MARRONE BIO INNOVATIONS INC
Form 10-Q
May 15, 2018

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

[X] Quarterly report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the quarterly period ended March 31, 2018

or

[ ] Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from ________to _________

Commission File Number: 001-36030

Marrone Bio Innovations, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**20-5137161**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

1540 Drew Avenue, Davis, CA 95618

(Address of principal executive offices and zip code)

(530) 750-2800

(Registrant's telephone number, including area code)

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

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

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

Large accelerated filer	[ ]	Accelerated filer	[ ]
Non-accelerated filer	[ ](Do not check if a smaller reporting company)	Smaller reporting company	[X]
Emerging growth Company [X]			

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

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

Class	Shares Outstanding at May 11, 2018
Common Stock, $0.00001 par value	110,469,486

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PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS (UNAUDITED)

MARRONE BIO INNOVATIONS, INC.

Condensed Consolidated Balance Sheets

(In Thousands, Except Par Value)

	MARCH 31, 2018 **(Unaudited)**	DECEMBER 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$14,757	$ 786
Restricted cash, current portion	487	487
Accounts receivable	4,352	3,785
Inventories, net	10,047	9,827
Deferred cost of product revenues	3	3,063
Prepaid expenses and other current assets	780	1,170
Total current assets	30,426	19,118
Property, plant and equipment, net	15,700	16,016
Restricted cash, less current portion	1,560	1,560
Other assets	340	219
Total assets	$48,026	$ 36,913
Liabilities and stockholders' equity (deficit)		
Current liabilities:		
Accounts payable	$2,621	$ 3,800
Accrued liabilities	6,805	8,189
Accrued interest due to related parties	—	1,622
Deferred revenue, current portion	303	6,193
Derivative liability	—	674
Debt, current portion	1,852	1,524
Total current liabilities	11,581	22,002
Deferred revenue, less current portion	2,512	2,046
Debt, less current portion	11,974	24,407
Debt due to related parties	7,285	37,822
Other liabilities	923	1,287
Total liabilities	34,275	87,564
Commitments and contingencies *(Note 9)*		
Stockholders' equity (deficit):		
Preferred stock: $0.00001 par value; 20,000 shares authorized and no shares issued or outstanding at March 31, 2018 and December 31, 2017	—	—
Common stock: $0.00001 par value; 250,000 shares authorized, 102,093 and 31,351 shares issued and outstanding as of March 31, 2018 and December 31,	1	—

2017, respectively		
Additional paid in capital	279,929	214,921
Accumulated deficit	(266,179)	(265,572)
Total stockholders' equity (deficit)	13,751	(50,651)
Total liabilities and stockholders' equity (deficit)	$48,026	$ 36,913

See accompanying notes.

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MARRONE BIO INNOVATIONS, INC.

Condensed Consolidated Statements of Operations

(In Thousands, Except Per Share Amounts)

(Unaudited)

	THREE MONTHS ENDED MARCH 31,	
	2018	2017
Revenues:		
Product	$4,224	$4,096
License	100	58
Total revenues	4,324	4,154
Cost of product revenues	2,242	2,279
Gross profit	2,082	1,875
Operating Expenses:		
Research, development and patent	2,534	2,444
Selling, general and administrative	5,024	5,343
Total operating expenses	7,558	7,787
Loss from operations	(5,476)	(5,912)
Other income (expense):		
Interest expense	(1,119)	(636)
Interest expense, related parties	(434)	(1,074)
Change in fair value of financial instruments	(5,177)	—
Loss on extinguishment of debt, net	(303)	—
Gain on extinguishment of debt, related party	9,622	—
Other income (expense), net	(31)	(7)
Total other income (expense), net	2,558	(1,717)
Net loss	$(2,918)	$(7,629)
Basic and diluted net loss per common share:	$(0.04)	$(0.31)
Weighted-average shares outstanding used in computing basic and diluted net loss per common share:	74,591	24,739

See accompanying notes.

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MARRONE BIO INNOVATIONS, INC.

Condensed Consolidated Statements of Cash Flows

(In Thousands)

(Unaudited)

	THREE MONTHS ENDED MARCH 31,	
	2018	2017
Cash flows from operating activities		
Net loss	$(2,918)	$(7,629)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	478	521
Gain on disposal of equipment	—	(4)
Share-based compensation	491	582
Non-cash interest expense	611	337
Change in fair value of financial instruments	5,177	—
Loss on extinguishment of debt, net	303	—
Gain on extinguishment of debt, related party, net	(9,622)	—
Net changes in operating assets and liabilities:		—
Accounts receivable	(567)	(4,481)
Inventories	(220)	347
Prepaid Expenses and other assets	146	142
Deferred cost of product revenues	2	(1,307)
Accounts payable	(1,092)	1,627
Accrued and other liabilities	(793)	828
Accrued interest due to related parties	(1,614)	(820)
Deferred revenue	(128)	2,307
Net cash used in operating activities	(9,746)	(7,550)
Cash flows from investing activities		
Purchases of property, plant and equipment	(362)	(83)
Net cash used in investing activities	(362)	(83)
Cash flows from financing activities		
Proceeds from issuance of common stock, net of offering costs	21,820	—
Proceeds from issuance of debt	2,000	—
Proceeds from secured borrowings	3,520	—
Reductions in secured borrowings	(3,194)	—
Repayment of debt	(67)	(66)
Repayment of capital leases	—	(145)
Exercise of stock options	—	17
Net cash provided by (used in) financing activities	24,079	(194)
Net increase (decrease) in cash and cash equivalents and restricted cash	13,971	(7,827)

