other vendors for the production and supply of clinical trial material and, if necessary, drug administration devices, which agreements can be subject to extensive negotiation;
- delays in the production or delivery of sufficient quantities of clinical trial material or drug delivery devices from our CMOs and other vendors to initiate or continue a clinical study;
- delays due to product candidate recalls as result of stability failure, excessive product complaints or other failures of the product candidate during its use or testing;
- invalidation of clinical data caused by premature unblinding or integrity issues;
- invalidation of clinical data caused by mixing up of the active drug and placebo through randomization or manufacturing errors;
- delays on the part of our CROs, CMOs, and other third-party contractors in developing procedures and protocols or otherwise conducting activities in accordance with applicable policies and procedures and in accordance with agreed upon timelines;
- delays in identifying and hiring or engaging, as applicable, additional employees or consultants to assist in managing clinical study-related activities;
- delays in recruiting and enrolling individuals to participate in a clinical study, which historically can be challenging in orphan diseases;

- delays caused by patients dropping out of a clinical study due to side effects, concurrent disorders, difficulties in adhering to the study protocol, unknown issues related to different patient profiles than in previous studies, such as the reduced age limit required for inclusion into the planned AeroVanc Phase 3 study, or otherwise;
- delays in having patients complete participation in a clinical study, including returning for post-treatment follow-up;
- delays resulting from study sites dropping out of a trial, providing inadequate staff support for the study, problems with shipment of study supplies to clinical sites or focusing its staff's efforts on enrolling studies that compete for the same patient population;
- suspension of enrollment at a study site or the imposition of a clinical hold by the FDA or other regulatory authority following an inspection of clinical study operations at study sites or finding of a drug-related serious adverse event; and
- delays in quality control/quality assurance procedures necessary for study database lock and analysis of unblinded data.

Patient enrollment, a critical component to successful completion of a clinical study, is affected by many factors, including the size and nature of the study population, the proximity of patients to clinical sites, the eligibility criteria for the study, the design of the clinical study, ongoing studies competing for the same patient population and clinicians, patients' perceptions as to the potential advantages of the drug being studied in relation to available alternatives, including therapies being investigated by other companies which may be viewed as more beneficial or important to study, fear of being randomized to the placebo arm, and changes in standard of care. Challenges to complete enrollment can be exacerbated in orphan indications, like those being pursued by us, with a limited number of qualifying patients and the lack of clinical sites with the necessary expertise and experience to conduct our studies. Further, completion of a clinical study and/or its results may be adversely affected by failure to retain patients who enroll in a study but withdraw due to adverse side effects, perceived lack of efficacy, belief that they are on placebo, improvement in condition before treatment has been completed, or for personal reasons, or without reason, or by patients who fail to return for or complete post-treatment follow-up.

Clinical studies may not begin on time or be completed in the time frames we anticipate and may be costlier than we anticipate for a variety of reasons, including one or more of those described above. The length of time necessary to successfully complete clinical studies varies significantly and is difficult to predict accurately. We may make statements regarding anticipated timing for completion of enrollment in and/or availability of results from our clinical studies, but such predictions are subject to a number of significant assumptions and actual timing may differ materially for a variety of reasons, including patient enrollment rates, length of time needed to prepare raw study data for analysis and then to review and analyze it, and other factors described above. If we experience delays in the completion of a clinical study, if a clinical study is terminated, or if failure to conduct a study in accordance with regulatory requirements or the study's protocol leads to deficient safety and/or efficacy data, the regulatory approval and/or commercial prospects for our product candidates may be harmed and our ability to generate product revenue will be delayed. In addition, any delays in completing our clinical studies likely will increase our development costs. Further, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical studies may ultimately lead to the denial of regulatory approval of a product candidate. Even if we ultimately commercialize our product candidates, the standard of care may have changed or other therapies for the same indications may have been introduced to the market in the interim and may establish a competitive threat to us or diminish the need for our products.

Clinical studies are very expensive, difficult to design and implement, often take many years to complete, and the outcome is inherently uncertain.

Clinical development of pharmaceutical products for humans is generally very expensive, takes many years to complete and failures can occur at any stage of clinical testing. We estimate that clinical development of our product candidates will take several additional years to complete, but because of the variety of factors that can affect the design, timing and outcome of clinical studies, we are unable to estimate the exact funds required to complete research and development, obtain regulatory approval and commercialize all of our product candidates. We will need significant additional capital to continue to advance our products as per current business plans.

Failure at any stage of clinical testing is not uncommon and we may encounter problems that would require additional, unplanned studies or cause us to abandon a clinical development program.

In addition, a clinical study may be suspended or terminated by us, an IRB, a data safety monitoring board, the FDA or other regulatory authorities due to a number of factors, including:

- lack of adequate funding to continue the study;
- failure to conduct the study in accordance with regulatory requirements or the study's protocol;
- inspection of clinical study operations or sites by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;

- unforeseen safety issues, including adverse side effects; or
- changes in governmental regulations or administrative actions.

Changes in governmental regulations and guidance relating to clinical studies may occur and we may need to amend study protocols to reflect these changes, or we may amend study protocols for other reasons. Amendments may require us to resubmit protocols to IRBs for re-examination and approval or renegotiate terms with CROs, study sites and investigators, all of which may adversely impact the costs or timing of or our ability to successfully complete a trial.

There is significant uncertainty regarding the regulatory approval process for any investigational new drug, substantial further testing and validation of our product candidates and related manufacturing processes may be required, and regulatory approval may be conditioned, delayed or denied, any of which could delay or prevent us from successfully marketing our product candidates and substantially harm our business.

Pharmaceutical products generally are subject to rigorous nonclinical testing and clinical studies and other approval procedures mandated by the FDA and foreign regulatory authorities. Various federal and foreign statutes and regulations also govern or materially influence the manufacturing, safety, labeling, storage, record keeping and marketing of pharmaceutical products. The process of obtaining these approvals and the subsequent compliance with appropriate U.S. and foreign statutes and regulations is time-consuming and requires the expenditure of substantial resources.

We have commenced the Phase 3 trial of AeroVanc, the success of which will be needed for FDA approval to market AeroVanc in the United States to treat persistent MRSA lung infection in cystic fibrosis patients. While significant communication with the FDA on the Phase 3 study design has occurred, even if the Phase 3 clinical study meets all of its statistical goals and protocol end points, the FDA may not view the results as robust and convincing. They may require additional clinical studies and/or other costly studies, which could require us to expend substantial additional resources and could significantly extend the timeline for clinical development prior to market approval. Additionally, we are conducting a two-year nonclinical carcinogenicity study on the AeroVanc powder, required by the FDA. The results of this study will not be known until a short time prior to potential submission of an NDA for AeroVanc. If the carcinogenicity study cannot be completed for technical or other reasons, or provides results that the FDA determine to be concerning, this may cause a delay or failure in obtaining approval for AeroVanc.

Molgradex is currently undergoing a Phase 3 clinical study in Europe and Japan. Concurrently, we are exploring formulation changes to Molgradex that could simplify the composition of the drug product by eliminating one or more potentially unnecessary or harmful excipients. While we expect this change to improve the product quality and possibly reduce other documentation requirements, the regulatory agencies may require additional clinical or nonclinical studies prior to approval of such formulation changes. We currently plan not to make any formulation changes prior to submitting applications to regulatory authorities for regulatory approvals of Molgradex, but instead, to qualify the excipients in its nonclinical and clinical studies. However, regulatory agencies may request that we attempt to make the aforementioned formulation changes prior to approval of the product, and therefore, even if current clinical studies are deemed successful, such formulation changes could require us to expend substantial additional resources, including conducting an additional Phase 3 clinical study that would significantly extend the timeline for clinical development of Molgradex in PAP.

We recently received guidance from the FDA on the requirements to initiate clinical studies in the United States and on the clinical study requirements to achieve BLA approval for Molgradex. Based on the guidance, we amended our ongoing Phase 3 clinical study to include more patients, and to amended our endpoint hierarchy and statistical analyses to be used for U.S. approval purposes prior to submission of a U.S. IND. Even if the clinical study meets all of its statistical goals and protocol end points, the FDA may not view the results to provide persuasive evidence of efficacy across multiple clinical endpoints. Instead, they may require additional clinical studies and/or other costly studies, including an additional Phase 3 study, which would require us to expend substantial additional resources and would significantly extend the timeline for clinical development prior to market approval, or in failure to complete the clinical development of Molgradex.

Significant uncertainty exists with respect to the regulatory approval process for any investigational new drug, including AeroVanc, Molgradex, and Aironite. Regardless of any guidance the FDA or foreign regulatory agencies may provide a drug’s sponsor during its development, the FDA or foreign regulatory agencies retain complete discretion in deciding whether to accept an NDA or BLA or the equivalent foreign regulatory approval submission for filing or, if accepted, approve an NDA or BLA. There are many components to an NDA or BLA or marketing authorization application submission in addition to clinical study data. For example, the FDA or foreign regulatory agencies will review the sponsor’s internal systems and processes, as well as those of its CROs, CMOs and other vendors, related to development of its product candidates, including those pertaining to its clinical studies and manufacturing processes. Before accepting an NDA for review or before approving the NDA or BLA, the FDA or foreign regulatory agencies may request that we provide additional information that may require significant resources and time to generate and there is no guarantee that its product candidates will be approved for any indication for which we may apply. The FDA or foreign regulatory agencies may choose not to approve an NDA or BLA for any of a variety of reasons, including a decision related to the safety or efficacy data, manufacturing

controls or systems, or for any other issues that the agency may identify related to the development of its product candidates. Even if one or more Phase 3 clinical studies are successful in providing statistically significant evidence of the efficacy and safety of the investigational drug, the FDA or foreign regulatory agencies may not consider efficacy and safety data from the submitted studies adequate scientific support for a conclusion of effectiveness and/or safety and may require one or more additional Phase 3 or other studies prior to granting marketing approval. If this were to occur, the overall development cost for the product candidate would be substantially greater and its competitors may bring products to market before us, which could impair our ability to generate revenues from the product candidates, or even seek approval, if blocked by a competitor's Orphan Drug exclusivity, which would have a material adverse effect on our business, financial condition and results of operations.

Further, development of our product candidates and/or regulatory approval may be delayed for reasons beyond our control. For example, U.S. federal government shut-down or budget sequestration, such as one that occurred during 2013, may result in significant reductions to the FDA's budget, employees and operations, which may lead to slower response times and longer review periods, potentially affecting our ability to progress development of our product candidates or obtain regulatory approval for our product candidates.

Even if the FDA or foreign regulatory agencies grant approvals for our product candidates, the conditions or scope of the approval(s) may limit successful commercialization of the product candidates and impair our ability to generate substantial sales revenue. For example, the FDA may approve label claims for AeroVanc with age restrictions and/or treatment duration limitations, or Molgradex with restrictions for use only by patients unresponsive to the current standard of care. They may limit the label of AeroVanc, Molgradex, or Aironite to a subset of patients based on a review of which patient groups had the greatest efficacious response in clinical studies. Such label restriction may be undesirable and may limit successful commercialization. The FDA or foreign regulatory agencies may also only grant marketing approval contingent on the performance of costly post-approval nonclinical or clinical studies, or subject to warnings or contraindications that limit commercialization. Additionally, even after granting approval, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for our products will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, and continued compliance with current good manufacturing processes, or cGMP, good clinical practices, international conference on harmonization regulations and good laboratory practices, which are regulations and guidelines that are enforced by the FDA or foreign regulatory agencies for all of its clinical development and for any clinical studies that we conduct post-approval. The FDA or foreign regulatory agencies may decide to withdraw approval, add warnings or narrow the approved indications in the product label, or establish risk management programs that could restrict distribution of our products. These actions could result from, among other things, safety concerns, including unexpected side effects or drug interaction problems, or concerns over misuse of a product. If any of these actions were to occur following approval, we may have to discontinue commercialization of the product, limit our sales and marketing efforts, implement risk minimization procedures, and/or conduct post-approval studies, which in turn could result in significant expense and delay or limit our ability to generate sales revenues.

Regulations may be changed prior to submission of a marketing application that require higher hurdles than currently anticipated. These may occur as a result of drug scandals, recalls, or a political environment unrelated to our products.

Even if we receive regulatory approval for a product candidate, we may face regulatory difficulties that could materially and adversely affect our business, financial condition and results of operations.

Even if initial regulatory approval is obtained, as a condition to the initial approval the FDA or a foreign regulatory agency may impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly post-approval studies or marketing surveillance programs, any of which would limit the commercial potential of the product. Our product candidates also will be subject to ongoing FDA requirements related to the manufacturing processes, labeling, packaging, storage, distribution, advertising, promotion, record-keeping and submission of safety and other post-market information regarding the product. For instance, the FDA may require changes to approved drug labels, require post-approval clinical studies and impose distribution and use restrictions on certain drug products. In addition, approved products, manufacturers and manufacturers' facilities are subject to continuing regulatory review and periodic inspections. If previously unknown problems with a product are discovered, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, the FDA may impose restrictions on that product or us, including requiring withdrawal of the product from the market. If we or a CMO of ours fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue warning letters or untitled letters;
- impose civil or criminal penalties;
- suspend or withdraw regulatory approval;
- suspend or terminate any ongoing clinical studies;
- refuse to approve pending applications or supplements to approved applications;

- exclude our product from reimbursement under government healthcare programs, including Medicaid or Medicare;
- impose restrictions or affirmative obligations on our or our CMO's operations, including costly new manufacturing requirements;
- close the facilities of a CMO; or
- seize or detain products or require a product recall.

If any of our product candidates for which we receive regulatory approval fails to achieve significant market acceptance among the medical community, patients or third-party payers, the revenue we generate from its sales will be limited and our business may not be profitable.

Our success will depend in substantial part on the extent to which our product candidates, if approved, are accepted by the medical community and patients and reimbursed by third-party payers, including government payers. The degree of market acceptance with respect to each of our approved products, if any, will depend upon a number of factors, including:

- the safety and efficacy of our products as demonstrated in clinical studies;
- acceptance in the medical and patient communities of our products as a safe and effective treatment;
- the product's taste, ease of use, or features associated with the delivery device;
- the perceived advantages of our product over alternative treatments, including with respect to the incidence and severity of any adverse side effects and the cost of treatment;
- the indications for which our product is approved;
- claims or other information (including limitations or warnings) in a product's approved labeling;
- reimbursement and coverage policies of government and other third-party payers;
- pricing and cost-effectiveness of our product relative to alternative treatments;
- availability of alternative treatments;
- smaller than expected market size due to lack of disease awareness of a rare disease, or the patient population with a specific rare disease being smaller than anticipated;
- inappropriate diagnostic efforts due to limited knowledge and/or resources among clinicians;
- the prevalence of off-label substitution of chemically equivalent products or alternative treatments; and
- the resources we devote to marketing our product and restrictions on promotional claims we can make with respect to the product.

We cannot predict with reasonable accuracy whether physicians, patients, healthcare insurers or health maintenance organizations, or the medical community in general, will accept or utilize any of our products, if approved. If our product candidates are approved but do not achieve an adequate level of acceptance by these parties, we may not generate sufficient revenue to become or remain profitable. In addition, our efforts to educate the medical community and third-party payers regarding benefits of our products may require significant resources and may never be successful.

If we determine that a product candidate may not achieve adequate market acceptance or that the potential market size does not justify additional expenditure on the program, we may reduce our expenditures on the development and/or the process of seeking regulatory approval of the product candidate while we evaluate whether and on what timeline to move the program forward.

Even if we receive regulatory approval to market one or more of our product candidates in the United States, we may never receive approval or commercialize our products outside of the United States, which would limit our ability to realize the full commercial potential of our product candidates.

In order to market products outside of the United States, we must establish and comply with the numerous and varying regulatory requirements of other countries regarding safety and efficacy. Approval procedures vary among countries and can involve additional product testing and validation and additional administrative review periods. The time required to obtain approval in other countries generally differs from that required to obtain FDA approval. The regulatory approval process in other countries may include all of the risks detailed above regarding FDA approval in the United States, as well as other risks. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in others. Failure to obtain regulatory approval in other countries or any delay or setback in obtaining such

approval could have the same adverse effects detailed above regarding FDA approval in the United States. As described above, such effects include the risks that our product candidates may not be approved for all indications requested, which could limit the uses of our product candidates and have an adverse effect on product sales, and that such approval may be subject to limitations on the indicated uses for which the product may be marketed or require costly, post-marketing follow-up studies. Conversely, if the product candidates do receive approval outside the United States in the future, we may not meet the FDA requirements in the United States for approval.

We must comply with the U.S. Foreign Corrupt Practices Act and similar foreign anti-corruption laws.

The U.S. Foreign Corrupt Practices Act, to which we are subject, prohibits corporations and individuals from engaging in certain activities to obtain or retain business or to influence a person working in an official capacity. It is illegal to pay, offer to pay or authorize the payment of anything of value to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. Other countries, such as the U.K., have similar laws with which we must comply. We face the risk that an employee or agent could be accused of violating one or more of these laws, particularly in geographies where significant overlap exists between local government and healthcare industries. Such an accusation, even if unwarranted, could prove disruptive to our developmental and commercialization efforts.

Risks Related to Our Intellectual Property

Our success will depend in part on obtaining and maintaining effective patent and other intellectual property protection for our product candidates and proprietary technology.