Cash and cash equivalents and restricted cash, beginning of period	2,833	12,613
Cash and cash equivalents and restricted cash, end of period	$16,804	$4,786
Supplemental disclosure of cash flow information		
Cash paid for interest	$2,145	$2,182
Supplemental disclosure of non-cash investing and financing activities		
Property, plant and equipment included in accounts payable and accrued liabilities	$200	$40
Embedded derivative liability associated with bridge loan	$573	$—
Conversion of debt to equity	$10,000	$—
Conversion of bridge loan (convertible note) to equity	$6,000	$—
Conversion of debt, related party to equity	$35,000	$—
Conversion of accrued liabilities into equity associated with the granting of restricted stock units	$205	$—

See accompanying notes.

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MARRONE BIO INNOVATIONS, INC.

Notes to Condensed Consolidated Financial Statements

March 31, 2018

(Unaudited)

1. Summary of Business, Basis of Presentation and Liquidity

Marrone Bio Innovations, Inc. ("Company"), formerly Marrone Organic Innovations, Inc., was incorporated under the laws of the State of Delaware on June 15, 2006, and is located in Davis, California. In July 2012, the Company formed a wholly-owned subsidiary, Marrone Michigan Manufacturing LLC ("MMM LLC"), which holds the assets of a manufacturing plant the Company purchased in July 2012. The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary. All significant intercompany balances and transactions have been eliminated in consolidation. The Company makes bio-based pest management and plant health products. The Company targets the major markets that use conventional chemical pesticides, including certain agricultural and water markets where its bio-based products are used as alternatives for, or mixed with, conventional chemical pesticides. The Company also targets new markets for which (i) there are no available conventional chemical pesticides or (ii) the use of conventional chemical pesticides may not be desirable or permissible either because of health and environmental concerns (including for organically certified crops) or because the development of pest resistance has reduced the efficacy of conventional chemical pesticides. The Company delivers EPA-approved and registered biopesticide products and other bio-based products that address the global demand for effective, safe and environmentally responsible products.

From October 2017 through January 2018, the Company borrowed, pursuant to a convertible promissory note (the "Secured December 2017 Convertible Note") as amended and restated on December 22, 2017, $6,000,000, including $4,000,000 borrowed in 2017 and $2,000,000 borrowed in January 2018.

In February 2018, the Company issued, pursuant to a securities purchase agreement (the "Securities Purchase Agreement") entered into on December 15, 2017, 70,514,000 unregistered shares of its common stock and converted $51,000,000 in outstanding debt principal (including $6,000,000 outstanding under the Secured December 2017 Convertible Note and $45,000,000 outstanding under long-term senior secured debt instruments) into a portion of the aforementioned common shares (the "February Stock and Debt Conversion Transaction"). The gross proceeds to the Company from the offering were approximately $24,000,000, which excludes the $6,000,000 in debt converted under the Secured December 2017 Convertible Note, and after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company, the aggregate net proceeds to the Company totaled approximately $21,800,000. See Notes 6 and 10 for further discussion of February Stock and Debt Conversion Transaction.

In April 2018, the Company completed a public offering of 8,336,250 registered shares of its common stock. The public offering price of the shares sold in the offering was $1.65 per share. The total gross proceeds to the Company from the offerings were $13,800,000. The estimated aggregate net proceeds to the Company from common stock sold under the shelf registration total approximately $12,700,000.

The Company is an early stage company with a limited operating history and has a limited number of commercialized products. As of March 31, 2018, the Company had an accumulated deficit of $266,179,000, has incurred significant losses since inception and expects to continue to incur losses for the foreseeable future. Until the completion of the IPO in August 2013, the Company had funded operations primarily with net proceeds from the private placements of convertible preferred stock, convertible notes, promissory notes and term loans, as well as with the proceeds from the sale of its products and payments under strategic collaboration and distribution agreements and government grants. The Company will need to generate significant revenue growth to achieve and maintain profitability. As of March 31, 2018, the Company had working capital of $18,845,000, including cash and cash equivalents of $14,757,000. In addition, as of March 31, 2018, the Company had debt and debt due to related parties of $13,826,000 and $7,285,000, respectively, for which the underlying debt agreements contain various financial and non-financial covenants, as well as certain material adverse change clauses. In addition, as of March 31, 2018, the Company had a total of $2,047,000 of restricted cash relating to these debt agreements (see Note 6).

The June 2014 Secured Promissory Note (as defined in Note 6) contains a material adverse change clause that could be invoked by the lender as a result of the uncertainty related to the Company's ability to continue as a going concern. If the lender were to declare an event of default, the entire amount of borrowings related to all debt agreements at that time would have to be reclassified as current in the financial statements. The lender has waived their right to deem recurring losses, liquidity, going concern, and financial condition a material adverse change through November 15, 2019. As a result, none of the long term portion of the Company's outstanding debt has been reclassified to current in these financial statements as of March 31, 2018.