AeroVanc has received a U.S. Patent Notice of Allowance for its formulation in the United States, AeroVanc's primary market. AeroVanc has either been issued patents or is prosecuting patent applications in numerous countries outside the United States. We have no patent protection for Molgradex for the treatment of PAP, and primarily rely on the Orphan Drug exclusivity as our primary barrier to competition. Both AeroVanc and Molgradex utilize proprietary delivery devices with exclusive supply agreements. Molgradex is eligible for protection via a proprietary cell bank used in the production of the drug substance. For Aironite, which is administered via nebulization, we have no patent protection and may rely on regulatory exclusivity for the combination of Aironite and its delivery system. Other medications that alter pulmonary pressures include the delivery device in their U.S. and European market labels, and are approved for use only with the specified proprietary delivery device. However, there is no assurance that our Aironite product and its delivery system, if approved, will benefit from this type of market protection.

Our success will depend on our ability to:

- obtain and maintain patent and other exclusivity with respect to our products and its uses;
- prevent third parties from infringing upon our proprietary rights;
- maintain proprietary know-how and trade secrets;
- operate without infringing upon the patents and proprietary rights of others; and
- obtain appropriate licenses to patents or proprietary rights held by third parties if infringement would otherwise occur or if necessary to secure exclusive rights to them, both in the United States and in foreign countries.

The patent and intellectual property positions of biopharmaceutical companies generally are highly uncertain, involve complex legal and factual questions, and have been and continue to be the subject of much litigation. There is no guarantee that we have or will develop or obtain the rights to products or processes that are patentable, that patents will issue from any pending applications or that claims allowed will be sufficient to protect the technology we develop or have developed or that is used by us, our CMOs or our other service providers. In addition, any patents that are issued to us may be limited in scope or challenged, invalidated, infringed or circumvented, including by our competitors, and rights we have under issued patents may not provide competitive advantages to us. If competitors can develop and commercialize technology and products similar to ours, our ability to successfully commercialize our technology and products may be impaired.

Patent applications in the United States are confidential for a period of time until they are published, and publication of discoveries in scientific or patent literature typically lags actual discoveries by several months. As a result, we cannot be certain that the inventors listed in any patent or patent application owned by us were the first to conceive of the inventions covered by such patents and patent applications (for U.S. patent applications filed before March 16, 2013), or that such inventors were the first to file patent applications for such inventions outside the United States and, after March 15, 2013, in the United States. In addition, changes in or different interpretations of patent laws in the United States and foreign countries may affect our patent rights and limit the number of patents we can obtain, which could permit others to use our discoveries or to develop and commercialize our technology and products without any compensation to us.

Our AeroVanc patent is specific to the formulation of the AeroVanc powder. While this may prevent identical products from entering the market, it may not preclude someone skilled in the art from inventing an alternate formulation approach with comparable or improved characteristics.

We also rely on unpatented know-how and trade secrets and continuing technological innovation to develop and maintain our competitive position, which we seek to protect, in part, through confidentiality agreements with employees, consultants, collaborators and others. We also have invention or patent assignment agreements with our employees and certain consultants. The steps we have taken to protect our proprietary rights, however, may not be adequate to preclude misappropriation of or otherwise protect our proprietary information or prevent infringement of our intellectual property rights, and we may not have adequate remedies for any such misappropriation or infringement. In addition, it is possible that inventions relevant to our business could be developed by a person not bound by an invention assignment agreement with us or independently discovered by a competitor.

We also intend to rely on regulatory exclusivity for protection of our product candidates, if approved for commercial sale. Implementation and enforcement of regulatory exclusivity, which may consist of regulatory data protection and market protection, varies widely from country to country. Failure to qualify for regulatory exclusivity, or failure to obtain or maintain the extent or duration of such protections that we expect for our product candidates, if approved, could affect our decision on whether to market the products in a particular country or countries or could otherwise have an adverse impact on our revenue or results of operations. For Molgradex, which is administered via nebulization, we may rely on regulatory exclusivity for the combination of Molgradex and its delivery system. However, there is no assurance that our Molgradex product and its delivery system, if approved, will benefit from this type of market protection.

We may rely on trademarks, trade names and brand names to distinguish our products, if approved for commercial sale, from the products of our competitors. We intend to seek approval for new names for AeroVanc and Molgradex that meet the FDA's and foreign regulatory requirements. However, our trademark applications may not be approved. Third parties may also oppose our trademark applications or otherwise challenge our use of the trademarks in which case we may expend substantial resources to defend our proposed or approved trademarks and may enter into agreements with third parties that may limit our use of our trademarks. In the event that our trademarks are successfully challenged, we could be forced to rebrand our product, which could result in loss of brand recognition and could require us to devote significant resources to advertising and marketing these new brands. For example, we filed a trademark for the name "Savara" and were challenged. We decided to terminate its application, but we may revisit such filings at a future date. Further, our competitors may infringe our trademarks or we may not have adequate resources to enforce our trademarks.

Our success depends on our ability to prevent competitors from duplicating or developing and commercializing equivalent versions of our product candidates, but patent protection may be difficult to obtain and any issued claims may be limited.

We have filed for patent protection in the United States and other countries to cover the formulation of AeroVanc and were granted a notice of allowance in the United States, its primary market. However, this patent may not provide us with significant competitive advantages, because the validity or enforceability of the patents may be challenged and, if instituted, one or more of the challenges may be successful. Patents may be challenged in the United States under post-grant review proceedings, *inter partes* re-examination, *ex parte* re-examination, or challenges in district court. Any patents issued in foreign jurisdictions may be subjected to comparable proceedings lodged in various foreign patent offices, or courts. These proceedings could result in either loss of the patent or loss or reduction in the scope of one or more of the claims of the patent. Even if a patent issues, and is held valid and enforceable, competitors may be able to design around our patents, such as by using pre-existing or newly developed technology, in which case competitors may not infringe our issued claims and may be able to market and sell products that compete directly with us before and after our patents expire.

We have filed for patent protection in the U.S. and other countries to cover various methods of therapeutic use of our product candidates, including the use of Molgradex for treating Nontuberculous mycobacteria ("NTM") lung infection, and the use of inhaled inorganic nitrite for treating HFpEF. The potential use and potential therapeutic benefits of systemically administered GM-CSF for systemic NTM disease have been described in case reports in the literature, and therefore the use of an inhaled form of GM-CSF may be considered to lack novelty and an inventive step, and thereby to be unpatentable. Likewise, the potential use and therapeutic benefits of inorganic nitrite, such as sodium nitrite (the API in Aironite) have been known for decades. There is substantial prior art describing the uses of inorganic nitrite in a wide range of diseases and conditions. As a result, our ability to find novel and non-obvious uses of Aironite is uncertain. Further, a patent examiner may combine numerous, disparate references in order to reject a claimed composition, formulation and/or use for obviousness. If the prior art suggests, even implicitly, the desirability of combining previously known elements, such as the use of Aironite in a particular indication, the subsequent use of Aironite in that indication may be unpatentable.

The patent prosecution process is expensive and time-consuming. We and any future licensors and licensees may not apply for or prosecute patents on certain aspects of our product candidates at a reasonable cost, in a timely fashion, or at all. We may not have the right to control the preparation, filing and prosecution of some patent applications related to our product candidates or technologies. As a result, these patents and patent applications may not be prosecuted and enforced in a manner consistent with the best interests of

us. It is also possible that we or any future licensors or licensees will fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Further, it is possible that defects of form in the preparation or filing of our patent applications may exist, or may arise in the future, such as with respect to proper priority claims, inventorship, assignment, or claim scope. If there are material defects in the form or preparation of our patents or patent applications, such patents or applications may be invalid or unenforceable. In addition, one or more parties may independently develop similar technologies or methods, duplicate our technologies or methods, or design around the patented aspects of our products, technologies or methods. Any of these circumstances could impair our ability to protect our products, if approved, in ways which may have an adverse impact on our business, financial condition and operating results.

Furthermore, the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in and outside of the United States. Such challenges may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability use our patents to stop others from using or commercializing similar or identical products or technology, or limit the duration of the patent protection of our technology and drugs. Given the amount of time required for the development, testing and regulatory review of new drug candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing drugs similar or identical to those of us once Orphan Drug and Qualified Infectious Disease Product exclusivities have expired. See the section entitled “Risks Related to Our Industry” for further description of Orphan Drug and Qualified Infectious Disease Product exclusivities.

Enforcement of intellectual property rights in certain countries outside the United States, including China in particular, has been limited or non-existent. Future enforcement of patents and proprietary rights in many other countries will likely be problematic or unpredictable. Moreover, the issuance of a patent in one country does not assure the issuance of a similar patent in another country. Claim interpretation and infringement laws vary by nation, so the extent of any patent protection is uncertain and may vary in different jurisdictions.

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

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and applications are required to be paid to the United States Patent and Trademark Office, or USPTO, and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and applications. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process and after a patent has issued. There are situations in which non-compliance can result in decreased patent term adjustment or in abandonment or lapse of the patent or patent application, leading to partial or complete loss of patent rights in the relevant jurisdiction.

Third parties may claim that our products, if approved, infringe on their proprietary rights and may challenge the approved use or uses of a product or its patent rights through litigation or administrative proceedings, and defending such actions may be costly and time consuming, divert management attention away from our business, and result in an unfavorable outcome that could have an adverse effect on our business.

Our commercial success depends on our ability and the ability of our CMOs and component suppliers to develop, manufacture, market and sell our products and product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are or may be developing products. Because patent applications can take many years to publish and issue, there currently may be pending applications, unknown to us, that may later result in issued patents that our products, product candidates or technologies infringe, or that the process of manufacturing its products or any of our respective component materials, or the component materials themselves, infringe, or that the use of our products, product candidates or technologies infringe.

We or our CMOs or component material suppliers may be exposed to, or threatened with, litigation by third parties alleging that our products, product candidates and/or technologies infringe its patents and/or other intellectual property rights, or that one or more of the processes for manufacturing its products or any of our respective component materials, or the component materials themselves, or the use of our products, product candidates or technologies, infringe its patents and/or other intellectual property rights. If a third-party patent or other intellectual property right is found to cover our products, product candidates, technologies or our uses, or any of the underlying manufacturing processes or components, we could be required to pay damages and could be unable to commercialize our products or use our technologies or methods unless we are able to obtain a license to the patent or intellectual property right. A license may not be available to us in a timely manner or on acceptable terms, or at all. In addition, during litigation, the third-party alleging infringement could obtain a preliminary injunction or other equitable remedy that could prohibit us from making, using, selling or importing our products, technologies or methods.

There generally is a substantial amount of litigation involving patent and other intellectual property rights in the industries in which we operate and the cost of such litigation may be considerable. We can provide no assurance that our product candidates or technologies will not infringe patents or rights owned by others, licenses to which might not be available to us in a timely manner or on acceptable terms, or at all. If a third party claims that we or our CMOs or component material suppliers infringe its intellectual property rights, we may face a number of issues, including, but not limited to:

- infringement and other intellectual property claims which, with or without merit, may be expensive and time consuming to litigate and may divert management's time and attention from our business;
- substantial damages for infringement, including the potential for treble damages and attorneys' fees, which we may have to pay if it is determined that the product and/or its use at issue infringes or violates the third party's rights;
- a court prohibiting us from selling or licensing the product unless the third-party licenses its intellectual property rights to us, which we may not be required to do;
- if a license is available from the third party, we may have to pay substantial royalties, fees and/or grant cross-licenses to the third party; and
- redesigning our products or processes so they do not infringe, which may not be possible or may require substantial expense and time.

No assurance can be given that patents do not exist, have not been filed, or could not be filed or issued, which contain claims covering our products, product candidates or technology or those of our CMOs or component material suppliers or the use of our products, product candidates or technologies. Because of the large number of patents issued and patent applications filed in the industries in which we operate, there is a risk that third parties may allege they have patent rights encompassing our products, product candidates or technologies, or those of our CMOs or component material suppliers, or uses of our products, product candidates or technologies.

In the future, it may be necessary for us to enforce our proprietary rights, or to determine the scope, validity and unenforceability of other parties' proprietary rights, through litigation or other dispute proceedings, which may be costly, and to the extent we are unsuccessful, adversely affect our rights. In these proceedings, a court or administrative body could determine that our claims, including those related to enforcing patent rights, are not valid or that an alleged infringer has not infringed our rights. The uncertainty resulting from the mere institution and continuation of any patent or other proprietary rights-related litigation or interference proceeding could have a material and adverse effect on our business prospects, operating results and financial condition.

Risks Related to Our Industry

We expect competition in the marketplace for our product candidates, should any of them receive regulatory approval.

AeroVanc and Molgradex have received Orphan Drug Designation from the FDA and Molgradex has received Orphan Drug Designation from the European Medicines Agency. Orphan Drug Designation will provide market exclusivity in the U.S. for 7 years and 10 years in Europe, but only if (1) AeroVanc and Molgradex receive market approval before a competitor using the same active compound for the same indication, (2) we are able produce sufficient supply to meet demand in the marketplace, and (3) another product with the same active ingredient is not deemed clinically superior. AeroVanc has also received Qualified Infectious Disease Product (QIDP) status extending market exclusivity by an additional five years in addition to any other exclusivity obtained in the United States.

In terms of Aironite, we are not aware of any pharmacologic therapy of proven benefit for patients with HFpEF. Therapies that have demonstrated efficacy in heart failure with reduced ejection fraction (HFrEF) have thus far failed to demonstrate improved outcomes in patients with HFpEF. A couple Phase 3 studies of Novartis' LCZ696 in patients with HFpEF are underway. We are aware of other therapies under investigation in earlier stage clinical studies for the treatment of HFpEF. We also are aware of a non-surgical medical device being studied for treatment of HFpEF patients in the U.S., which device has received CE Mark approval in the European Union. Should any therapy that receives approval prior to our product candidates become entrenched in the standard of care, the need for our product candidates may be diminished and/or such competing products may be difficult to displace. However, we believe that, as with HFrEF, there will be a need for a multimodal therapy approach to treating patients with HFpEF.

The industries in which we operate (biopharmaceutical, specialty pharmaceutical, biotechnology and pharmaceutical) are highly competitive and subject to rapid and significant change. Developments by others may render potential application of any of our product candidates in a particular indication obsolete or noncompetitive, even prior to completion of its development and approval for that indication. If successfully developed and approved, we expect our product candidates will face competition. We may not be able to compete successfully against organizations with competitive products, particularly large pharmaceutical companies. Many of our potential competitors have significantly greater financial, technical and human resources than us, and may be better equipped to develop, manufacture, market and distribute products. Many of these companies operate large, well-funded research, development and commercialization programs, have extensive experience in nonclinical and clinical studies, obtaining FDA and other regulatory approvals and manufacturing and marketing products, and have multiple products that have been approved or are in late-stage

development. These advantages may enable them to receive approval from the FDA or any foreign regulatory agency before us and prevent us from competing due to their orphan drug protections. Smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large pharmaceutical and biotechnology companies. Furthermore, heightened awareness on the part of academic institutions, government agencies and other public and private research organizations of the potential commercial value of their inventions have led them to actively seek to commercialize the technologies they develop, which increases competition for investment in our programs. Competitive products may be more effective, easier to dose, or more effectively marketed and sold, than theirs, which would have a material adverse effect on our ability to generate revenue.

We are subject to uncertainty relating to healthcare reform measures and reimbursement policies that, if not favorable to our products, could hinder or prevent our products' commercial success, if any of our product candidates are approved.

The unavailability or inadequacy of third-party payer coverage and reimbursement could negatively affect the market acceptance of our product candidates and the future revenues we may expect to receive from those products. The commercial success of our product candidates, if approved, will depend on the extent to which the costs of such products will be covered by third-party payers, such as government health programs, commercial insurance and other organizations. Third-party payers are increasingly challenging the prices and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. These challenges to prices may be problematic to us since our products are targeted for a small number of patients (those suffering from orphan diseases) thus requiring us to charge very high prices in order to recover development costs and achieve a profit on our revenue. If these third-party payers do not consider our products to be cost-effective compared to other therapies, we may not obtain coverage for our products after approval as a benefit under the third-party payers' plans or, even if we do, the level of coverage or payment may not be sufficient to allow us to sell our products on a profitable basis.

Significant uncertainty exists as to the reimbursement status for newly approved drug products, including coding, coverage and payment. There is no uniform policy requirement for coverage and reimbursement for drug products among third-party payers in the United States, therefore coverage and reimbursement for drug products can differ significantly from payer to payer. The coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payer separately, with no assurance that coverage and adequate payment will be applied consistently or obtained. The process for determining whether a payer will cover and how much it will reimburse a product may be separate from the process of seeking approval of the product or for setting the price of the product. Even if reimbursement is provided, market acceptance of our products may be adversely affected if the amount of payment for our products proves to be unprofitable for healthcare providers or less profitable than alternative treatments or if administrative burdens make our products less desirable to use. Third-party payer reimbursement to providers of our products, if approved, may be subject to a bundled payment that also includes the procedure of administering our products or third-party payers may require providers to perform additional patient testing to justify the use of our products. To the extent there is no separate payment for our product(s), there may be further uncertainty as to the adequacy of reimbursement amounts.

The continuing efforts of governments, private insurance companies, and other organizations to contain or reduce costs of healthcare may adversely affect:

- our ability to set an appropriate price for our products;
- the rate and scope of adoption of our products by healthcare providers;
- our ability to generate revenue or achieve or maintain profitability;
- the future revenue and profitability of our potential customers, suppliers and collaborators; and
- our access to additional capital.