If the Company breaches any of the covenants contained within the debt agreements or if the material adverse change clauses are triggered, the entire unpaid principal and interest balances would be due and payable upon demand. Without entering into a continuation of its current waiver, which expires November 15, 2019, entering into strategic agreements that include significant cash payments upfront, significantly increasing revenues from sales or raising additional capital through the issuance of equity, the Company expects it will exceed its maximum debt-to-worth requirement under a promissory note with Five Star Bank. Further, a violation of a covenant in one debt agreement will cause the Company to be in violation of certain covenants under each of its other debt agreements. Breach of covenants included in the Company's debt agreements, which could result in the lenders demanding payment of the unpaid principal and interest balances, would have a material adverse effect upon the Company and would likely require the Company to seek to renegotiate these debt arrangements with the lenders. If such negotiations are unsuccessful, the Company may be required to seek protection from creditors through bankruptcy proceedings. The Company's inability to maintain compliance with its debt covenants could have a negative impact on the Company's financial condition and ability to continue as a going concern.

The Company participates in a heavily regulated and highly competitive crop protection industry and believes that adverse changes in any of the following areas could have a material effect on the Company's future financial position, results of operations or cash flows: inability to obtain regulatory approvals, increased competition in the pesticide market, market acceptance of the Company's products, weather and other seasonal factors beyond the Company's control, litigation or claims against the Company related to intellectual property, patents, products or governmental regulation, and the Company's ability to support increased growth.

It is possible the Company may need to raise additional funds in the future. If so there can be no assurance that such efforts will be successful or that, in the event that they are successful, the terms and conditions of such financing will not be unfavorable. Any future equity financing may result in dilution to existing shareholders and any debt financing may include additional restrictive covenants. Any failure to obtain additional financing or to achieve the revenue growth necessary to fund the Company with cash flows from operations will have a material adverse effect upon the Company and will likely result in a substantial reduction in the scope of the Company's operations and impact the Company's ability to achieve its planned business objectives.

The accompanying financial statements have been prepared under the assumption that the Company will continue to operate as a going concern, which contemplates the realization of assets and the settlement of liabilities in the normal course of business. The condensed consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts of liabilities that may result from any inability of the Company to continue as a going concern. The Company adopted the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2014-15, *Presentation of Financial Statements – Going Concern (Subtopic 205-40)* effective December 31, 2016, which requires the Company to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the entity's ability to continue as a going concern within one year from the date of the issuance of these condensed consolidated financial statements.

The Company's historical operating results indicate substantial doubt exists related to the Company's ability to continue as a going concern. The Company believes that its existing cash and cash equivalents of $14,757,000 at March 31, 2018, expected revenues and, the net proceeds from equity financing discussed in Note 12 will be sufficient to fund operations as currently planned through one year from the date of the issuance of these financial statements. The Company believes that the actions discussed above are probable of occurring and mitigating the substantial doubt raised by the Company's historical operating results and satisfying the Company's estimated liquidity needs 12 months from the issuance of the financial statements. Cash on hand as of the issuance of these financial statements is estimated to be $21.0 million. However, the Company cannot predict, with certainty, the outcome of its actions to grow revenues or manage or reduce costs. The Company has based this belief on assumptions and estimates that may prove to be wrong, and the Company could spend its available financial resources less or more rapidly than currently expected. The Company may continue to require additional sources of cash for general corporate purposes, which may include operating expenses, working capital to improve and promote its commercially available products, advance product candidates, expand international presence and commercialization, general capital expenditures and satisfaction of debt obligations. Management may seek additional capital through debt financings, collaborative or other funding arrangements with partners, or through other sources of financing. Should the Company seek additional financing from outside sources, the Company may not be able to raise such financing on terms acceptable to the

Company or at all. If the Company is unable to raise additional capital when required or on acceptable terms, the Company may be required to scale back or to discontinue the promotion of currently available products, scale back or discontinue the advancement of product candidates, reduce headcount, file for bankruptcy, reorganize, merge with another entity, or cease operations.

2. Significant Accounting Policies

Basis of Presentation

The accompanying financial information as of March 31, 2018, and for the three months ended March 31, 2018 and 2017, has been prepared by the Company, without audit, in accordance with generally accepted accounting principles in the United States ("U.S. GAAP") and applicable rules and regulations of the Securities and Exchange Commission ("SEC") regarding interim financial reporting. Certain information and note disclosures normally included in annual financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to such SEC rules and regulations and accounting principles applicable for interim periods. However, the Company believes that the disclosures are adequate to make the information presented not misleading. The information included in this Quarterly Report on Form 10-Q should be read in connection with the consolidated financial statements and accompanying notes included in the Company's Annual Report filed on Form 10-K for the fiscal year ended December 31, 2017.

In the opinion of management, the condensed consolidated financial statements as of March 31, 2018, and for the three months ended March 31, 2018 and 2017, reflect all adjustments, which are normal recurring adjustments, necessary to present a fair statement of financial position, results of operations and cash flows. The results of operations for the three months ended March 31, 2018 are not necessarily indicative of the operating results for the full fiscal year or any future periods.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The Company used significant estimates in accounting for the useful lives of property, plant and equipment, reserves for inventory obsolescence, fair value estimates and in its going concern analysis.

Restricted Cash

The Company's restricted cash consists of cash that the Company is contractually obligated to maintain in accordance with the terms of its June 2014 Secured Promissory Note. See Note 6 for further discussion.