Our ability to successfully commercialize our products will depend on the extent to which governmental authorities, private health insurers and other organizations establish what we believe are appropriate coverage and reimbursement for our products. The containment of healthcare costs has become a priority of federal and state governments worldwide and the prices of drug products have been a focus in this effort. For example, there have been several recent U.S. Congressional inquiries and proposed bills designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs and the new U.S. President has stated that reducing drug pricing is a priority for his administration. We expect that federal, state and local governments in the United States, as well as in other countries, will continue to consider legislation directed at lowering the total cost of healthcare. In addition, in certain foreign markets, the pricing of drug products is subject to government control and reimbursement may in some cases be unavailable or insufficient. It is uncertain whether and how future legislation, whether domestic or abroad, could affect prospects for our product candidates or what actions federal, state, or private payers for healthcare treatment and services may take in response to any such healthcare reform proposals or legislation. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures reforms may prevent or limit our ability to generate revenue, attain profitability or commercialize our product candidates, especially in light of our plans to price our product candidates at a high level.

Furthermore, we expect that healthcare reform measures that may be adopted in the future, including the possible repeal and replacement of the Affordable Care Act, which the Trump administration has stated is a priority, are unpredictable, and the potential impact on our operations and financial position is uncertain, but may result in more rigorous coverage criteria, lower reimbursement, and additional downward pressure on the price we may receive for approved product. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payers. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our products, if approved.

We face potential product liability exposure and, if successful claims are brought against us, we may incur substantial liability for a product or product candidate and may have to limit its commercialization. In the future, we anticipate that we will need to obtain additional or increased product liability insurance coverage and it is uncertain whether such increased or additional insurance coverage can be obtained on commercially reasonable terms, if at all.

Our business (in particular, the use of our product candidates in clinical studies and the sale of any products for which we obtain marketing approval) will expose us to product liability risks. Product liability claims might be brought against us by patients, healthcare providers, pharmaceutical companies or others selling or involved in the use of our products. If we cannot successfully defend ourselves against any such claims, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for our products and loss of revenue;
- impairment of our business reputation;
- delays in enrolling patients to participate in our clinical studies;
- withdrawal of clinical study participants;
- a “clinical hold,” suspension or termination of a clinical study or amendments to a study design;
- significant costs of related litigation;
- substantial monetary awards to patients or other claimants; and
- the inability to commercialize our products and product candidates.

We maintain limited product liability insurance for our clinical studies, but our insurance coverage may not reimburse us or may not be sufficient to reimburse us for all expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses.

We expect that we will expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for any of our product candidates, but we may be unable to obtain product liability insurance on commercially acceptable terms or may not be able to maintain such insurance at a reasonable cost or in sufficient amounts to protect us against potential losses. Large judgments have been awarded in class action lawsuits based on drug products that had unanticipated side effects. A successful product liability claim or series of claims brought against us, if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business.

Risks Related to our Common Stock

Our stock price is expected to continue to be volatile.

The market price of our common stock will be subject to significant fluctuations. Market prices for securities of early-stage pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. Some of the factors that may cause the market price of our common stock to fluctuate include:

- our ability to obtain regulatory approvals for our product candidates, and delays or failures to obtain such approvals;
- failure of any of our product candidates, if approved, to achieve commercial success;
- failure to maintain our existing third party license and supply agreements;
- failure by us or our licensors to prosecute, maintain, or enforce our intellectual property rights;
- changes in laws or regulations applicable to our product candidates;
- any inability to obtain adequate supply of our product candidates or the inability to do so at acceptable prices;
- adverse regulatory authority decisions;

- introduction of new products, services, or technologies by our competitors;
- failure to meet or exceed any financial and development projections that we may provide to the public;
- failure to meet or exceed the financial and development projections of the investment community;
- if securities or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinions regarding our business and stock;
- failure to obtain sufficient capital to fund our business objectives;
- sales of our common stock by us or our stockholders in the future;
- trading volume of our common stock;
- the perception of the pharmaceutical industry by the public, legislatures, regulators, and the investment community;
- announcements of significant acquisitions, strategic partnerships, joint ventures, or capital commitments by us or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters, and our ability to obtain patent protection for our technologies;
- additions or departures of key personnel;
- significant lawsuits, including patent or stockholder litigation;
- changes in the market valuations of similar companies;
- general market or macroeconomic conditions;
- announcements by commercial partners or competitors of new commercial products, clinical progress or the lack thereof, significant contracts, commercial relationships or capital commitments;
- adverse publicity relating to the cystic fibrosis market generally, including with respect to other products and potential products in such markets;
- the introduction of technological innovations or new therapies that compete with potential products of the combined organization;
- changes in the structure of health care payment systems; and
- period-to-period fluctuations in our financial results.

Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of our common stock.

In the past, following periods of volatility in the market price of our securities, stockholders have often instituted class action securities litigation against those companies. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm our profitability and reputation.

Future sales of shares by existing stockholders could cause our stock price to decline.

If our stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after the existing lock-up agreements lapse, the trading price of our common stock could decline. As of November 8, 2017, we had approximately 30.5 million shares of common stock outstanding. Substantially all of such shares of common stock may be sold in the public market; however, approximately 6.9 million of such shares remain subject to lock-up restrictions, which restrictions expire as to approximately 3.5 million shares in December 2017 and approximately 3.4 million shares in February 2018. If substantial additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock would likely decline. In connection with to the October 2017 public offering, approximately 6 million shares are subject to a ninety day “lock-up” restriction.

We will incur costs and demands upon management as a result of complying with the laws and regulations affecting public companies.

We will incur significant legal, accounting and other expenses that we did not incur as a private company prior to the Merger, including costs associated with public company reporting requirements. We will also incur costs associated with corporate governance requirements, including requirements under the Sarbanes-Oxley Act, as well as rules implemented by the SEC and Nasdaq. These rules and regulations are expected to increase our legal and financial compliance costs and to make some activities more time-consuming and costly. For example, our management team will consist of certain officers prior to the Merger whom have not previously managed and operated a public company. These officers and other personnel will need to devote substantial time to gaining expertise regarding operations as a public company and compliance with applicable laws and regulations. These rules and regulations may also make it difficult and expensive for us to obtain directors' and officers' liability insurance. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our board of directors or as executive officers, which may adversely affect investor confidence in us and cause our business or stock price to suffer.

We do not expect to pay any cash dividends in the foreseeable future.

We expect to retain any future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be stockholders' sole source of gain, if any, for the foreseeable future.

Because the Merger likely has resulted in an ownership change under Section 382 of the Code, our pre-merger net operating loss carryforwards and certain other tax attributes will be subject to limitation. The net operating loss carryforwards and certain other tax attributes may also be subject to limitations as a result of ownership changes.

If a corporation undergoes an "ownership change" within the meaning of Section 382 of the Code, the corporation's net operating loss carryforwards and certain other tax attributes arising from before the ownership change are subject to limitations on use after the ownership change. In general, an ownership change occurs if there is a cumulative change in the corporation's equity ownership by certain stockholders that exceeds fifty percentage points over a rolling three-year period. Similar rules may apply under state tax laws. The Merger likely resulted in an ownership change for us and, accordingly, our net operating loss carryforwards and certain other tax attributes with respect to the pre-closing period will be subject to limitations on use after the Merger. The Merger may also have resulted in an ownership change for us, in which case, our net operating loss carryforwards and certain other tax attributes would also be subject to limitations. Additional ownership changes in the future could result in additional limitations on our net operating loss carryforwards. Consequently, even if we achieve profitability, we may not be able to utilize a material portion of its net operating loss carryforwards and other tax attributes, which could have a material adverse effect on cash flow and results of operations.

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

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

An Exhibit Index has been attached as part of this report and is incorporated by reference.

Exhibit Index

Exhibit Number	Description
4.1	Form of Pre-Funded Warrant to Purchase Common Stock (incorporated by reference to the same numbered exhibit to the Company's Current Report on Form 8-K filed on October 25, 2017)
10.1	Settlement Agreement between Savara Inc. and Serenova A/S dated September 1, 2017
10.2	Second Addendum, dated September 20, 2017, to the Supply and License Agreement, dated December 10, 2012, between Gemabiotech SAU and Savara ApS
10.3	Form of Grant of Restricted Stock Units under the 2015 Omnibus Incentive Plan.
10.4	First Amendment, dated October 31, 2017, to Loan and Security Agreement, dated April 28, 2017, among Savara Inc., Aravas Inc. and Silicon Valley Bank.
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

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.

Company Name

Date: November 8, 2017

By: /s/ Dave Lowrance
Dave Lowrance
Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: November 8, 2017

By: /s/Robert Neville
Robert Neville
Chief Executive Officer
(Principal Executive Officer)

SETTLEMENT AGREEMENT

Between

Savara Inc.
900 S. Capital of Texas Highway
Suite 150
Austin, TX 78746

(Hereinafter “Savara”)

and

Serenova A/S
Kildeager 5A
2680 Solrød Strand

(Hereinafter “Serenova”)

1. Background

1.1 This Settlement Agreement is executed to witness the full, final and complete settlement between Savara and Serenova with respect to any and all disputes, claims or potential claims arising between them in regard to the payment of service fees and actual costs to TFS Trial Form Support International AB (“TFS”) and DOT World Co., Ltd. (“DOT”) in the amount of JPY 53,528,875 and related consumption taxes in the amount of JPY 1,992,600 (collectively, the “TFS Invoices”), related to the IMPALA study.

1.2 TFS and DOT have made claims against Savara for the TFS Invoices. According to TFS and Savara, the TFS Invoices are related to the IMPALA study for activities performed for Serenova (formerly Serendex Pharmaceuticals A/S) prior to July 15, 2016 which was the closing date under the Business Transfer Agreement and the Addendum to the Business Transfer Agreement, dated May 13, 2016 (collectively, the “BTA”) between Savara and Serenova.

1.3 According to Savara, the liabilities for the TFS Invoices were not assumed by Savara and are the sole responsibility of Serenova. In spite of this, Savara has chosen to pay the TFS Invoices as TFS and DOT threatened to cease performing under their contracts with Savara until the payments were made.

1.4 With reference to the contracts between TFS and Serenova (that were assumed by Savara) Serenova has disputed the TFS Invoices. Serenova is of the opinion that neither TFS, DOT nor Savara has a legitimate claim against Serenova in relation to the TFS Invoices.

2. Settlement

2.1 The parties hereto agree to settle the dispute described in Section 1 above as follows:

2.2 Serenova shall pay an amount of USD 336,886.82 to Savara. The amount equals to 2/3 of the TFS Payments. Payment must be made no later than 15 days after the Effective Date and shall be made by wire transfer to an account designated by Savara (the "Payment Date").

2.3 Subject to the provisions of this Section 2.3, Savara agrees to sell to Serenova up to 650,000 shares of Savara common stock (the "Savara Shares") at a price per share equal to 90% of the volume weighted average price (VWAP) of Savara common stock for the five (5) trading days ending on the date that Serenova provides written notice to Savara of its election to purchases such shares (the "Election Notice"). Serenova shall have the right, but not the obligation, to purchase the Savara Shares by delivering the Election Notice to Savara at any time during the Notice Period (as defined below). The Notice Period shall begin on the Payment Date and shall terminate ninety (90) days after the Effective Date. The sale of the Savara Shares to Serenova shall be made pursuant to an exemption from the registration requirements of applicable U.S. securities laws as determined by Savara and Serenova shall execute and deliver to Savara a purchase agreement (in a form to be provided by Savara) (the "Purchase Agreement") containing such investment representations that Savara deems necessary to comply with such securities exemption. Serenova acknowledges that the Savara Shares will not be registered under U.S. securities laws and may only be sold pursuant to an applicable exemption from such laws such as Rule 144 which requires, among other things, that the shares be held for at least six (6) months from the date of sale. The closing of the sale of the Savara Shares to Serenova shall occur upon the execution of the Purchase Agreement by Serenova and the payment of the purchase price by Serenova to Savara by wire transfer to an account designated by Savara.

3. General Provisions

3.1 Each Party's expenses and fees plus expenses of its advisors incurred in connection with the negotiation, delivery and performance of this Settlement Agreement are paid by such Party.

3.2 The content of this Settlement Agreement is confidential and shall be treated as confidential by both parties. The parties shall thus refrain from all external communication no matter in what form on the subject of this Settlement Agreement. Notwithstanding the foregoing, Savara may disclose this Settlement Agreement as required in connection with reports it files with the U.S. Securities and Exchange Commission or where such disclosure is required by other regulatory or government authority. The Effective Date of this Settlement Agreement is the last date on which a signatory hereto signs this Settlement Agreement.

3.3 The signatories signing this Settlement Agreement represent and warrant that they are duly authorised to execute this Settlement Agreement on behalf of the parties and to bind said entities to the terms, conditions, provisions, and obligations set forth in this Settlement Agreement.

4. Signatories

On behalf of **Savara**

Date: September 1st, 2017

On behalf of **Serenova**

Date: 1st of September 2017

Exhibit 10.2

SECOND ADDENDUM

Between

GEMABIOTECH SAU (“GEMA”)
Fray Justo Sarmiento 2350
Edificio 2B, Piso 5°
Olivos, Province of Buenos Aires
Argentina

and

SAVARA APS (“SAVARA”)
Slotsmarken 17, 2 tv
2970 Horsholm
Denmark

Individually referred to as a "Party" and collectively referred as the "Parties".

NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL CONVENANTS, AGREEMENTS AND REPRESENTATIONS HEREIN CONTAINED, THE PARTIES AGREE AS FOLLOWS:

1. Recitals

1.1 GEMA hereby declares that the change in its Corporate Name from GEMABIOTECH SA to GEMABIOTECH SAU does not alter GEMA's duties and responsibilities assumed in the Agreement, being able to carry out the performance of this Second Addendum.

1.2 In December 10th, 2012 GEMA and SERENDEX has entered into a Supply and License Agreement ("The Agreement") concerning Serendex supply and license of API Know How and Technology by GEMA in order to allow SERENDEX to conduct research, develop, distribute, commercialize and market Final Product based upon the API.

1.3 Due to necessities of the business, the Parties agreed to transfer the manufacture of the API from GEMA to a CMO, entering into the Addendum To The Supply And License Agreement, in February 22nd, 2016 ("First Addendum") in which the Parties set forth the terms and condition under which i) GEMA granted a license to SERENDEX to utilize the API Technology and API Specifications and to have a CMO manufacture API for

SERENDEX; ii) Serendex would acquire from GEMA the complete ownership of the MCB and the WCB.

1.4 In July 2016, SAVARA acquired the assets of SERENDEX, with SERENDEX assigning to SAVARA its contractual position regarding the Agreement and the First Addendum with GEMA. GEMA in June 27th, 2016, consented the assignment of the contract, discharging SERENDEX from any obligation under the contract arising after the assignment.

1.5 SAVARA and GEMA hereby recognize clause 8.2 of the First Addendum, dated February 22nd, 2016, called for the purchase of the MCB/WCB. Now, for economic and financial matters SAVARA and GEMA have agreed to a new payment schedule.

This Second Addendum sets forth the new terms and conditions.

2. Definitions

2.1. Unless explicitly stated otherwise the terms and definitions used in this Second Addendum shall have the same meaning set out in the Agreement.

3. Payment milestone for purchase of MCB/WCB.

3.1. SAVARA and GEMA agree that the payment terms are in the following manner:

USD 400,000	Payable on September 30th, 2017 (less already paid amounts).
USD 600,000	Payable after successful release of first GMP grade API batch produced at CMO.
USD 2,000,000	Payable after first regulatory approval of Final Product (Molgradex) in Europe or USA.
Total Amount: USD 3,000,000	

4. Technical Assistance

4.1. If SAVARA requires technical assistance from GEMA to accomplish API production within the API specifications, GEMA will charge SAVARA the amount of USD 1.000 (one thousand united states dollars) per week of work, plus all reasonable costs of travel, accommodation, meals, documentation, translation of documentation, fees, equipment, etc.

5. Miscelancous

5.1. The amendments set forth in this Second Addendum will replace the terms and conditions referred to in the Agreement and the First Addendum, but the rest of the terms and conditions of the Agreement and the First Addendum will continue to be as before and will continue to be valid and binding to the Parties. If there is a contradiction between the terms of this Second Addendum and the Agreement and First Addendum, then the terms of this Second Addendum shall prevail and be applied.

5.2. This Second Addendum constitutes the entire agreement of the Parties and supersedes all previous understanding of the agreement between the Parties, whether written or oral, in respect to the matters explicitly stipulated hereunder. Except as specifically modified and amended hereby, the Agreement shall remain in full force and effect. No provision of this Second Addendum may be modified or amended, nor shall any terms be waived, except expressly in a writing signed by both Parties.

5.3 For what is not expressly envisaged herein, the terms and conditions of the Agreement shall apply to the extent applicable.

This Second Addendum constitutes an integral part of the Agreement dated June 10th, 2012, and the First Addendum, dated February 22nd, 2016. This Second Addendum is made in two original counterparts of equal legal force, one for each Party

In witness whereof, the Parties have caused this Second Addendum to be duly executed by their fully authorized respective representatives and it shall be effective as of the date of the last signature.

Date:	9/20/2017	Date:	9/18/2017
Name:	FEDERICO MARTIN RIVERA DIEGO MARTIN DE SOUZA MORALES	Name:	Rob Neville
Title:	GENERAL MANAGER/CFO	Title:	CEO

/s/ Federico Martin Rivera

Signature
Federico Martin Rivera
General Manager

Diego Martin De Souza Morales
CFO

/s/ Robert Neville

Robert Neville
I am approving this document
2017.09.18 18:12:40
05’00’

Signature

Exhibit 10.3

SAVARA INC.

NOTICE OF GRANT OF RESTRICTED STOCK UNITS

The Awardee has been granted an award of Restricted Stock Units (the *"**Award**"*) pursuant to the Savara Inc. 2015 Omnibus Incentive Plan (the *"**Plan**"*), each of which represents the right to receive on the applicable Settlement Date one (1) Share of common stock of Savara Inc. (the *"**Company**"*), as follows:

Awardee:	_____
Grant Date:	[DATE]
Number of Restricted Stock Units:	_____, subject to adjustment as provided by the Restricted Stock Units Agreement.
Settlement Date:	For each Restricted Stock Unit, except as otherwise provided by the Restricted Stock Units Agreement, the first date that is administratively practicable following the date on which such unit becomes a Vested Unit (if any) in accordance with the vesting schedule set forth below; but no later than March 15th of the calendar year following the calendar year in which the Restricted Stock Units become Vested Units.

Vested Units:

Except as provided by the Restricted Stock Units Agreement and provided that the Awardee's service has not terminated, the Number of Restricted Stock Units shall become Vested Units as follows:

[Insert Vesting Schedule]

Notwithstanding the foregoing, in the event Awardee ceases providing Services to the Company due to the Company's, or a successor of the Company's termination of Awardee's service other than for Cause or Awardee's death or disability or due to Awardee's resignation for Good Reason, in either case within 24 months following a Change in Control, the Restricted Stock Units shall become fully vested and free from restrictions.

For the purposes of this Award, "Cause" shall mean the commission of any act of fraud, embezzlement or dishonesty by Awardee, any unauthorized use or disclosure
by such person of confidential information or trade secrets of the Company or an Affiliate or a successor company (or a subsidiary or parent thereof), or any other intentional misconduct by such person adversely affecting the business affairs of the Company or an Affiliate or a successor company (or a subsidiary or parent thereof) in a material manner.

For purposes of this Award, "Good Reason" shall mean, in each case without Awardee's explicit written consent, which Awardee may withhold or provide in Awardee's sole and absolute discretion, (i) a reduction by the Company or an Affiliate or a successor company (or a subsidiary or parent thereof) of more than 10% in Awardee's rate of annual base salary as in effect immediately prior to such Change in Control; (ii) a reduction by the Company or an Affiliate or a successor company (or a subsidiary or parent thereof) of more than 10% of Awardee's individual annual target or bonus opportunity, except under circumstances where the Company or the Affiliate or the successor company (or a subsidiary or parent thereof) implement changes to the bonus structure of similarly situated employees, including but not limited to changes to the bonus structure designed to integrate the Company's or the Affiliate's personnel with other personnel of the successor company (or a subsidiary or parent thereof); (iii) a change in position that materially reduces Awardee's level of responsibility, including the level of person to whom Awardee reports; or (iv) a relocation following the Change in Control of Grantee's primary office location (A) by more than 50 miles or (B) that would reasonably be expected to increase Awardee's commute such that Awardee's total (i.e., round-trip) commute would reasonably be expected to increase by more than one hour per day; provided, however, that no such occurrence shall constitute Good Reason unless (x) the Awardee gives the Company a written notice of termination for Good Reason not more than 30 days after the initial existence of the condition, (y) the grounds for termination (if susceptible to correction) are not corrected by the Company within 30 days of its receipt of such notice, and (z) the Awardee's termination of employment occurs within 90 days following the Company's receipt of such notice.

By their signatures below or by electronic acceptance or authentication in a form authorized by the Company, the Company and the Awardee agree that the Award is governed by this Grant Notice and by the provisions of the Plan and the Restricted Stock Units Agreement, both of which are made a part of this document. The Awardee acknowledges that copies of the Plan, Restricted Stock Units Agreement, and the prospectus for the Plan have been made available to the Awardee.

Thus, the Awardee shall not be entitled to this Award, which shall not be treated as having been granted, until this Agreement is executed. The Awardee represents that the Awardee has read and is familiar with the provisions of the Plan and Restricted Stock Units Agreement, and hereby accepts the Award subject to all of their terms and conditions.

SAVARA INC.

By: _____

Its: _____

Address: Savara Inc.
900 S. Capital of Texas Highway, Suite 150
Austin, TX 78746

AWARDEE:

Signature: _____

Date: _____

Address: _____

_____

ATTACHMENTS: Restricted Stock Units Agreement; 2015 Omnibus Incentive Plan, as amended to the Grant Date

SAVARA INC.
RESTRICTED STOCK UNITS AGREEMENT

Savara Inc. ("**Savara**" or the "**Company**") has granted to the Awardee named in the *Notice of Grant of Restricted Stock Units* (the "***Grant Notice***") to which this Restricted Stock Units Agreement (the "***Agreement***") is attached an Award consisting of Restricted Stock Units (the "***Units***") subject to the terms and conditions set forth in the Grant Notice and this Agreement. The Award has been granted pursuant to and shall in all respects be subject to the terms conditions of the Savara Inc. 2015 Omnibus Incentive Plan (the "***Plan***"), as amended to the Grant Date attached as Exhibit A, the provisions of which are incorporated herein by reference. By signing the Grant Notice, the Awardee: (a) acknowledges receipt of and represents that the Awardee has read and is familiar with the Grant Notice, this Agreement, the Plan and a prospectus for the Plan prepared in connection with the registration with the Securities and Exchange Commission of the shares issuable pursuant to the Award (the "***Plan Prospectus***"), (b) accepts the Award subject to all of the terms and conditions of the Grant Notice, this Agreement and the Plan and (c) agrees to accept as binding, conclusive and final all decisions or interpretations of the Company's Board of Directors or its delegatee(s) (collectively, the "***Board***") upon any questions arising under the Grant Notice, this Agreement or the Plan.

1. **DEFINITIONS AND CONSTRUCTION.**

1.1 **Definitions.** Unless otherwise defined herein, capitalized terms shall have the meanings assigned in the Grant Notice or the Plan.

1.2 **Construction.** Captions and titles contained herein are for convenience only and shall not affect the meaning or interpretation of any provision of this Agreement. Except when otherwise indicated by the context, the singular shall include the plural and the plural shall include the singular. Use of the term "or" is not intended to be exclusive, unless the context clearly requires otherwise.

2. **ADMINISTRATION.**

All questions of interpretation concerning the Grant Notice, this Agreement and the Plan shall be determined by the Board. All such determinations shall be final and binding upon all persons having an interest in the Award as provided by the Plan. Any Officer shall have the authority to act on behalf of the Company with respect to any matter, right, obligation, or election which is the responsibility of or which is allocated to the Company herein, provided the Officer has apparent or actual authority with respect to such matter, right, obligation, or election.

3. **THE AWARD.**

3.1 **Grant of Units.** On the Grant Date, the Awardee shall acquire, subject to the provisions of this Agreement, the Number of Restricted Stock Units set forth in the Grant Notice, subject to adjustment as provided in Section 9 of this Agreement. Each Unit represents a right to receive on a date determined in accordance with the Grant Notice and this Agreement one (1) Share.

3.2 **No Monetary Payment Required.** The Awardee is not required to make any monetary payment (other than applicable tax withholding, if any) as a condition to receiving the Units or Shares issued upon settlement of the Units, the consideration for which shall be past services actually rendered and/or future services to be rendered to the Company or an affiliate. Notwithstanding the foregoing, if required by applicable state corporate law, the Awardee shall furnish consideration in the form of cash or past services rendered having a value not less than the par value of the Shares issued upon settlement of the Units.

4. **VESTING OF UNITS**.

The Units shall vest and become Vested Units as provided in the Grant Notice.

5. **COMPANY REACQUISITION RIGHT.**

5.1 **Grant of Company Reacquisition Right.** Except to the extent otherwise provided in an employment agreement between the Company or an Affiliate and the Awardee, the Plan or this Agreement, in the event that the Awardee's Service terminates for any reason or no reason, with or without cause, the Awardee shall forfeit and the Company shall automatically reacquire all Units which are not, as of the time of such termination, Vested Units (***"Unvested Units"***), and the Awardee shall not be entitled to any payment therefor (the ***"Company Reacquisition Right"***).

5.2 **Dividends, Distributions and Adjustments.** Upon a dividend or distribution to the stockholders of the Company paid in shares of Stock or other property, or any other adjustment upon a change in the capital structure of the Company as described in Section 10.2 of the Plan, any and all new, substituted or additional securities or other property (other than regular, periodic dividends paid on Shares pursuant to the Company's dividend policy) to which the Awardee is entitled by reason of the Awardee's ownership of Unvested Units shall be immediately subject to the Company Reacquisition Right and included in the terms "Units" and "Unvested Units" for all purposes of the Company Reacquisition Right with the same force and effect as the Unvested Units immediately prior to the dividend, distribution or adjustment, as the case may be. For purposes of determining the number of Vested Units following a dividend, distribution or adjustment, credited Service shall include all service with the Company or an Affiliate at the time the service is rendered.

6. **SETTLEMENT OF THE AWARD.**

6.1 **Issuance of Shares.** Subject to the provisions of Section 6.3 of this Agreement, the Company shall issue to the Awardee on the settlement date with respect to each Vested Unit to be settled on such date one (1) Share. Shares issued in settlement of Units shall not be subject to any restriction on transfer other than any such restriction as may be required pursuant to Section 6.3 of this Agreement, Section 7 of this Agreement, other applicable laws, insider trading policies or any agreement between the Awardee and the Company applicable to the Shares (collectively, "***Share Sale Restrictions***").

6.2 **Beneficial Ownership of Shares; Certificate Registration.** The Awardee hereby authorizes the Company, in its sole discretion, to deposit for the benefit of the Awardee with the broker designated by the Company with which the Awardee has an account, any or all Shares acquired by the Awardee pursuant to the settlement of the Award. Except as provided by the preceding sentence, a certificate for the Shares as to which the Award is settled shall be registered in the name of the Awardee, or, if applicable, in the names of the heirs of the Awardee.

6.3 **Restrictions on Grant of the Award and Issuance of Shares.** The grant of the Award and issuance of Shares upon settlement of the Award shall be subject to compliance with all applicable requirements of federal, state or foreign law with respect to such securities. No Shares may be issued hereunder if the issuance of such Shares would constitute a violation of any applicable federal, state or foreign securities laws or other law or regulations or the requirements of any stock exchange or market system upon which the Shares may then be listed. The inability of the Company to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Company's legal counsel to be necessary to the lawful issuance of any shares subject to the Award shall relieve the Company of any liability in respect of the failure to issue such Shares as to which such requisite authority shall not have been obtained. As a condition to the settlement of the Award, the Company may require the Awardee to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any applicable law or regulation and to make any representation or warranty with respect thereto as may be requested by the Company.

6.4 **Fractional Shares.** The Company shall not be required to issue fractional Shares upon the settlement of the Award.

6.5 **Section 409A**. It is the intent of this Agreement that it and all payments and benefits hereunder be exempt from, or comply with, the requirements of Section 409A so that none of the Restricted Stock Units provided under this Agreements or Shares issuable thereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to be so exempt or so comply. Each payment payable under this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). However, in no event with the Company reimburse Awardee, or be otherwise responsible for, any taxes or costs that may be imposed on Awardee as a result of Section 409A. For purposes of this Agreement "Section 409A" means Section 409A of the Code and any final Treasury Regulations and Internal Revenue Service guidance thereunder, as each may be amended from time to time.

7. **TAX WITHHOLDING.**

7.1 **In General.** At the time the Grant Notice is executed, or at any time thereafter as requested by the Company, the Awardee hereby authorizes withholding from payroll and any other amounts payable to the Awardee, and otherwise agrees to make adequate provision for, any sums required to satisfy the federal, state, local and foreign tax (including any social insurance) withholding obligations of the Company and its affiliates, if any, which arise in connection with the Award, the vesting of Units or the issuance of Shares in settlement thereof. The Company shall have no obligation to deliver shares of Stock until such tax withholding obligations of the Company have been satisfied by the Awardee.

7.2 **Assignment of Sale Proceeds; Payment of Tax Withholding by Check.** Subject to compliance with applicable law and any Share Sale Restrictions, the Company may permit the Awardee to satisfy the tax withholding obligations in accordance with procedures established by the Company providing for either (i) delivery by the Awardee to the Company or a broker approved by the Company of properly executed instructions, in a form approved by the Company, providing for the assignment to the Company of the proceeds of a sale with respect to some or all of the Shares being acquired upon settlement of Units, or (ii) payment by check.

7.3 **Withholding in Shares.** The Company may require, or permit, the Awardee to satisfy all or any portion of the Company's or Affiliate's tax withholding obligations by deducting from the Shares otherwise deliverable to the Awardee in settlement of the Award a number of whole Shares having a fair market value, as determined by the Company as of the date on which the tax withholding obligations arise, not in excess of the amount of such tax withholding obligations determined by the applicable minimum statutory withholding rates.

8. **DEATH OF AWARDEE.**

Any distribution or delivery to be made to Awardee under this Agreement will, if Awardee is then deceased, be made to Awardee's designated beneficiary, or if no beneficiary survives Awardee, to Awardee's estate. Any such transferee must furnish the Company with (i) written notice of his or her status as transferee and (ii) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

9. **ADJUSTMENTS FOR CHANGES IN CAPITAL STRUCTURE.**

Subject to any required action by the stockholders of the Company and the requirements of Section 409A to the extent applicable, in the event of any change in the Shares effected without receipt of consideration by the Company, whether through merger, consolidation, reorganization, reincorporation, recapitalization, reclassification, stock dividend, stock split, reverse stock split, split-up, split-off, spin-off, combination of shares, exchange of shares, or similar change in the capital structure of the Company, or in the event of payment of a dividend or distribution to the stockholders of the Company in a form other than Shares (excepting normal cash dividends) that has a material effect on the Fair Market Value of Shares, appropriate and proportionate adjustments shall be made in the number of Units subject to the Award and/or the number and kind of shares to be issued in settlement of the Award, in order to prevent dilution or enlargement of the Awardee's rights under the Award. For purposes of the foregoing, conversion of any convertible securities of the Company shall not be treated as "effected without receipt of consideration by the Company." Any fractional Share resulting from an adjustment pursuant to this Section shall be rounded down to the nearest whole number. Such adjustments shall be determined by the Board, and its determination shall be final, binding and conclusive.

10. **RIGHTS AS A STOCKHOLDER OR EMPLOYEE.**

The Awardee shall have no rights as a stockholder with respect to any Shares which may be issued in settlement of this Award until the date of the issuance of a certificate for such Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). No adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date such certificate is issued, except as provided in Section 9 of this Agreement. If the Awardee is an Employee, the Awardee understands and acknowledges that, except as otherwise provided in a separate, written employment agreement between the Company or an Affiliate and the Awardee, the Awardee's employment is "at will" and is for no specified term. Nothing in this Agreement shall confer upon the Awardee any right to continue in the service of the Company or an Affiliate or interfere in any way with any right to terminate the Awardee's service at any time.

11. **LEGENDS.**

The Company may at any time place legends referencing any applicable federal, state or foreign securities law restrictions on all certificates representing Shares issued pursuant to this Agreement. The Awardee shall, at the request of the Company, promptly present to the Company any and all certificates representing Shares acquired pursuant to this Award in the possession of the Awardee in order to carry out the provisions of this Section.

12. **MISCELLANEOUS PROVISIONS.**

12.1 **Termination or Amendment.** The Board may terminate or amend the Plan or this Agreement at any time; provided, however, that except as provided in Section 11 of the Plan in connection with a Change in Control, no such termination or amendment may adversely affect the Awardee's rights under this Agreement without the consent of the Awardee unless such termination or amendment is necessary to comply with applicable law or government regulation, including, but not limited to, Section 409A. No amendment or addition to this Agreement shall be effective unless in writing.

12.2 **Nontransferability of the Award.** Prior to the issuance of Shares on the applicable Settlement Date, neither this Award nor any Units subject to this Award shall be subject in any manner to anticipation, alienation, sale, exchange, transfer, assignment, pledge, encumbrance, or garnishment by creditors of the Awardee or the Awardee's beneficiary, except transfer by will or by the laws of descent and distribution. All rights with respect to the Award shall be exercisable during the Awardee's lifetime only by the Awardee or the Awardee's guardian or legal representative.

12.3 **Further Instruments.** The parties hereto agree to execute such further instruments and to take such further action as may reasonably be necessary to carry out the intent of this Agreement.

12.4 **Binding Effect.** This Agreement shall inure to the benefit of the successors and assigns of the Company and, subject to the restrictions on transfer set forth herein, be binding upon the Awardee and the Awardee's heirs, executors, administrators, successors and assigns.

12.5 **Delivery of Documents and Notices.** Any document relating to participation in the Plan or any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given (except to the extent that this Agreement provides for effectiveness only upon actual receipt of such notice) upon personal delivery, electronic delivery at the e-mail address, if any, provided for the Awardee by the Company or any Affiliate, or upon deposit in the U.S. Post Office or foreign postal service, by registered or certified mail, or with a nationally recognized overnight courier service, with postage and fees prepaid, addressed to the other party at the address shown below that party's signature to the Grant Notice or at such other address as such party may designate in writing from time to time to the other party.