Cash and Cash Equivalents and Restricted Cash

The following table provides a reconciliation of cash, cash equivalents and restricted cash to amounts shown in the statement of cash flows in thousands:

	March 31, 2018	March 31, 2017
Cash and cash equivalents	$14,757	$1,782
Restricted cash, current portion	487	1,444
Restricted cash, less current portion	1,560	1560
Total cash, cash equivalents and restricted cash	$16,804	$4,786

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash, cash equivalents, accounts receivable and debt. The Company deposits its cash and cash equivalents with high credit quality domestic financial institutions with locations in the U.S. Such deposits may exceed federal deposit insurance limits. The Company believes the financial risks associated with these financial instruments are minimal.

The Company's customer base is dispersed across many different geographic areas, and currently most customers are pest management distributors in the U.S. Generally, receivables are due up to 120 days from the invoice date and are considered past due after this date, although the Company may offer extended terms from time to time.

Revenues generated from international customers were 18% for each of the three months ended March 31, 2018 and 2017.

The Company's principal sources of revenues are its Regalia, Grandevo and Venerate product lines. These three product lines accounted for 91% of the Company's total revenues for the three months ended March 31, 2018 and 2017.

Customers to which 10% or more of the Company's total revenues are attributable for any one of the periods presented consist of the following:

	CUSTOMER A		CUSTOMER B		CUSTOMER C		CUSTOMER D		CUSTOMER E	
Three months ended March 31,										
2018	23	%	14	%	0	%	9	%	6	%
2017	18	%	0	%	15	%	13	%	12	%

Customers to which 10% or more of the Company's outstanding accounts receivable are attributable as of either March 31, 2018 or December 31, 2017 consist of the following:

	CUSTOMER A		CUSTOMER B		CUSTOMER C		CUSTOMER D	
March 31, 2018	37	%	0	%	9	%	9	%
December 31, 2017	22	%	16	%	11	%	11	%

Concentrations of Supplier Dependence

The active ingredient in the Company's Regalia product line is derived from the giant knotweed plant, which the Company obtains from China. The Company currently has one supplier of this plant. Such single supplier acquires raw knotweed from numerous regional sources and performs an extraction process on this plant, creating a dried extract that is shipped to the Company's manufacturing plant. While the Company does not have a long-term supply contract with this supplier, the Company does have a long term business relationship with this supplier. The Company maintains 6-12 months of knotweed extract at any given time, but an unexpected disruption in supply could have an effect on Regalia supply and revenues. Although the Company has identified additional sources of raw knotweed, there can be no assurance that the Company will continue to be able to obtain dried extract from China at a competitive price

Deferred Cost of Product Revenues

Deferred cost of product revenues are stated at the lower of cost or net realizable value and include product sold where title has transferred but the criteria for revenue recognition have not been met. As of March 31, 2018 and December 31, 2017, the Company recorded deferred cost of product revenues of $3,000 and $3,063,000 respectively.

Deferred Revenue

When the Company receives consideration, or such consideration is unconditionally due, from a customer prior to transferring control of goods or services to the customer under the terms of a sales contract, the Company records deferred revenue, which represents a contract liability. The Company recognizes deferred revenue as net sales after the Company has transferred control of the goods or services to the customer and all revenue recognition criteria are met. The Company's deferred revenue is broken out as follows:

	March 31, 2018	December 31, 2017
Product revenues	$539	$ 6,449
Financing costs(1)	545	-
License revenues	1,731	1,790
	2,815	8,239
Less current portion	(303)	(6,193)
	$2,512	$ 2,046

[1]Financing costs relate to the implementation of ASC 606. Refer to the Company's revenue recognition policy in this note.

Revenue Recognition

On January 1, 2018, the Company adopted the new accounting standard Accounting Standards Codification ("ASC") 606, *Revenue from Contracts with Customers* and all the related amendments ("the new revenue standard") and applied it to all contracts using the modified retrospective method. The Company recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of accumulated deficit. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. For the three months ended March 31, 2018, the adoption of this standard had a material impact on the Company's financial statements, and it is expected to have a material impact on future periods, because the Company will no longer recognize revenue on a sell-through basis.

The cumulative effect of the changes made to the Company's condensed consolidated balance sheet on January 1, 2018 for the adoption of the new revenue standard was as follows (in thousands):

BALANCE SHEET	As Reported Balance at December 31, 2017	**Adjustments Due to ASC 606**	**Balance at January 1, 2018**
ASSETS			
Deferred cost of product revenues	$3,063	$ (3,058)	$5
LIABILITIES AND STOCKHOLDERS' EQUITY			
Deferred revenue, current portion	6,193	(5,893)	300
Deferred revenue, less current portion	2,046	524	2,570
Accumulated deficit	$(265,572)	$ 2,311	$(263,261)

In accordance with the new revenue standard requirements, the disclosure of the impact of adoption on the Company's Condensed Consolidated Balance Sheet and Condensed Consolidated Statement of Operations was as follows (in thousands):

	March 31, 2018		
BALANCE SHEET	As Reported	**Balances without Adoption of ASC 606**	**Effect of Change Higher/(Lower)**
ASSETS			
Deferred cost of product revenues	$3	$ 3,381	$ 3,384
LIABILITIES AND STOCKHOLDERS' EQUITY			
Deferred revenue, current portion	303	6,352	6,655
Deferred revenue, less current portion	2,512	(545)	1,967
Accumulated deficit	$(266,179)	$ (2,426)	$ (268,605)