(a) **Description of Electronic Delivery.** The Plan documents, which may include but do not necessarily include: the Plan, the Grant Notice, this Agreement, the Plan Prospectus, and any reports of the Company provided generally to the Company's stockholders, may be delivered to the Awardee electronically. In addition, the Awardee may deliver electronically the Grant Notice to the Company or to such third party involved in administering the Plan as the Company may designate from time to time. Such means of electronic delivery may include but do not necessarily include the delivery of a link to a Company intranet or the Internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other means of electronic delivery specified by the Company.

(b) **Consent to Electronic Delivery.** The Awardee acknowledges that the Awardee has read Section 12.5(a) of this Agreement and consents to the electronic delivery of the Plan documents and Grant Notice, as described in Section 12.5(a). The Awardee acknowledges that he or she may receive from the Company a paper copy of any documents delivered electronically at no cost to the Awardee by contacting the Company by telephone or in writing. The Awardee further acknowledges that the Awardee will be provided with a paper copy of any documents if the attempted electronic delivery of such documents fails. Similarly, the Awardee understands that the Awardee must provide the Company or any designated third party administrator with a paper copy of any documents if the attempted electronic delivery of such documents fails. The Awardee may revoke his or her consent to the electronic delivery of documents described in Section 12.5(a) or may change the electronic mail address to which such documents are to be delivered (if Awardee has provided an electronic mail address) at any time by notifying the Company of such revoked consent or revised e-mail address by telephone, postal service or electronic mail. Finally, the Awardee understands that he or she is not required to consent to electronic delivery of documents described in Section 12.5(a).

12.6 **Integrated Agreement.** The Grant Notice, this Agreement and the Plan, together with any employment, service or other agreement between the Awardee and the Company or an Affiliate referring to the Award, shall constitute the entire understanding and agreement of the Awardee and the Company or an Affiliate with respect to the subject matter contained herein or therein and supersede any prior agreements, understandings, restrictions, representations, or warranties among the Awardee and the Company or an Affiliate with respect to such subject matter other than those as set forth or provided for herein or therein. To the extent contemplated herein or therein, the provisions of the Grant Notice, this Agreement and the Plan shall survive any settlement of the Award and shall remain in full force and effect.

12.7 **Applicable Law.** This Agreement shall be governed by the laws of the State of California as such laws are applied to agreements between California residents entered into and to be performed entirely within the State of California.

12.8 **Counterparts.** The Grant Notice may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Exhibit 10.4

FIRST AMENDMENT TO
LOAN AND SECURITY AGREEMENT

THIS **FIRST AMENDMENT** to Loan and Security Agreement (this "**Amendment**") is entered into this 31st day of October, 2017, by and among **SILICON VALLEY BANK**, a California corporation ("**Bank**") and **SAVARA INC. f/k/a MAST THERAPEUTICS, INC.**, a Delaware corporation ("**Parent**"), and **ARAVAS INC. f/k/a SAVARA INC.** a Delaware corporation (each a "**Co-Borrower**" and collectively "**Co-Borrowers**").

RECITALS

A. Bank and Co-Borrowers have entered into that certain Loan and Security Agreement dated as of April 28, 2017 (as the same may from time to time be further amended, modified, supplemented or restated, the "**Loan Agreement**").

B. Bank has extended credit to Co-Borrowers for the purposes permitted in the Loan Agreement.

C. Co-Borrowers have requested that Bank amend the Loan Agreement to (i) permit transactions contemplated by the LifeRaft Asset Purchase Agreement (as defined below), and (ii) make certain other revisions to the Loan Agreement as more fully set forth herein.

D. Bank has agreed to so amend certain provisions of the Loan Agreement, but only to the extent, in accordance with the terms, subject to the conditions and in reliance upon the representations and warranties set forth below.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:

1. Definitions. Capitalized terms used but not defined in this Amendment shall have the meanings given to them in the Loan Agreement.

2. Amendments to Loan Agreement.

2.1 Section 7.1 (Dispositions). New subsection (k) is hereby added to the end of Section 7.1 of the Loan Agreement to read as follows:

"and (k) made pursuant to the LifeRaft Asset Purchase Agreement."

2.2 Section 13 (Definitions). The following term and its respective definition is hereby added in its entirety in Section 13.1 of the Loan Agreement, as appropriate, as follows:

"**LifeRaft Asset Purchase Agreement**" means that certain Asset Purchase Agreement by and among Co-Borrowers and LifeRaft Biosciences Inc., a South Carolina corporation, in substantially the form attached hereto as Annex I.

2.3 Exhibit A of the Loan Agreement is hereby replaced with Exhibit A attached hereto.

3. Notice. Pursuant to Section 7.2 of the Loan Agreement, the Co-Borrowers hereby deliver notice of their intent to sign a new office lease for a new office location on or about November 2017.

4. Limitation of Amendments.

4.1 The amendments set forth in **Section 2**, above, are effective for the purposes set forth herein and shall be limited precisely as written and shall not be deemed to (a) be a consent to any amendment, waiver or modification of any other term or condition of any Loan Document, or (b) otherwise prejudice any right or remedy which Bank may now have or may have in the future under or in connection with any Loan Document.

4.2 This Amendment shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreements set forth in the Loan Documents, except as herein amended, are hereby ratified and confirmed and shall remain in full force and effect.

5. Representations and Warranties. To induce Bank to enter into this Amendment, each Co-Borrower hereby represents and warrants to Bank as follows:

5.1 Immediately after giving effect to this Amendment (a) the representations and warranties contained in the Loan Documents are true, accurate and complete in all material respects as of the date hereof (except to the extent such representations and warranties relate to an earlier date, in which case they are true and correct as of such date), and (b) no Event of Default has occurred and is continuing;

5.2 Co-Borrower has the power and authority to execute and deliver this Amendment and to perform its obligations under the Loan Agreement, as amended by this Amendment;

5.3 The organizational documents of Co-Borrower delivered to Bank on April 28, 2017 remain true, accurate and complete and have not been amended, supplemented or restated and are and continue to be in full force and effect;

5.4 The execution and delivery by Co-Borrower of this Amendment and the performance by Co-Borrower of its obligations under the Loan Agreement, as amended by this Amendment, have been duly authorized;

5.5 The execution and delivery by Co-Borrower of this Amendment and the performance by Co-Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not and will not contravene (a) any law or regulation binding on or affecting Co-Borrower, (b) any contractual restriction with a Person binding on Co-Borrower, (c) any order, judgment or decree of any court or other governmental or public body or authority, or subdivision thereof, binding on Co-Borrower, or (d) the organizational documents of Co-Borrower;

5.6 The execution and delivery by Co-Borrower of this Amendment and the performance by Co-Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not require any order, consent, approval, license, authorization or validation of, or filing, recording or registration with, or exemption by any governmental or public body or authority, or subdivision thereof, binding on either Co-Borrower, except as already has been obtained or made; and

5.7 This Amendment has been duly executed and delivered by Co-Borrower and is the binding obligation of Co-Borrower, enforceable against Co-Borrower in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, liquidation, moratorium or other similar laws of general application and equitable principles relating to or affecting creditors' rights.

6. Counterparts. This Amendment may be executed in any number of counterparts and all of such counterparts taken together shall be deemed to constitute one and the same instrument.

7. Effectiveness. This Amendment shall be deemed effective upon the due execution and delivery to Bank of this Amendment by each party hereto.

8. Covenant. As a covenant to this Amendment, no later than thirty (30) days after Co-Borrowers move into the leased location at 6836 Bee Caves Road, the Overlook at Rob Roy, Building III, Suite 200, Austin, TX 78746, Co-Borrowers shall deliver to Bank, on a best efforts basis, a landlord's consent in favor of Bank for such location by the respective landlord thereof, together with the duly executed signatures thereto.

[*Balance of Page Intentionally Left Blank*]
[*Signature page follows.*]

In Witness Whereof, the parties hereof have caused this Amendment to be duly executed and delivered as of the date first written above.

BANK

SILICON VALLEY BANK

By: /s/ Anthony Flores

Name: Anthony Flores

Title: Director

CO-BORROWER

SAVARA INC.

By: /s/ David L. Lowrance

Name: David L. Lowrance

Title: CFO

CO-BORROWER

ARAVA INC.

By: /s/ David L. Lowrance

Name: David L. Lowrance

Title: CFO

EXHIBIT A

COLLATERAL DESCRIPTION

The Collateral consists of all of Co-Borrowers' right, title and interest in and to the following personal property:

All goods, Accounts (including health-care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles (except as provided below), commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and

all Co-Borrowers' Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

Notwithstanding the foregoing, the Collateral does not include any of the following: (a) Intellectual Property; provided, however, the Collateral shall include all Accounts and all proceeds of Intellectual Property; provided that if a judicial authority (including a U.S. Bankruptcy Court) would hold that a security interest in the underlying Intellectual Property is necessary to have a security interest in such Accounts and such property that are proceeds of Intellectual Property, then the Collateral shall automatically, and effective as of the Effective Date, include the Intellectual Property to the extent necessary to permit perfection of Bank's security interest in such Accounts and such other property of a Co-Borrower that are proceeds of the Intellectual Property; (b) more than 65% of the presently existing and hereafter arising issued and outstanding shares of capital stock owned by a Co-Borrower of any Foreign Subsidiary or FSHCO which shares entitle the holder thereof to vote for directors or any other matter; (c) any intent-to-use trademarks at all times prior to the first use thereof, whether by the actual use thereof in commerce, the recording of a statement of use with the United States Patent and Trademark Office or otherwise; (d) any interest of a Co-Borrower as a lessee or sublessee under a real property lease; (e) rights held under a license that are not assignable by their terms without the consent of the licensor thereof (but only to the extent such restriction on assignment is enforceable under applicable law); (f) any interest of a Co-Borrower as a lessee under an Equipment lease if a Co-Borrower is prohibited by the terms of such lease from granting a security interest in such lease or under which such an assignment or Lien would cause a default to occur under such lease; provided, however, that upon termination of such prohibition, such interest shall immediately become Collateral without any action by such Co-Borrower or Bank; (g) any Purchased Assets (as defined in the LifeRaft Asset Purchase Agreement).

Annex I

LifeRaft Asset Purchase Agreement

[to be attached]

ASSET PURCHASE AGREEMENT

This Asset Purchase Agreement (this "**Agreement**") is entered into and made effective as of October ___, 2017 (the "**Effective Date**"), by and between **LifeRaft Biosciences Inc.**, a South Carolina corporation ("**Buyer**"), and **Savara Inc.**, a Delaware corporation ("**Seller**").

WHEREAS, Seller by virtue of its merger with Mast Therapeutics, Inc. ("**Mast Therapeutics**") on or about April 27, 2017 (the "**Seller Acquisition Date**") holds certain rights to a discontinued vepoloxamer product candidate;

WHEREAS, Mast Therapeutics in September 2016 made the strategic decision to discontinue clinical development of vepoloxamer and to wind down all of the clinical studies of that asset after its Phase 3 clinical development for treatment of vaso-occlusive crisis in patients with sickle cell disease and failed to achieve its primary efficacy endpoint;

WHEREAS, Mast Therapeutics in turn discontinued such clinical development and wound down all such clinical studies prior to its merger with Seller;

WHEREAS, Seller now desires to sell, transfer and assign to Buyer, and Buyer desires to acquire and assume from Seller, certain assets related to the vepoloxamer product candidate as set forth in Section 2.3 below (the "**Purchased Assets**"), subject to the terms and conditions set forth in this Agreement;

NOW, THEREFORE, the parties hereto hereby agree as follows:

ARTICLE I

DEFINITIONS

1.1 Definitions. When used in this Agreement and not otherwise defined in this Agreement, the following terms will have the meanings specified in this Section 1.1 and will be applicable equally to both the singular and plural forms.

1.1.1 "**Affiliate**" means an entity that directly or indirectly controls, is controlled by, or is under common control by Buyer. Control means direct or indirect ownership of, or other beneficial interest in, fifty percent (50%) or more of the voting stock, other voting interest, or income of a corporation or other entity, the power to direct or cause the direction of the management and policies of the other entity, or the power to elect or appoint fifty percent (50%) or more of the members of the governing body of the other entity. An entity shall only be deemed an Affiliate for the duration of such control.

1.1.2 "**Net Sales**" means the gross amounts received by Buyer or an Affiliate for the sale of a Therapeutic Product (as defined in Section 1.1.11 below) or a Storage Product (as defined in Section 1.1.10 below), as applicable, to a Third Party (as defined in Section 1.1.12 below), after deduction of all the following customary and normal amounts (to the extent applicable to such sales):

(a) trade, case and quantity credits, discounts, refunds or rebates, including without limitation rebates accrued, incurred or paid to Federal Medicare and State Medicaid and any other price reductions required by a United States or foreign governmental agency;

(b) allowances or credits actually granted for returns, including without limitation amounts received for sales that become the subject of a subsequent temporary or partial recall by a regulatory agency for safety or efficacy reasons outside the control of Buyer or an Affiliate, as applicable, and retroactive price reductions (including Medicaid, managed care and similar types of rebates) to the extent that each is included in Buyer's or an Affiliate's billings, *provided*, *however*, that amounts set aside for temporary recalls are added back to Net Sales in the event the temporary recall is cancelled;

(c) cost of freight, postage, and freight insurance, if actually paid by and to the extent that each is included in Buyer's or an Affiliate's billings;

(d) taxes, value added taxes, excise taxes, and customs duties directly imposed and with reference to particular sales, but specifically excluding taxes based on net income of Buyer;

(e) sales commissions paid to non-employees of Buyer or an Affiliate; and

(f) cost of export licenses and any taxes, fees or other charges associated with the exportation or importation of such Therapeutic Product or such Storage Product, as applicable;

provided that all of the foregoing deductions are calculated in accordance with generally accepted accounting principles (GAAP) consistently applied.

For purposes of this definition, (x) a sale or transfer to an Affiliate for re-sale by such Affiliate will not be considered a sale, but the resale by such Affiliate shall be considered a sale; and (y) any amounts received by Buyer or an Affiliate in exchange for a Therapeutic Product or a Storage Product transferred or provided to any person or entity for use in testing, clinical trials, or as marketing samples to develop or promote such products, will not be included in the definition of Net Sales.

If a Therapeutic Product or a Storage Product includes one or more components ("**Other Components**") not subject to a Valid Claim (as defined in Section 1.1.13 below) and Other Components contribute significant and material value to such Therapeutic Product or such Storage Product (such a Therapeutic Product or a Storage Product, a "**Combination Product**"), the Net Sales of such Combination Product shall be determined as follows:

1. Buyer will determine the actual Net Sales of such Combination Product (using the above provisions of this Section 1.1.2); then

2. Such amount shall be multiplied by the fraction "A/(A+B)", where "A" is the price of the applicable Therapeutic Product or Storage Product if sold separately, and "B" is the aggregate price of all the Other Components, if sold separately; *but*

3. If all the Other Components are not sold separately, Buyer shall determine actual Net Sales of such Combination Product (using the above provisions of this Section 1.1.2) and such amount shall be multiplied by the fraction "A/C", where "A" is the price of the applicable Therapeutic Product or Storage Product if sold separately, and "C" is the price of such Combination Product; *provided*, *however*, that the maximum value of the fraction "A/C" may not exceed one (1).

4. If neither the applicable Therapeutic Product or Storage Product nor all the Other Components are sold separately, the adjustment to Net Sales will be determined by Buyer in good faith to reasonably reflect the fair value of the contribution of the components of the applicable Therapeutic Product or Storage Product subject to Valid Claims to the total market value of such Combination Product.

1.1.3 "**Poloxamer Assets**" means any ethoxylated surface active agents acquired by Mast Therapeutics (then known as "Adventrx Pharmaceuticals") from SynthRx Inc., or developed by Mast Therapeutics, including but not limited to (i) poloxamer 188, (ii) vepoloxamer or (iii) purified poloxamer 188.

1.1.4 "**Product**" means a product containing Vepoloxamer (as defined in Section 1.1.14 below) as an active ingredient where the manufacture, use, sale, offering for sale or importation of which, in the absence of the purchase (and assignment) contemplated by this Agreement, would infringe a Valid Claim.

1.1.5 "**Program**" means all of the activities directed to the development, manufacture and commercialization of the Poloxamer Assets prior to the Seller Acquisition Date.

1.1.6 "**Program IP**" means all intellectual property rights and other proprietary rights related to the Poloxamer Assets (other than Program Patents) owned or controlled by Seller.

1.1.7 "**Program Know-How**" means information not included in the Program Patents, which information is: (a) Controlled by Seller immediately prior to the Closing; and (b) directed to the development, manufacture (including synthesis, characterization, control, formulation, storage, finishing or packaging), use, commercialization, offer for sale, sale or import of any Poloxamer Assets.

1.1.8 "**Program Patents**" means:

(a) the patents and patent applications listed on **Exhibit A**;

(b) any and all divisionals, continuations and continuations-in-part of the patents and patent applications referenced in the preceding subsection (a);

(c) the foreign patent applications associated with the patent applications referenced in the preceding subsections (a) and (b);

(d) the patents issued or issuing from the patent applications referenced in the preceding subsections (a) through (c); and

(e) reissues, reexaminations, restorations (including supplemental protection certificates) and extensions of any patent or patent application referenced in the preceding subsections (a) through (d).

1.1.9 "**Program Technology**" means the Program IP, Program Know-How and Program Patents.