	For the Three Months Ended March 31, 2018		
	As Reported	Activity Without Adoption of ASC 606	Effect of Change Higher/(Lower)
STATEMENT OF OPERATIONS			

Revenues			
Product	$4,224	$ (469)	$ 3,755
License	100	(42)	58
Cost of product revenues	2,242	(323)	1,919
Interest expense	(1,119)	72	(1,047)
Net loss	$(2,918)	$ (116)	$ (3,034)

Product Sales. The Company recognizes revenue for product sales at a point in time following the transfer of control of such products to the customers, which typically occurs upon shipment or delivery depending on the terms of the underlying contracts. The Company may enter into contracts in which the standalone selling prices (“SSP”) is different from the amount the Company is entitled to bill the customer. As of March 31, 2018, the Company had deferred product revenue in the amount of $539,000 associated primarily with billings in excess of SSP.

Licenses Revenues. The Company recognizes license revenues pursuant to strategic collaboration and distribution agreements under which the Company receives payments for the achievement of certain testing validation, regulatory progress and commercialization events. As these activities and payments are associated with exclusive rights that the Company provides in connection with strategic collaboration and distribution agreements over the term of the agreements, revenues related to the payments received are deferred and recognized over the term of the exclusive distribution period of the respective agreement.

Financing Component Revenues. The Company recognizes a financing component, if material, when the Company receives consideration from the customer, and when the Company expects control of the product or service to be transferred to the customer in a period of greater than one year from the date of receipt of the consideration.

Revenue recognition requires the Company to make a number of estimates that include variable consideration. For example, customers may receive sales or volume-based pricing incentives or receive incentives for providing the Company with marketing-related information. The Company makes estimates surrounding variable consideration and the net impact to revenues. In making such estimates, significant judgment is required to evaluate assumptions related to the amount of net contract revenues, including the impact of any performance incentives and the likelihood that customers will achieve them. In the event estimates related to variable consideration change, the cumulative effect of these changes is recognized as if the revised estimates had been used since revenue was initially recognized under the contract. Such revisions could occur in any reporting period, and the effects may be material.

From time to time, the Company offers certain product rebates to its distributors and growers, which are estimated and recorded as reductions to product revenues, and an accrued liability is recorded at the later of when the revenues are recorded or the rebate is being offered.

Contract Assets. The Company does not have contract assets since revenue is recognized as control of goods are transferred or as services are performed or such contract assets are incurred or expensed within one year of the recognition of the revenue.

Contract Liabilities. The contract liabilities consist of deferred revenue. The Company classifies deferred revenue as current or noncurrent based on the timing of when the Company expects to recognize revenue. Generally all contract liabilities, excluding deferred revenue, are expected to be recognized within one year and are included in accounts payable in the Company's condensed consolidated balance sheet.

Research, Development and Patent Expenses

Research and development expenses include payroll-related expenses, field trial costs, toxicology costs, regulatory costs, consulting costs and lab costs. Patent expenses include legal costs relating to the patents and patent filing costs. These costs are expensed to operations as incurred. For the three months ended March 31, 2018 and 2017, research and development expenses totaled $2,286,000 and $2,138,000, respectively, and patent expenses totaled $248,000 and $306,000, respectively.

Shipping and Handling Costs

Amounts billed for shipping and handling are included as a component of product revenues. Related costs for shipping and handling have been included as a component of cost of product revenues. Shipping and handling costs for the three months ended March 31, 2018 and 2017 were $174,000 and $104,000, respectively.

Advertising

The Company expenses advertising costs as incurred. Advertising costs for the three months ended March 31, 2018 and 2017 were $206,000 and $124,000, respectively.

Segment Information

The Company is organized as a single operating segment, whereby its chief operating decision maker assesses the performance of and allocates resources to the business as a whole.

Net Loss Per Share

Net loss per share is computed by dividing the net loss by the weighted average number of common shares outstanding for the period. The calculation of basic and diluted net loss per share is the same for all periods presented as the effect of certain potential common stock equivalents, which consist of stock options and warrants to purchase common stock and restricted stock units, are anti-dilutive due to the Company’s net loss position. Anti-dilutive common stock equivalents are excluded from diluted net loss per share. The following table sets forth the potential shares of common stock as of the end of each period presented that are not included in the calculation of diluted net loss per share because to do so would be anti-dilutive (in thousands):

	MARCH 31,

	2018	2017
Stock options outstanding	5,343	3,325
Warrants to purchase common stock	52,725	4,152
Restricted stock units outstanding	931	415

Recently Adopted Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, to clarify the principles of recognizing revenue and create common revenue recognition guidance between U.S. GAAP and International Financial Reporting Standards. Under ASU 2014-09, revenue is recognized when a customer obtains control of promised goods or services and is recognized at an amount that reflects the consideration expected to be received in exchange for such goods or services. In addition, ASU 2014-09 requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers.

The Company adopted ASU 2014-09 in the first quarter of 2018 using the modified-retrospective method. This adoption primarily affected the Company’s product revenues accounted for using the sell-through method under ASC 605*, Revenue Recognition,* and also the accounting for variable consideration in the form of customer incentives.

The Company adopted Accounting Standards Update 2014-09 (“ASU 2014-09”), which supersedes the revenue guidance under ASC 605, generally requires the Company to recognize revenue and profit from its product sales arrangements earlier and in a more linear fashion than historical practice under ASC 605, including the estimation of sell-through revenue and variable consideration that would otherwise have been deferred. Following the adoption of ASU 2014-09, the revenue recognition for the Company’s license arrangements remained materially consistent with its historical practice. See the tables above in this note for the effects of the adoption of ASU 2014-09 on the Company’s condensed consolidated financial statements as of January 1, 2018 and for the three months ended March 31, 2018. See “Revenue Recognition” above for further discussion of the effects of the adoption of ASU 2014-09 on the Company’s significant accounting policies. The adoption of this standard had a material impact on the Company’s financial statements as disclosed above and is expected to continue to have a material impact for the foreseeable future.

The Company adopted Accounting Standards Update No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments (“ASU 2016-15”). The amendment updated and clarified how certain cash receipts and cash payments are to be presented and classified in the statement of cash flows. The adoption of this standard did not have a material impact on the condensed consolidated financial statements and is not expected to have a material impact on future periods.

In March 2018, the Financial Accounting Standards Board (“FASB”) issued guidance pertaining to the accounting of the Tax Cuts and Jobs Act (“TCJA”), allowing companies a year to finalize and record any provisional or inestimable impacts of the TCJA. This guidance is effective upon issuance during this quarter. The adoption of this particular guidance did not have a material effect on the Company’s financial statements.

In July 2017, the FASB issued ASU No. 2017-011, “Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815), (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception,” (ASU No. 2017-11) which allows for the exclusion of a down round feature, when evaluating whether or not an instrument or embedded feature requires derivative classification. The Company early adopted this guidance beginning January 1, 2018. The adoption of this standard had a material impact on the Company’s financial statements as the Company was not required to classify the warrants issued in conjunction with the February 5, 2018 equity financing as derivatives.

In March 2018, the FASB issued ASU No. 2018-05, “Income Taxes (Topic 740)—Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118,” (ASU No. 2018-05) which amends certain Securities and Exchange Commission (SEC) material in Topic 740 for the income tax accounting implications of the recently issued Tax Reform. This guidance clarifies the application of Topic 740 in situations where a registrant does not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting under Topic 740 for certain income tax effects of Tax Reform for the reporting period in which Tax Reform was enacted. The adoption of this guidance did not have a material impact on the financial statements of the Company.

Recently Issued Accounting Pronouncements

In February 2018, the FASB issued ASU No. 2018-02, “Income Statement—Reporting Comprehensive Income (Topic 220),” (ASU No. 2018-02) which allows for the stranded tax effects resulting from the Tax Cuts and Jobs Act of 2017 (Tax Reform) to be reclassified from accumulated other comprehensive income to retained earnings. The provisions of ASU No. 2018-02 are effective for annual reporting periods beginning after December 15, 2018, and interim reporting periods within those annual periods, with early adoption permitted. This ASU shall be applied either at the beginning of the annual or interim period of adoption or retrospectively to each period in which the income tax effects of Tax Reform affects the items remaining in accumulated other comprehensive income (loss). The Company has not yet determined the impact of implementing this new standard.

3. Fair Value Measurements

Accounting Standards Codification ("ASC") 820, *Fair Value Measurements* ("ASC 820"), clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability.

ASC 820 requires that the valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. ASC 820 establishes a three tier value hierarchy, which prioritizes inputs that may be used to measure fair value as follows:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs other than quoted prices in active markets for identical assets and liabilities, quoted prices for identical or similar assets or liabilities in inactive markets or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Inputs that are generally unobservable and typically reflect management's estimate of assumptions that market participants would use in pricing the asset or liability.

The following table presents the Company's financial assets measured at fair value on a recurring basis as of March 31, 2018 and December 31, 2017 (in thousands):

	MARCH 31, 2018			
	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Liabilities				
Derivative liability	$—	$ —	$ —	$ —

	DECEMBER 31, 2017			
	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Derivative liability	$674	$ —	$ —	$ 674

The Company estimated the fair value of the derivative liability as of February 5, 2018 and as of December 31, 2017 using an option pricing model. See Note 6 for further discussion of the extinguishment of the derivative liability in conjunction with the conversion of debt into common shares and issuance of warrants. The fair value is subjective and is affected by certain significant inputs to the valuation model, which are disclosed in the table below. The fair value of the derivative liability is based upon the outputs of the option pricing model. As the option pricing model estimates the fair value of derivative liability using unobservable inputs, it is considered to be a Level 3 fair value measurement.

As a result of the change in the estimated fair value between December 31, 2017 and February 5, 2018, the Company recognized a net loss from the total change in estimated fair value of the derivative liabilities as shown in the tables below. This loss is included in the change in estimated fair value of derivative liability in the Company's condensed consolidated statement of operations.

The following table provides a reconciliation of the activity between the beginning date and ending balances for the derivative liability measured at fair value using significant unobservable inputs (Level 3) (in thousands):

	Derivative LIABILITY
Fair value at December 31, 2017	$ 674
Derivative liability issued	573
Change fair value of financial instruments	5,177
Derivative liability extinguished	(6,424)
Fair value at March 31, 2018	$ —

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The following table represents significant unobservable inputs used in determining the fair value of the derivative liability:

	MARCH 31, 2018		DECEMBER 31, 2017	
Stock Price volatility	60	%	60	%
Risk-free rate	1.46	%	1.28	%
Probability weighted term in years	0.18		0.42	

4. Inventories

Inventories, net consist of the following (in thousands):

As of March 31, 2018 and December 31, 2017, the Company had $306,000 and $252,000, respectively, in reserves against its inventories.