1.1.10 "**Storage Product**" means a Product that is approved for marketing by the U.S. Food and Drug Administration (or foreign equivalent) for use in the *ex vivo* storage of cells intended for future transplant or transfusion into patients.

1.1.11 "**Therapeutic Product**" means a Product that is approved for marketing by the U.S. Food and Drug Administration (or foreign equivalent) for direct administration to a patient for the treatment of a medical condition.

1.1.12 "**Third Party**" means any entity or person other than Buyer or an Affiliate.

1.1.13 "**Valid Claim**" means any claim of United States Patent No. 9,403,941 (or any foreign patent that claims priority thereto) that has not lapsed, been canceled or become abandoned and has not been declared invalid or unenforceable by an unreversed decision or judgment of a court or other appropriate body of competent jurisdiction, and which has not been admitted to be invalid or unenforceable through reissue, disclaimer or otherwise.

1.1.14 "**Vepoloxamer**" means the purified poloxamer 188 described in United States investigational new drug (IND) # 31,246 and claimed in United States Patent No. 9,403,941, and US IND # 121,764.

1.1.15 **Additional definitions**:

"**Action**" has the meaning set forth in Section 3.1.5 below.

"**Assumed Liabilities**" has the meaning set forth in Section 2.2 below.

"**Cash Payment**" has the meaning set forth in Section 2.7 below.

"**Closing**" has the meaning set forth in Section 2.10 below.

"**Closing Date**" has the meaning set forth in Section 2.10 below.

"**Contingent Payment**" has the meaning set forth in Section 2.7 below.

"**Encumbrances**" has the meaning set forth in Section 2.1 below.

"**Excluded Assets**" has the meaning set forth in Section 2.4 below.

"**Excluded Liabilities**" has the meaning set forth in Section 2.2 below.

"**Liabilities**" has the meaning set forth in Section 2.2 below.

"**Payment Report**" has the meaning set forth in Section 2.8(a) below.

"**Royalties**" has the meaning set forth in Section 2.7(b)(i) below.

"**Sales Milestone Payments**" has the meaning set forth in Section 2.7(b)(ii) below.

"**Seller Custody Period**" has the meaning set forth in Section 2.1 below.

"**Transferred Agreements**" has the meaning set forth in Section 2.3(b) below.

ARTICLE II

ASSET PURCHASE AND SALE

2.1 Purchase and Sale of Assets. Subject to the terms and conditions set forth in this Agreement, Seller shall sell, assign, transfer, convey and deliver to Buyer (or its designee Affiliate as named in writing to Seller), and Buyer shall purchase from Seller, all of Seller's right, title and interest in and to the Purchased Assets, free and clear of any mortgage, pledge, lien, charge, security interest, claim or other encumbrance ("**Encumbrances**") arising during and attributable to the period between the Seller Acquisition Date and the Closing Date (as defined in Section 2.10 below) (the "**Seller Custody Period**").

2.2 Limitation of Assumed Liabilities. Buyer shall not assume or be liable for any liabilities, debt or obligations, including any costs or expenses relating thereto, of Seller of any kind, whether direct or indirect, known or unknown, absolute or contingent, accrued or unaccrued, liquidated or unliquidated, matured, due or to become due or otherwise related to Purchased Assets ("**Liabilities**") arising during and attributable to the Seller Custody Period (the "**Excluded Liabilities**"). For purposes of clarification, the Excluded Liabilities includes all liabilities for taxes relating to the Purchased Assets for all taxable periods ending on or prior to the Closing Date. Buyer shall assume and be liable for any Liabilities other than those Liabilities arising during and attributable to the Seller Custody Period (the "**Assumed Liabilities**"). If and to the extent Seller continues to benefit from any third-party indemnification granted to Seller for the period prior to the Closing Date with respect to the Purchased Assets, then Seller agrees to use reasonable efforts to assign such indemnification right to indemnification to Buyer.

2.3 Purchased Assets. Subject to the terms and conditions of this Agreement, at the Closing (as defined in Section 2.10 below), Seller shall sell, convey, transfer, assign and deliver to Buyer, and Buyer shall purchase and acquire from Seller, free and clear of all Encumbrances other than the Assumed Liabilities, all of Seller's right, title and interest in and to all of the following (collectively, the "**Purchased Assets**"):

(a) All Program Technology, and all rights to sue for or assert claims against and remedies against past, present or future infringements of any or all of the Program Technology and rights of priority and protection of interests therein and to retain any and all amounts therefrom except any Excluded Assets;

(b) A copy of all contracts that are set forth on **Exhibit A** (the "**Transferred Agreements**");

(c) Seller's interest in and to any Poloxamer Assets material, starting materials, intermediates and reference standards for and Poloxamer Assets stock on hand; and

(d) All of Seller's data, records, files, manuals and other documentation that embody the Program Technology or the Transferred Agreements, including: (i) studies, reports, publications, correspondence and other similar documents and records, whether in electronic form or otherwise; (ii) all regulatory submissions and any amendments thereto prepared in connection with the Poloxamer Assets and all related materials and documentation including regulatory correspondence, tracking files, meeting minutes and strategy materials; and (iii) all files, documents, correspondence, and records of attorneys or consultants of Seller relating to the prosecution of Program Patents, but excluding Seller's data, records, files, manuals or other documentations related to non-Program Therapies; in each case, excluding the Excluded Assets. The delivery of all Purchased Assets in a physical form shall be made at such place as mutually agreed by Buyer and Seller.

2.4 Excluded Assets. Notwithstanding anything to the contrary contained in Section 2.3 or elsewhere in this Agreement, any and all assets of Seller not expressly set forth in Section 2.3 and Exhibit A (collectively, the "**Excluded Assets**") shall not be part of the sale and purchase contemplated hereunder, are excluded from the Purchased Assets, and shall remain the property of Seller after the Closing.

2.5 Assumed Liabilities. Upon and subject to the terms, conditions, representations and warranties of Seller contained in this Agreement, and subject to Section 2.3 above, Buyer hereby assumes and agrees to pay, perform, and discharge in a timely manner when due the following:

(a) any Liabilities of Seller under the Transferred Agreements as disclosed in **Exhibit B**, but only to the extent such Liabilities (i) arise after the Closing Date, (ii) do not arise from or relate to any breach by the Seller of any provision of any of such Transferred Agreements, (iii) do not arise from or relate to any event, circumstance or condition occurring or existing on or prior to the Closing Date that, with notice or lapse of time, would constitute or result in a breach of any of such Transferred Agreements, and (iv) are ascertainable (in nature and amount) solely by reference to the express terms of such Transferred Agreements; and

(b) all Liabilities of Seller relating to the prosecution, ownership, control, operation, maintenance, sale, lease, or use of Purchased Assets by Buyer but only to the extent that they arise after the Closing;

2.6 Retained Liabilities. Except for the Assumed Liabilities and the obligations of Buyer pursuant to Section 2.5 above, Buyer shall not assume, and shall have no liability for, any Liabilities of Seller of any kind, character or description, whether accrued, absolute, contingent or otherwise, it being understood that Buyer is expressly disclaiming any express or implied assumption of any Liabilities other than the Assumed Liabilities.

2.7 Cash Payments; Contingent Payments. In consideration of the Purchased Assets, Buyer will pay to Seller the following cash payments set forth in Section 2.7(a) below ("**Cash Payments**") and contingent payments set forth in Section 2.7(b) below ("**Contingent Payments**"), respectively:

(a) Cash Payments. Buyer shall pay Seller One Hundred Twenty-Five Thousand and 00/100 Dollars (US**$125,000.00)** in Cash Payments as follows:

(i) US$25,000 upon execution of the Letter of Intent, which Seller hereby acknowledges receipt as having been paid;

(ii) US$50,000 upon execution and delivery of this Agreement; and

(iii) US$50,000 upon submission by Seller of a letter, or multiple letters if warranted, to (A) the United States Food & Drug Administration officially transferring the two (2) Vepoloxamer INDs (US IND # 31,246 and US IND # 121,764) from Seller to Buyer *and* (B) Notice of Recordation of the assignment of all registrable intellectual property from Seller to Buyer with the United States Patent & Trademark Office. Seller shall then make this final payment by wire transfer of immediately available funds within two (2) business days of the applicable events.

(b) Contingent Payments. The Contingent Payments shall consist of *either* (1) royalties on Net Sales as described in Section 2.7(b)(i) below ("**Royalties**") *and* (2) sales milestone payments as described in Section 2.7(b)(ii) below ("**Sales Milestone Payments**") if Seller directly sells a Product *or* (3) a percentage of value received as described in Section 2.7(b)(iii) below in the case where Buyer does not generate revenues from direct sales and receives value as the result of a license, sale or other change in commercial control of Vepoloxamer or a Vepoloxamer Product(s):

(i) *Royalty*: For the duration of a Valid Claim, Seller shall be entitled to receive the following Royalties:

(A) Three percent (3%) of Net Sales of a Storage Product; and

(B) Five percent (5%) of Net Sales of a Therapeutic Product.

(ii) *Sales Milestones*: Seller shall be entitled to the following Sales Milestone Payments. (***For the sake of clarity, these Sales Milestone Payments are one-time payments to be made in each instance only upon the first instance of achieving each applicable sales milestone, respectively***):

(A) A one-time payment of US$2,500,000 following the first instance where Net Sales of a Storage Product exceed US$50,000,000 in a calendar year;

(B) An additional one-time payment of US$7,500,000 following the first instance where Net Sales of a Storage Product exceed US$150,000,000 in a calendar year;

(C) An additional one-time payment of US$10,000,000 following the first instance where Net Sales of a Therapeutic Product exceed US$150,000,000 in a calendar year;

(D) An additional one-time payment of US$15,000,000 following the first instance where Net Sales of a Therapeutic Product exceed US$300,000,000 in a calendar year; and

(E) An additional one-time payment of US$25,000,000 following the first instance where Net Sales of a Therapeutic Product exceed US$600,000,000 in a calendar year.

Payments shall be made within thirty (30) calendar days of achievement of the applicable milestone.

(iii) Contingent Payments in the case where Buyer does not generate revenues from direct sales and receives value as the result of a license, sale or other change in control of Vepoloxamer or a Vepoloxamer Product(s):

(A) If Buyer or its Affiliate enters into an agreement whereby Buyer does not sell Product directly and receives tangible value from a third party following the sale, license or other business transaction involving a change of control for the commercial rights to Vepoloxamer or a product containing Vepoloxamer, then the Contingent Payment(s) as described in Section 2.7(b)(i) and Section 2.7(b)(ii) shall not apply and the Contingent Payment(s) to Seller shall be:

(1) Thirty-five percent (35%) of any value received for a Therapeutic Product if a change of control for the Therapeutic Product occurs within three (3) years of the Effective Date; or

(2) Seven and one-half percent (7.5%) of any value received if a change of control of the Therapeutic Product occurs three (3) or more years following the Effective Date.

(B) In the case of a Storage Product, Buyer shall be entitled to twenty percent (20%) of any value received if a change in control of the Storage Product occurs within three (3) years of the Effective Date or seven and one-half percent (7.5%) of any value received if the change in control of the Storage Product occurs three (3) or more years following the Effective Date.

(C) For clarity and the avoidance of doubt, notwithstanding anything to the contrary in this Section 2.7, "value received" where indicated in this Section 2.7(b)(iii) for purposes of Buyer's obligation to make Contingent Payments to Seller shall include any and all forms of consideration as and when received by Buyer, including without limitation upfront payments, milestone payments, royalties, and other then-present and then-future payments.

Any Contingent Payment will only be owed by Buyer to Seller following the actual receipt of monies by Buyer with such payment to be made to Seller within thirty (30) calendar days of the receipt by Buyer.

2.8 Payment Reports.

(a) Within sixty (60) days after the first business day of each calendar quarter during which a commercial sale of a Product is made, Buyer (or its designee Affiliate) will submit to Seller a written report with respect to the preceding calendar quarter (the "**Payment Report**") setting forth: (a) Net Sales of Products during such quarter; and (b) a calculation of amounts due Seller for such quarter. Simultaneously with the submission of each Payment Report, Buyer (or its designee Affiliate) will make payment to Seller of amounts due for the calendar quarter covered by such Payment Report. Payment will be by such method as Seller may, from time to time, reasonably request.

(b) With respect to sales in foreign countries (or not consummated in U.S. dollars), Buyer (or its designee Affiliate) will make payment to Seller in the U.S. in U.S. dollars. Contingent Payments for sales in other than U.S. dollars will be determined first in the currency in which the sale is consummated and then converted to U.S. dollars using the buying rates of exchange quoted by *The Wall Street Journal* (or its successor) in New York, New York for the last business day of the calendar quarter covered by the applicable Payment Report. The Payment Report will show sales both in the non-U.S. dollar currency and in U.S. dollars and will identify the exchange rate used.

(c) Buyer will maintain or required to be maintained records reasonable adequate to support the calculation of the payment obligations under Section 2.7. Such records will be maintained (a) with respect to Contingent Payments, for four (4) years from the quarter with respect to which such records relate. Upon reasonable notice, but not more than once per calendar year, Seller may have a certified public accountant or auditor (reasonably acceptable to Buyer or, as applicable, an Affiliate or a licensee) inspect the records required to be maintained hereunder for purposes of verifying the accuracy of amounts paid hereunder; *provided*, *however*, that such accountant or auditor will enter into a confidentiality agreement with Buyer (or the applicable Affiliate or licensee). In the event that such inspection shows that Buyer (or an Affiliate or a licensee) has underpaid amounts due hereunder by five percent (5%) or more with respect to any calendar year, Buyer (or the applicable Affiliate or licensee) will pay, within fifteen (15) days after demand by Seller, the reasonable out-of-pocket costs of such inspection, in addition to the amount of such underpayment and interest thereon at a rate of five percent (5%) per annum. Seller agrees (and will require applicable Affiliates and licensees to agree) to cooperate with Seller's accountant or auditor in connection with any such inspection.

2.9 Purchase Price Allocation. Buyer will provide an allocation of the Cash Payment enumerated in Section 2.7 above among the Purchased Assets for all purposes (including tax and financial accounting). Each of Buyer and Seller will file all tax returns (including amended returns and claims for refund) and information reports in a manner consistent with such allocation.

2.10 Closing. The closing of the transactions contemplated by this Agreement (the "**Closing**") will take place simultaneously with the execution and delivery of this Agreement (the "**Closing Date**") at the offices of Buyer, but effective as of 12:01 A.M. on the business day following the Effective Date.

2.11 Closing Deliverables. On the Closing Date, each of Seller and Buyer will duly execute and deliver:

(a) the Bill of Sale and Assignment in the form attached hereto as **Exhibit C** (required to transfer the INDs and any other assets as listed in Exhibit A);

(b) the Patent Assignment in the form attached hereto as **Exhibit D**; and

(c) Officer's Certificate of Seller confirming the accuracy of the representations and warranties made in Article III as of the Closing Date, substantially in the form attached hereto as **Exhibit E**.

ARTICLE III

SELLER REPRESENTATIONS AND WARRANTIES

3.1 Representations and Warranties. Seller represents and warrants to Buyer that the statements contained in this Article III are true and correct as of the Effective Date.

3.1.1 *Organization and Authority*. Seller is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware. Seller has full corporate power and authority to enter into this Agreement and the documents to be delivered and contemplated hereunder, to carry out its obligations hereunder and to consummate the transactions contemplated hereby.

3.1.2 *No Conflicts; Consents*. The execution, delivery and performance by Seller of this Agreement and the documents to be delivered or contemplated hereunder, and the consummation of the transactions contemplated hereby, do not and will not: (a) violate or conflict with the certificate of incorporation, bylaws or other organizational document of Seller; (b) violate or conflict with any judgment, order, decree, statute, law, ordinance, rule or regulation applicable to Seller or the Purchased Assets; (c) conflict with, or result in (with or without notice or lapse of time or both) any violation of, or default under, or give rise to a right of termination, acceleration or modification of any obligation or loss of any benefit under any contract or other instrument to which Seller is a party or to which any of the Purchased Assets are subject; or (d) result in the creation or imposition of any Encumbrance on the Purchased Assets. No consent, approval, waiver or authorization is required to be obtained by Seller from any person or entity (including any governmental authority) in connection with the execution, delivery and performance by Seller of this Agreement and the consummation of the transactions contemplated hereby.

3.1.3 *Title to Purchased Assets*. Seller owns and has good title to the Purchased Assets, (a) free and clear of free and clear of any Encumbrance arising during and attributable to the Seller Custody Period, and (b) to the best of Seller's knowledge after reasonable inquiry, free and clear of any Encumbrance prior to the Seller Acquisition Date.

3.1.4 *Compliance with Laws*. Seller has complied, and is now complying, with all applicable federal, state and local laws and regulations applicable to ownership of the Purchased Assets.

3.1.5 *Legal Proceedings*. There is no claim, action, suit, proceeding or governmental investigation ("**Action**") of any nature pending or, to Seller's knowledge (after reasonably inquiry), threatened against or by Seller (a) relating to or affecting the Purchased Assets; or (b) that challenges or seeks to prevent, enjoin or otherwise delay the transactions contemplated by this Agreement. To Seller's knowledge (after reasonable inquiry), no event has occurred or circumstances exist that may give rise to, or serve as a basis for, any such Action.

3.1.6 *Full Disclosure*. No representation or warranty by Seller in this Agreement or any certificate or other document furnished or to be furnished to Buyer pursuant to this Agreement contains any untrue statement of a material fact, or omits to state a material fact necessary to make the statements contained herein or therein, in light of the circumstances in which it is made, not misleading.

3.1.7 *Use of Purchased Assets*. Seller has not used or taken any adverse action with respect to the Purchased Assets during the Seller Custody Period.

3.1.8 *No other Representations or Warranties*.

(a) EXCEPT FOR THE REPRESENTATIONS AND WARRANTIES EXPRESSLY CONTAINED IN THIS ARTICLE 3, NEITHER SELLER NOR ANY OTHER PERSON MAKES ANY OTHER EXPRESS OR IMPLIED REPRESENTATION OR WARRANTY WITH RESPECT TO SELLER, THE PURCHASED ASSETS, OR THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT, THE ASSUMED LIABILITIES AND ANY OTHER

RIGHTS OR OBLIGATIONS TO BE TRANSFERRED HEREUNDER OR PURSUANT HERETO, AND SELLER DISCLAIMS ANY OTHER REPRESENTATIONS OR WARRANTIES, WHETHER MADE BY SELLER OR ANY OF ITS AFFILIATES, OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR REPRESENTATIVES. EXCEPT FOR THE REPRESENTATIONS AND WARRANTIES EXPRESSLY CONTAINED IN THIS ARTICLE 3, SELLER HEREBY DISCLAIMS ALL LIABILITY AND RESPONSIBILITY FOR ANY REPRESENTATION, WARRANTY, PROJECTION, FORECAST, STATEMENT, OR INFORMATION MADE, COMMUNICATED, OR FURNISHED (ORALLY OR IN WRITING) TO BUYER OR ITS AFFILIATES OR REPRESENTATIVES (INCLUDING ANY OPINION, INFORMATION, PROJECTION, OR ADVICE THAT MAY HAVE BEEN OR MAY BE PROVIDED TO BUYER BY ANY DIRECTOR, OFFICER, EMPLOYEE, AGENT, CONSULTANT, OR REPRESENTATIVE OF SELLER OR ANY OF ITS AFFILIATES). SELLER MAKES NO REPRESENTATIONS OR WARRANTIES TO BUYER REGARDING THE PROBABLE SUCCESS OR PROFITABILITY OF THE PURCHASED ASSETS OR THE PRODUCT.

(b) EXCEPT AS OTHERWISE PROVIDED IN THIS AGREEMENT FOR A BREACH BY SELLER OF ANY SELLER REPRESENTATION OR WARRANTY, BUYER, UPON THE CLOSING, SHALL BE DEEMED TO HAVE WAIVED, RELINQUISHED, AND RELEASED SELLER AND EACH OF ITS AFFILIATES FROM AND AGAINST ANY AND ALL CLAIMS, DEMANDS, CAUSES OF ACTION (INCLUDING CAUSES OF ACTION IN CONTRACT, STRICT LIABILITY OR TORT), LOSSES, DAMAGES, LIABILITIES, COSTS, AND EXPENSES OF ANY AND EVERY KIND OR CHARACTER, KNOWN OR UNKNOWN, WHICH BUYER MIGHT HAVE ASSERTED OR ALLEGED AGAINST SELLER OR ANY OF ITS AFFILIATES, AT ANY TIME BY REASON OF OR ARISING OUT OF ANY AND ALL ACTS, OMISSIONS, EVENTS, CIRCUMSTANCES, OR MATTERS REGARDING THE PURCHASED ASSETS OR THE TRANSACTION CONTEMPLATED HEREIN. BUYER ACKNOWLEDGES AND AGREES THAT THE WAIVERS, RELEASES, AND OTHER PROVISIONS CONTAINED IN THIS PROVISION WERE A MATERIAL FACTOR IN SELLER'S ACCEPTANCE OF THE PURCHASE PRICE AND THAT SELLER WOULD HAVE BEEN UNWILLING TO SELL THE PURCHASED ASSETS TO BUYER UNLESS SELLER AND EACH OF ITS AFFILIATES IS RELEASED AS EXPRESSLY SET FORTH ABOVE. BUYER, WITH BUYER'S COUNSEL, HAS FULLY REVIEWED THE DISCLAIMERS AND WAIVERS SET FORTH IN THIS AGREEMENT, AND UNDERSTANDS THE SIGNIFICANCE AND EFFECT THEREOF. THE FOREGOING WAIVER AND RELEASE SHALL NOT MODIFY, ALTER OR LIMIT ANY OF SELLER'S REPRESENTATIONS OR WARRANTIES EXPRESSLY SET FORTH IN THIS AGREEMENT.

ARTICLE IV

BUYER REPRESENTATIONS AND WARRANTIES

4.1 Representations and Warranties. Buyer represents and warrants to Seller that the statements contained in this Article IV are true and correct as of the Effective Date.

4.1.1 *Organization and Authority*. Buyer is a corporation duly organized, validly existing and in good standing under the laws of the State of South Carolina. Buyer has full corporate power and authority to enter into this Agreement and the documents to be delivered or contemplated hereunder, to carry out its obligations hereunder and to consummate the transactions contemplated hereby.

4.1.2 *Authorization*. The execution, delivery and performance by Buyer of this Agreement and the documents to be delivered in connection herewith, and the consummation by Buyer of the transactions contemplated hereby and thereby, are within the powers of Buyer and have been duly authorized by all necessary action on the part of Buyer. This Agreement and each of the documents to be delivered in connection herewith to which Buyer is a party have been duly executed and delivered by Buyer and constitute valid and binding agreements of Buyer, enforceable against Buyer in accordance with their respective terms.

4.1.3 *No Conflicts; Consents*. The execution, delivery and performance by Buyer of this Agreement and the documents to be delivered or contemplated hereunder, and the consummation of the transactions contemplated hereby, do not and will not: (a) violate or conflict with the certificate of incorporation, bylaws or other organizational document of Buyer; (b) violate or conflict with any judgment, order, decree, statute, law, ordinance, rule or regulation applicable to Buyer; or (c) conflict with, or result in (with or without notice or lapse of time or both) any violation of, or default under, or give rise to a right of termination, acceleration or modification of any obligation or loss of any benefit under any contract or other instrument to which Buyer is a party. No consent, approval, waiver or authorization is required to be obtained by Buyer from any person or entity (including any governmental authority) in connection with the execution, delivery and performance by Buyer of this Agreement and the consummation of the transactions contemplated hereby.

4.1.4 *No Other Representations or Warranties*. BUYER ACKNOWLEDGES AND AGREES THAT (I) SELLER IS THE MERE CUSTODIAN OF, AND TOOK NO ADVERSE ACTION REGARDING, THE PURCHASED ASSETS

DURING THE SELLER CUSTODY PERIOD, (II) PRIOR TO THE SELLER ACQUISITION DATE, CLINICAL DEVELOPMENT OF VEPOLOXAMER AND/OR THE PRODUCT WAS DISCONTINUED AND ALL CLINICAL STUDIES OF VEPOLOXAMER AND/OR THE PRODUCT WERE WOUND DOWN AFTER FAILURE TO ACHIEVE PRIMARY EFFICACY ENDPOINTS, (III) IT HAS MADE ITS OWN INQUIRY AND INVESTIGATION INTO, AND, BASED THEREON, HAS FORMED AN INDEPENDENT JUDGMENT CONCERNING SELLER, THE PURCHASED ASSETS, THE PRODUCT, THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT, THE ASSUMED LIABILITIES, AND ANY OTHER ASSETS, RIGHTS OR OBLIGATIONS TO BE TRANSFERRED HEREUNDER OR PURSUANT HERETO, AND (IV) IT HAS BEEN FURNISHED WITH, OR GIVEN ADEQUATE ACCESS TO, SUCH INFORMATION ABOUT SELLER, THE PURCHASED ASSETS, THE PRODUCT, THE ASSUMED LIABILITIES, AND ANY OTHER RIGHTS OR OBLIGATIONS TO BE TRANSFERRED HEREUNDER OR PURSUANT HERETO, AS IT HAS REQUESTED. EXCEPT FOR THE SPECIFIC REPRESENTATIONS AND WARRANTIES EXPRESSLY MADE BY SELLER IN ARTICLE 3 ABOVE, (I) BUYER ACKNOWLEDGES AND AGREES THAT (A) SELLER IS NOT MAKING AND HAS NOT MADE ANY REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, AT LAW OR IN EQUITY, IN RESPECT OF THE PURCHASED ASSETS, SELLER, SELLER'S AFFILIATES, OR ANY OF SELLER'S OR ITS AFFILIATES' RESPECTIVE BUSINESSES, ASSETS, LIABILITIES, OPERATIONS, PROSPECTS, OR CONDITION (FINANCIAL OR OTHERWISE), INCLUDING WITH RESPECT TO MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY ASSETS, THE NATURE OR EXTENT OF ANY LIABILITIES, THE PROSPECTS OF THE PURCHASED ASSETS OR THE PRODUCT, THE EFFECTIVENESS OR THE SUCCESS OF ANY OPERATIONS, OR THE ACCURACY OR COMPLETENESS OF ANY CONFIDENTIAL INFORMATION MEMORANDA, DOCUMENTS, PROJECTIONS, MATERIAL OR OTHER INFORMATION (FINANCIAL OR OTHERWISE) REGARDING THE PURCHASED ASSETS OR THE PRODUCT, SELLER OR SELLER'S AFFILIATES FURNISHED TO PURCHASER OR ITS REPRESENTATIVES OR MADE AVAILABLE TO PURCHASER AND ITS REPRESENTATIVES IN ANY FORM IN EXPECTATION OF, OR IN CONNECTION WITH, THE TRANSACTIONS CONTEMPLATED HEREBY, OR IN RESPECT OF ANY OTHER MATTER WHATSOEVER, AND (B) NO OFFICER, AGENT, REPRESENTATIVE OR EMPLOYEE OF SELLER OR ANY OF SELLER'S AFFILIATES HAS ANY AUTHORITY, EXPRESS OR IMPLIED, TO MAKE ANY REPRESENTATIONS, WARRANTIES, OR AGREEMENTS NOT SPECIFICALLY SET FORTH IN THIS AGREEMENT AND SUBJECT TO THE LIMITED REMEDIES HEREIN PROVIDED; (II) BUYER SPECIFICALLY DISCLAIMS THAT IT IS RELYING UPON OR HAS RELIED UPON ANY SUCH OTHER REPRESENTATIONS OR WARRANTIES THAT MAY HAVE BEEN MADE BY ANY PERSON, AND ACKNOWLEDGES AND AGREES THAT SELLER HAS SPECIFICALLY DISCLAIMED AND DOES HEREBY SPECIFICALLY DISCLAIM ANY SUCH OTHER REPRESENTATION OR WARRANTY MADE BY ANY PERSON; (III) BUYER SPECIFICALLY DISCLAIMS ANY OBLIGATION OR DUTY BY SELLER TO MAKE ANY DISCLOSURES OF FACT NOT REQUIRED TO BE DISCLOSED PURSUANT TO THE SPECIFIC REPRESENTATIONS AND WARRANTIES SET FORTH IN ARTICLE 3 ABOVE; AND (IV) BUYER IS ACQUIRING THE PURCHASED ASSETS AND THE ASSUMED LIABILITIES IN "AS IS" CONDITION AND ON A "WHERE IS" BASIS, SUBJECT ONLY TO THE SPECIFIC REPRESENTATIONS AND WARRANTIES SET FORTH IN ARTICLE 3 ABOVE.

ARTICLE V

OTHER AGREEMENTS

5.1 Bulk Sales Laws. The parties hereby waive compliance with the provisions of any bulk sales, bulk transfer or similar laws of any jurisdiction that may otherwise be applicable with respect to the sale of any or all of the Purchased Assets to Buyer.

5.2 Transfer Taxes. All transfer, documentary, sales, use, stamp, registration, value added and other taxes and fees (including any penalties and interest) incurred in connection with this Agreement and the documents to be delivered or contemplated hereunder will be borne and paid by Seller. Each party will, at its own expense, timely file any tax return or other document required to be filed by such party with respect to such taxes or fees (and the other party will cooperate reasonably with respect thereto).

5.3 Further Assurances. Following the Closing, each of the parties hereto will execute and deliver such additional documents, instruments, conveyances and assurances and take such further actions as may be reasonably required to carry out the provisions hereof and give effect to the transactions contemplated by this Agreement and the documents to be delivered or contemplated hereunder.

ARTICLE VI

INDEMNIFICATION

6.1 Indemnification.

6.1.1 *By Seller*. Seller will defend, indemnify and hold harmless Buyer, each Affiliate and each licensee, and each of their respective stockholders, directors, officers and employees, from and against all claims, judgments, damages, liabilities, settlements, losses, costs and expenses, including attorneys' fees and disbursements, arising from or relating to (i) any inaccuracy in or breach of any of the representations or warranties of Seller contained in this Agreement or any document to be delivered or contemplated hereunder; or (ii) any breach or non-fulfillment of any covenant, agreement or obligation to be performed by Seller pursuant to this Agreement or any document to be delivered or contemplated hereunder. Whenever any claim will arise for indemnification hereunder, Buyer will promptly provide written notice of such claim to Seller including any reasonable information relating such claim and the amount, if known, of such claim.

6.1.2 *By Buyer*. Buyer will defend, indemnify and hold harmless Seller, each Affiliate and each licensee, and each of their respective stockholders, directors, officers and employees, from and against all claims, judgments, damages, liabilities, settlements, losses, costs and expenses, including attorneys' fees and disbursements, arising from or relating to (i) any inaccuracy in or breach of any of the representations or warranties of Buyer contained in this Agreement or any document to be delivered or contemplated hereunder; (ii) any breach or non-fulfillment of any covenant, agreement or obligation to be performed by Buyer pursuant to this Agreement or any document to be delivered or contemplated hereunder; (iii) any Assumed Liability, or (iv) any claims or causes of action by any entity or person arising on or after the Closing Date in connection with the Purchased Assets or any of them. Whenever any claim will arise for indemnification hereunder, Seller will promptly provide written notice of such claim to Buyer including any reasonable information relating such claim and the amount, if known, of such claim.

6.2 Tax Treatment of Indemnification. Any indemnification payment made under this Agreement will be treated by the parties as an adjustment to the Cash Payment for tax purposes, unless otherwise required by law.

6.3 Effect of Investigation. The right to indemnification or other remedy of a party based on the representations, warranties, covenants and agreements of the other party contained in this Agreement will not be affected by any investigation conducted by such party with respect to, or any knowledge acquired by such party at any time, with respect to the accuracy or inaccuracy of, or compliance with, any such representation, warranty, covenant or agreement.

6.4 Cumulative Remedies. The rights and remedies provided in this Article VI are cumulative and are in addition to and not in substitution for any other rights and remedies available at law or in equity or otherwise.

6.5 Survival. All representations and warranties of the parties contained in this Agreement will survive the Closing for a period of twelve (12) months from the Closing Date, except that the representations and warranties provided in Section 3.1.3 (Title to Purchased Assets) and 3.1.4 (Compliance with Laws) will survive the Closing for a period of eighteen (18) months from the Closing Date. The indemnification obligations contained in this Article VI will survive the Closing.

ARTICLE VII

MISCELLANEOUS

7.1 Expenses. All costs and expenses incurred in connection with this Agreement and the transactions contemplated hereby will be paid by the party incurring such costs and expenses.

7.2 Notices. All notices, requests, consents, claims, demands, waivers and other communications required or permitted hereunder must be in writing and will be deemed delivered on the date of receipt or refusal of receipt (based on documented confirmation of delivery or refusal). Notice provided via email will be effective if the recipient personally (*i.e.*, not by automated machine response) confirms receipt from the sender, including by personally responding to the email. Such communications must be sent to the receiving party at the following addresses (or at such other address as a party may specify pursuant to a notice given in accordance with this Section 7.2):

If to Buyer:	LifeRaft Biosciences Inc. 940 Johnnie Dodds Blvd., Suite 205 Mt. Pleasant, South Carolina 29464 Attn: Martin Emanuele, Ph.D., President and CEO Email: marty@liferaftbio.com
With a copy to:	Buxton & Collie, LLC 940 Johnnie Dodds Blvd., Suite 205 Mt. Pleasant, South Carolina 29464 Attn: James T. H. Buxton Email: jbuxton@buxtonandcollie.com
If to Seller:	Savara Inc. 900 S. Capital of Texas Highway Suite 150 Austin, TX 78746 USA Attn: Rob Neville, CEO Email: rob.neville@savarapharma.com
With a copy to:	Life Science Legal LLC 214 South Spring Street Independence, Missouri 64050 Attn: Tom Fredrick Email: tfredrick@lifesciencelegal.com

7.3 Headings. The headings in this Agreement are for reference only and will not affect the interpretation of this Agreement.

7.4 Severability. If any term or provision of this Agreement is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other term or provision of this Agreement or invalidate or render unenforceable such term or provision in any other jurisdiction.

7.5 Entire Agreement. This Agreement and the documents to be delivered or contemplated hereunder constitute the sole and entire agreement of the parties to this Agreement with respect to the subject matter contained in this Agreement and supersede all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter. In the event of any inconsistency between the statements in the body of this Agreement and the documents to be delivered or contemplated hereunder, the statements in the body of this Agreement will control. Without limiting the foregoing, this Agreement will be binding upon and inure to the benefit of the parties and their respective successors and permitted assigns.

7.6 Amendment and Modification. This Agreement may only be amended, modified or supplemented by an agreement in writing signed by each party hereto.