	MARCH 31, 2018	DECEMBER 31, 2017
Raw materials	$ 3,339	$ 2,310
Work in progress	2,174	2,441
Finished goods	4,534	5,076
	$ 10,047	$ 9,827

5. Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	MARCH 31, 2018	DECEMBER 31, 2017
Accrued compensation	$ 1,582	$ 1,825
Accrued warranty costs	472	556
Accrued legal costs	616	1,558
Accrued customer incentives	2,151	1,986
Accrued liabilities, other	1,984	2,264

$ 6,805	$ 8,189

The Company warrants the specifications and/or performance of its products through implied product warranties and has extended product warranties to qualifying customers on a contractual basis. The Company estimates the costs that may be incurred during the warranty period and records a liability in the amount of such costs at the time product is shipped. The Company's estimate is based on historical experience and estimates of future warranty costs as a result of increasing usage of the Company's products. During the three months ended March 31, 2018, the Company recognized $44,000 in warranty expense associated with product shipments for the period. This expense was reduced by $121,000 as a result of the historical usage of warranty reserves being lower than previously estimated and $7,000 in settlements during the period. The Company periodically assesses the adequacy of its recorded warranty liability and adjusts the amount as necessary. Changes in the Company's accrued warranty costs during the period are as follows (in thousands):

Balance at December 31, 2017	$556
Warranties issued (released) during the period	(77)
Settlements made during the period	(7)
Balance at March 31, 2018	$472

6. Debt

Debt, including debt due to related parties, consists of the following (in thousands):

	MARCH 31, 2018	DECEMBER 31, 2017
Secured promissory notes ("October 2012 and April 2013 Secured Promissory Notes") bearing interest at 8.00% per annum, interest and principal due at maturity (December 31, 2022), collateralized by substantially all of the Company's assets, net of unamortized debt discount as of March 31, 2018 and December 31, 2017 of $0 and $103, respectively, imputed interest rate of 0% (see Note 6)	3,411	12,347
Secured promissory note ("June 2014 Secured Promissory Note") bearing interest at prime plus 2% (6.5% as of March 31, 2018) per annum, payable monthly through June 2036, collateralized by certain of the Company's deposit accounts and MMM LLC's inventories, chattel paper, accounts, equipment and general intangibles, net of unamortized debt discount as of March 31, 2018 and December 31, 2017 of $220 and $226, respectively, discount is based on imputed interest rate of 6.7%	8,811	8,872
Senior secured convertible promissory notes ("Secured December 2017 Convertible Note") bearing interest at 10% per annum, interest and principal through the conversion date in February 2018, collateralized by substantially all of the Company's assets, net of unamortized discount as of March 31, 2018 and December 31, 2017 of $0 and $510, respectively	—	3,490
Secured revolving borrowing ("LSQ Financing") bearing interest at (12.8% annually) payable through the lenders direct collection of certain accounts receivable through May 2018, collateralized by substantially all of the Company's personal property, net of unamortized debt discount as of March 31, 2018 and December 31, 2017 of $0 and $54, respectively, with an imputed interest rate of 43.3%	1,604	1,222
Senior secured promissory notes due to related parties ("August 2015 Senior Secured Promissory Notes") bearing interest at 8% per annum, interest and principal payable at maturity (December 31, 2022), collateralized by substantially all of the Company's assets, net of unamortized discount as of March 31, 2018 and December 31, 2017 of $0 and $2,178, respectively debt discount is based on imputed interest rate of 0% (see Note 9)	7,285	37,822
Debt, including debt due to related parties	21,111	63,753
Less debt due to related parties	(7,285)	(37,822)
Less current portion	(1,852)	(1,524)
	$ 11,974	$ 24,407

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As of March 31, 2018, aggregate contractual future principal payments on the Company's debt, including debt due to related parties, are due as follows (in thousands):

Period ended March 31, 2018	
2018	$1,800
2019	279
2020	296
2021	318
2022	7,789
Thereafter	7,604
Total future principal payments	18,086
Interest payments included in debt balance (1)	3,241
	$21,331

(1) Due to the debt extinguishment requirement, the Company as included both accrued interest and future interest in the debt balance for certain outstanding debt as further discussed in Notes 6 and 9.

The fair value of the Company's outstanding debt obligations as of March 31, 2018 and December 31, 2017 was $12,315,000 and $21,133,000, respectively, which as of March 31, 2018 was estimated based on a discounted cash flow model using an estimated market rate of interest of 15% for the fixed rate debt and 6.5% for the variable rate debt, and is classified as Level 3 within the fair value hierarchy. As of December 31, 2018, for the October 2012 and April 2013 Secured Promissory Notes, the debt was valued by applying the ratio of the value of common stock the lender agreed to take as consideration in connection with the conversion to equity and applying this ratio to the outstanding principal balance. The Company used 6.5%, the current interest rate, to value the variable rate debt. This debt is classified as Level 3 within the fair value hierarchy. The debt entered into during 2017 was valued using the outstanding principal balance.