7.7 Waiver. No waiver by any party of any provision hereof will be effective unless explicitly set forth in writing and signed by the party so waiving. No waiver by any party shall operate or be construed as a waiver in respect of any failure, breach or default not expressly identified by such written waiver, whether of a similar or different character, and whether occurring before or after that waiver. No failure to exercise, or delay in exercising, any right, remedy, power or privilege arising from this Agreement will operate or be construed as a waiver thereof; nor will any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

7.8 Governing Law; Venue. This Agreement and the transactions contemplated hereby will be governed by and construed in accordance with the internal laws of the State of New York. If any party brings against any other party any proceeding arising out of this Agreement, such party may bring that proceeding only in the United States District Court for New York or, only if there is no federal subject matter jurisdiction, in any state court of New York sitting in New York County, and each party hereby submits to the exclusive jurisdiction of those courts for purposes of any such proceeding. The parties undertake not to commence any suit, action or proceeding arising out of or relating to this Agreement in a forum other than a forum described in this Section 7.8; *provided, however*, that nothing in this Agreement will preclude Buyer or Seller from bringing any suit, action or proceeding in any other court for the purposes of enforcing the provisions of this Section 7.8 or enforcing any judgment obtained by either party.

The parties hereby waive, to the fullest extent permitted by applicable law, any objection which they now or hereafter have to personal jurisdiction or to the laying of venue of any such suit, action or proceeding brought in an applicable court described in this Section 7.8, and the parties agree that they will not attempt to deny or defeat such personal jurisdiction by motion or other request for leave from any such court. The parties agree that, to the fullest extent permitted by law, a final and non-appealable judgment in any suit, action or proceeding brought in any applicable court described in this Section 7.8 will be conclusive and binding upon the parties and may be enforced in any other jurisdiction.

7.9 Specific Performance. The parties agree that irreparable damage would occur if any provision of this Agreement were not performed in accordance with the terms hereof and that the parties will be entitled to specific performance of the terms hereof, in addition to any other remedy to which it is entitled at law or in equity.

7.10 Legal Fees. In the event any legal action is commenced in connection with this Agreement, the prevailing party in such action will be entitled to recover, in addition to court costs, such amount as the court may adjudge as reasonable attorneys' fees. A party will be considered the "prevailing party" if (a) it initiated the litigation and substantially obtained the relief it sought, either through a judgment or the losing party's voluntary action before trial or judgment; (b) the other party withdraws its action without substantially obtaining the relief the other party sought (except in connection with an agreed settlement); or (c) it did not initiate the litigation and judgment is entered for any party, but without substantially granting the relief sought by the initiating party or granting more substantial relief to the non-initiating party with respect to any counterclaim asserted by the non-initiating party in connection with such litigation.

7.11 Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together will be deemed to be one and the same agreement. A signed copy of this Agreement delivered by e-mail or other means of electronic transmission will be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

[Remainder of page intentionally left blank; signature page immediately follows]

IN WITNESS WHEREOF, the undersigned have executed and delivered this Asset Purchase Agreement effective as of the Effective Date.

LIFERAFT BIOSCIENCES INC.

By: _____

Name: Martin Emanuele, PhD

Title: CEO

SAVARA INC.

By: _____

Name: Rob Neville

Title: CEO

Exhibit A

PURCHASED ASSETS

All tangible and intangible property related to polyoxyethylene containing surface-active agents owned or controlled by Seller as of the Effective Date including, but not limited to:

(a) Listing of Patents/Patent Applications to be transferred and assigned to Buyer:

	Country	Inventor(s)	Title	Serial No. (Patent No.)
4001	US-PAT	Emanuele, R. Martin; Vetticaden, Santosh; Keran, Patrick Assignee: Mast Therapeutics, Inc.	Poloxamer Therapy for Heart Failure	14/793,662 (US 9,757,411) Priority: 62/021,691 62/126,400 CIP of PCT/US14/456 27
4003US	US-PAT	Emanuele, R. Martin; Balasubramanian, Mannarsamy Assignee: Mast Therapeutics, Inc.	A Poloxamer Composition Free of Long Circulating Material and Methods for Production and Uses Thereof	14/793,670 (US 9,403,941)
4003US CON	US-PAT	Emanuele, R. Martin; Balasubramanian, Mannarsamy Assignee: Mast Therapeutics, Inc.	Poloxamer Composition Free of Long Circulating Material and Methods for Production and Uses Thereof	15/207,441
4003TW	TW-PAT	Emanuele, R. Martin; Balasubramanian, Mannarsamy	A Poloxamer Composition Free of Long Circulating Material and Methods for Production and Uses Thereof	104122001 Priority: 62/021,697
4003AU	AU-PAT	Emanuele, R. Martin; Balasubramanian, Mannarsamy Assignee: Mast Therapeutics, Inc.	A Poloxamer Composition Free of Long Circulating Material and Methods for Production and Uses Thereof	2015287993
4003EP	EP-PAT	Emanuele, R. Martin; Balasubramanian, Mannarsamy Assignee: Mast Therapeutics,	A Poloxamer Composition Free of Long Circulating Material and Methods for Production and Uses Thereof	15747613.6

	Country	Inventor(s)	Title	Serial No. (Patent No.)
		Inc.		
4003KR	KR-PAT	Emanuele, R. Martin; Balasubramanian, Mannarsamy Assignee: Mast Therapeutics, Inc.	A Poloxamer Composition Free of Long Circulating Material and Methods for Production and Uses Thereof	1020177003330
4003JP	JP-PAT	Emanuele, R. Martin; Balasubramanian, Mannarsamy Assignee: Mast Therapeutics, Inc.	A Poloxamer Composition Free of Long Circulating Material and Methods for Production and Uses Thereof	2017-501308
4005AU	AU-PAT	Emanuele, R. Martin	Methods for Enhancing Oxygenation of Jeopardized Tissue	2011329088 (2011329088)
4005EP	EP-PAT	Emanuele, R. Martin	Methods for Enhancing Oxygenation of Jeopardized Tissue	11841387.1 (Regional Phase of PCT/US2011/060747)
4005JP	JP-PAT	Emanuele, R. Martin	Methods for Enhancing Oxygenation of Jeopardized Tissue	2013-538989 (National Phase of PCT/US2011/060747) (5823530)
4005NZ	NZ-PAT	Emanuele, R. Martin	Methods for Enhancing Oxygenation of Jeopardized Tissue	610441 (610441)
4005SG	SG-PAT	Emanuele, R. Martin	Methods for Enhancing Oxygenation of Jeopardized Tissue	201303544-9 (National Phase of PCT/US2011/060747) Patent No. 190695
4010AU	AU	Emanuele, R. Martin Assignee: Mast Therapeutics, Inc.	Treatment of Diuretic Induced Alterations of Plasma Volume	2014337190

	Country	Inventor(s)	Title	Serial No. (Patent No.)
4010CA/ 51911-3001	CA	Emanuele, R. Martin Assignee: Mast Therapeutics, Inc.	Treatment of Diuretic Induced Alterations of Plasma Volume	2927361
4010JP	JP	Emanuele, R. Martin Assignee: Mast Therapeutics, Inc.	Treatment of Diuretic Induced Alterations of Plasma Volume	2016-524404
4010KR	KR	Emanuele, R. Martin Assignee: Mast Therapeutics, Inc.	Treatment of Diuretic Induced Alterations of Plasma Volume	1020167012662
4010NZ	NZ	Emanuele, R. Martin Assignee: Mast Therapeutics, Inc.	Treatment of Diuretic Induced Alterations of Plasma Volume	719663
MAST 4027-WO	WO-PAT	Emanuele, R. Martin Assignee: Mast Therapeutics, Inc.	Polyoxyethylene/ Polyoxypropylene Copolymers and Fibrinolytic Inhibitors, Uses Thereof and Compositions	PCT/US2016/41304 Claims priority to 62/189,705
Mast 4028-WO	WO-PAT	Emanuele, R. Martin, Arthur, John, Hoye, Will, Smith, Stewart, Stirn, Scott	Reduce Sodium Poloxamer-188 Formulations and Methods For Use	PCT/US2016/41374 Claims priority to 62/189,580 and 62/238,059

(b) Vepoloxamer (previously known as purified poloxamer 188); and

(c) To the limited extent related to Vepoloxamer, other assets and intellectual property acquired by Seller through its merger with Mast Therapeutics, including, but not limited to, rights under that certain License Agreement, dated June 8, 2004, between SynthRx, Inc. and CytRx Corporation (the "**License Agreement**"), if and to the extent assignable, sub-licensable, or otherwise transferable under the License Agreement. For clarity, the Purchased Assets includes the following, if and to the extent in the actual possession of Seller:

(i) know-how, data or other intellectual property reflected therein; analytical methods; specifications; methods of manufacturing, storing, transporting or analyzing; dosing regimens; preclinical and clinical study protocols, designs and schema; study reports (whether or not final); statistical analyses and methodologies; stability protocols; formulations; routes of administration; combinations, including as adjuvants; applications and other submissions to, and approvals, clearances, designations or other actions by United States or foreign regulatory bodies such as, but not limited to, INDs and their foreign equivalents, in each instance related to Vepoloxamer;

(ii) communications with third parties, including regulatory bodies, patent offices, and other government agencies and authorities; invention disclosures; patent, trademark and copyright applications and allowances, issuances and registrations; and any internet domains related to Vepoloxamer to the extent such communications are available to Seller;

(iii) embodiments of the foregoing, including books and records; computer and network files; email; and other electronic or physical documents, records or files evidencing, reflecting or incorporating the foregoing, in each instance related to Vepoloxamer to the extent such items are available to the Seller; and

(iv) existing inventory of GLP stored Vepoloxamer active pharmaceutical ingredient (up to 100 KG) and formulated Vepoloxamer drug product (up to 1,500 vials).

The foregoing notwithstanding, the Purchased Assets shall not include any contract or other agreement, except the License Agreement.

Exhibit B

Assumed Liabilities

Liabilities of Seller under the License Agreement and other Transferred Agreement(s), including:

(a) Proteomics and RNA expression array samples stored at University of Rochester Medical Center (URMC), commencing with the amount ($4,500/Q) next due on November 1, 2017.

(b) Any and all royalty and other payment obligations in relation to Vepoloxamer as and when due and payable to any third party, including without limitation royalties payable to SynthRx, Inc. and its successor(s) in interest pursuant to the License Agreement.

Exhibit C

BILL OF SALE AND ASSIGNMENT

This BILL OF SALE AND ASSIGNMENT ("**Bill of Sale**"), dated as of October __, 2017, is executed and delivered by Savara Inc., a Delaware corporation ("**Seller**") to LifeRaft Biosciences Inc., a South Carolina corporation (the "**Buyer**").

BACKGROUND

Pursuant to that certain Asset Purchase Agreement (the "**Purchase Agreement**"), dated as of the date hereof, by and between the Seller and the Buyer, the Seller has agreed to sell, assign, transfer, deliver and convey to the Buyer the Purchased Assets.

AGREEMENT

NOW, THEREFORE, in consideration of the representations, warranties, covenants and agreements contained in this Bill of Sale and in the Purchase Agreement, and for other good and valuable consideration, the receipt and adequacy of which are conclusively acknowledged, and intending to be legally bound hereby, the Seller hereby agrees as follows:

1. Pursuant to the terms of the Purchase Agreement, Seller does hereby sell, assign, transfer, deliver and convey unto the Buyer all of Seller's right, title and interest in, to and under the Purchased Assets to have and to hold all the Purchased Assets hereby conveyed to the Buyer and its successors and assigns, for their own use and benefit forever, free and clear of all Encumbrances, subject to Assumed Liabilities.

2. The covenant of further assurances contained in Section 5.3 of the Purchase Agreement is hereby incorporated by reference as though restated in this Bill of Sale. The execution and delivery of any such additional documents or instruments shall not affect the validity of this Bill of Sale.

3. This Bill of Sale shall be binding upon Seller and its successors and assigns, and shall inure to the benefit of the Buyer and its successors and assigns. All representations, warranties, covenants, agreements and indemnities contained in the Purchase Agreement shall survive the execution and delivery of this Bill of Sale and shall continue in full force and effect as provided in the Purchase Agreement. Neither the making nor the acceptance of this Bill of Sale or of any other instrument or document of sale, transfer, assignment, conveyance, acquisition or acceptance as to any particular Purchased Asset shall restrict, impair, reduce, expand or otherwise modify the terms of the Purchase Agreement. In the event of any conflict between the terms and provisions of this Bill of Sale, the terms and provisions of the Purchase Agreement shall be deemed to govern and be controlling in all circumstances.

4. This Bill of Sale shall be governed by, and construed in accordance with, the Laws of the State of New York applicable to contracts executed in and to be performed in that state without giving effect to any choice or conflict of law provision or rule that would cause the application of the law of any jurisdiction other than the State of New York.

5. All capitalized terms used but not otherwise defined in this Bill of Sale shall have the meanings ascribed to such terms in the Purchase Agreement.

IN WITNESS WHEREOF, the undersigned has caused this Bill of Sale to be duly executed and delivered as of the date first above written.

SELLER:

SAVARA INC.

By: _____
Print Name: _____
Title: _____

BUYER:

LIFERAFT BIOSCIENCES INC.

By: _____
Print Name: _____
Title: _____

Exhibit D

PATENT AND INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

THIS AGREEMENT is made the __ day of October, 2017, by and between Savara Inc. ("Savara"), a company incorporated in the State of Delaware, and LifeRaft Biosciences, Inc. ("LifeRaft"), a company incorporated in the State of South Carolina.

WHEREAS, Savara and LifeRaft are parties to an Asset Purchase Agreement dated as of the date hereof ("Asset Purchase Agreement") pursuant to which Savara agrees to assign to LifeRaft its title, rights and interest in and to the patent and patent applications described in Asset Purchase Agreement Exhibit A ("Exhibit A");

WHEREAS, Savara and LifeRaft wish to document by formal assignment to LifeRaft of Savara's title, interest and rights in and to the patents and patent applications.

LifeRaft and Savara therefore agree as follows.

1. "Assigned Patents" shall mean the issued U.S. and foreign patents and patent applications listed on Exhibit A, including the following rights directly related to Assigned Patents, if and to the extent in the actual possession of Seller:

(i) know-how, data or other intellectual property reflected therein; analytical methods; specifications; methods of manufacturing, storing, transporting or analyzing; dosing regimens; preclinical and clinical study protocols, designs and schema; study reports (whether or not final); statistical analyses and methodologies; stability protocols; formulations; routes of administration; combinations, including as adjuvants; applications and other submissions to, and approvals, clearances, designations or other actions by United States or foreign regulatory bodies such as, but not limited to, INDs and their foreign equivalents, in each instance related to Vepoloxamer;

(ii) communications with third parties, including regulatory bodies, patent offices, and other government agencies and authorities; invention disclosures; patent, trademark and copyright applications and allowances, issuances and registrations; and any internet domains related to Vepoloxamer to the extent such communications are available to Seller; and

(iii) embodiments of the foregoing, including books and records; computer and network files; email; and other electronic or physical documents, records or files evidencing, reflecting or incorporating the foregoing, in each instance related to Vepoloxamer to the extent such items are available to the Seller.

2. For good and valuable consideration, receipt of which is hereby acknowledged, Savara hereby assigns to LifeRaft all of the right, title and interest in (i) the inventions disclosed in any patent or application listed on Exhibit A, (ii) the Assigned Patents, (iii) any U.S. or foreign Letters Patent which may issue from any application listed on Exhibit A, and (iv) all divisions, continuations, reissues, re-examinations and extensions of the patents and applications listed on Exhibit A.

3. Savara agrees to execute upon the request of LifeRaft any assignment paper or other document reasonably necessary to evidence the assignment of the rights hereunder to LifeRaft, and agrees to reasonably cooperate with LifeRaft in all other matters relating to the assignment of these rights to LifeRaft.

4. This Agreement shall be construed in accordance with and governed by the laws of the State of New York, excluding any choice of law rules which direct the application of the laws of another jurisdiction.

5. This Agreement, together with the Asset Purchase Agreement, constitutes the sole understanding of the parties with respect to the transactions provided herein and supersedes and merges herein any previous agreements and understandings, oral and written, between the parties hereto with respect to the subject matter hereof.

IN WITNESS WHEREOF, this Agreement was executed and delivered by Savara and LifeRaft as of the date first above written.

SAVARA INC.

By: _____
Print Name: _____
Title: _____

LIFERAFT BIOSCIENCES INC.

By: _____
Print Name: _____
Title: _____

Exhibit E

Officer’s Certificate of Seller

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15(d)-14(a) AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Robert Neville, certify that:

1. I have reviewed this Form 10-Q of Savara Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

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

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

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

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

Date: November 8, 2017

/s/ Robert Neville

Robert Neville
Chief Executive Officer and Chairman
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15(d)-14(a) AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, David Lowrance, certify that:

1. I have reviewed this Form 10-Q of Savara Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

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

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

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

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

Date: November 8, 2017

/s/ David Lowrance
David Lowrance
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

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

In connection with the Quarterly Report of Savara Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert Neville, principal executive officer of the Company, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

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

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

November 8, 2017

/s/ Robert Neville
Robert Neville
Chief Executive Officer and Chairman
(Principal Executive Officer)

In connection with the Quarterly Report of Savara Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David Lowrance, principal financial officer of the Company, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

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

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

November 8, 2017

/s/ David Lowrance
David Lowrance
Chief Financial Officer
(Principal Financial and Accounting Officer)