The following is a reconciliation of interest expense for the debt outstanding during the three months ended (in thousands).

	March 31, 2018		
	Interest Expense	Related Party	**Non cash**
October 2012 and April 2013 Secured Promissory Notes	$213	$ —	$42
June 2014 Secured Promissory Note	152	—	6
December 2017 Convertible Note	529	—	322
LSQ Financing	152	—	54

August 2015 Senior Secured Promissory Notes	—	434	114
ASC 606 Financing Component	73	—	73
	$1,119	$ 434	$611

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	March 31, 2017		
	Interest Expense	Related Party	Non cash
October 2012 and April 2013 Secured Promissory Notes	$483	$—	$46
June 2014 Secured promissory note	134	—	5
December 2017 Convertible Note (1)	—	—	—
LSQ Financing (1)	—	—	—
August 2015 Senior Secured Promissory Notes	—	1,074	286
ASC 606 Financing Component (1)	—	—	—
Capital leases and other	19	—	—
	$636	$1,074	$337

(1) There were no outstanding borrowings under this debt instrument during the three months ended March 31, 2017.

Secured Promissory Notes

On October 2, 2012, the Company borrowed $7,500,000 pursuant to senior notes ("October 2012 Secured Promissory Notes") with a group of lenders. On April 10, 2013 ("Conversion Date"), the Company entered into an amendment to increase, by up to $5,000,000, the amount available under the terms of the loan agreement with respect to the October 2012 Secured Promissory Notes. Under this amendment, an additional $4,950,000 was issued in partial consideration for $3,700,000 in cash received and in partial conversion for the cancellation of a $1,250,000 subordinated convertible note (collectively, "April 2013 Secured Promissory Notes"). The total amount borrowed under the amended loan agreement for the October 2012 Secured Promissory Notes and the April 2013 Secured Promissory Notes increased from $7,500,000 to $12,450,000 as of the Conversion Date. The October 2012 and April 2013 Secured Promissory Notes bore interest at 14% at until February 5, 2018.

On February 5, 2018, the Company converted, pursuant to an amendment, dated December 15, 2017, to the October 2012 and April 2013 Secured Promissory Notes, $10,000,000 aggregate principal amount of indebtedness outstanding under the October 2012 and April 2013 Secured Promissory Notes to an aggregate of 5,714,285 shares of common stock and warrants to purchase 1,142,856 shares of common stock (such conversion, the "Snyder Debt Conversion"), such that $2,450,000 of principal under the October 2012 and April 2013 Secured Promissory Notes is outstanding as of March 31, 2018. Simultaneously with the Snyder Debt Conversion, the maturity of the October 2012 and April 2013 Secured Promissory Notes was extended to December 31, 2022 ("Maturity Date"), the interest was reduced from 14% to 8% and all interest payments under the October 2012 and April 2013 Secured Promissory Notes were deferred to the Maturity Date. This loan is collateralized by substantially all of the Company's assets. The October 2012 and April 2013 Secured Promissory Notes contain representations and warranties by the Company and the lender, certain indemnification provisions in favor of the lenders and customary covenants (including limitations on other debt, liens, acquisitions, investments and dividends), and events of default (including payment defaults, breaches of covenants, a material impairment in the lender's security interest or in the collateral, and events relating to bankruptcy or insolvency). The October 2012 and April 2013 Secured Promissory Notes contain several restrictive covenants. The

Company is in compliance with all related covenants, or has received an appropriate waiver of these covenants.

In conjunction with the Snyder Debt Conversion, the Company accounted for the partial debt extinguishment under the troubled debt restructuring accounting guidance. The Company recognized a gain of $2,821,000 for the three months ended March 31, 2018 on partial extinguishment of the October 2012 and April 2013 Secured Promissory Notes. Because the Company recognized a gain on the partial extinguishment of debt, the Company was required to include all future interest and additional consideration, which included accrued interest, under the terms of this agreement as a reduction of the gain. As a result, the amount of the debt on the Company's balance sheet related to the October 2012 and April 2013 Secured Promissory Notes is $3,411,000, as compared to $2,450,000 of contractual principal outstanding thereunder. Going forward, subject to future amendments to debt agreement or costs, the Company will not recognize future interest expense on the October 2012 and April 2013 Secured Promissory Notes.

The accounting for the change due to the Snyder Debt Conversion is as follows (in thousands):

December 31, 2017	$12,347
Conversion of debt into equity	(10,000)
Change in discount, net	103
Future interest expense	961
March 31, 2018	$3,411

Secured Promissory Note

In June 2014, the Company borrowed $10,000,000 pursuant to a business loan agreement and promissory note ("June 2014 Secured Promissory Note") with Five Star Bank ("Lender") which bears interest at 6.5% as of March 31, 2018. The interest rate is subject to change and is based on the prime rate plus 2.00% per annum. The June 2014 Secured Promissory Note is repayable in monthly payments of $71,051 and adjusted from time-to-time as the interest rate changes, with the final payment due in June 2036. Certain of the Company's deposit accounts and MMM LLC's inventories, chattel paper, accounts, equipment and general intangibles have been pledged as collateral for the promissory note. The Company is required to maintain a deposit balance with the Lender of $1,560,000, which is recorded as restricted cash included in non-current assets. In addition, until the Company provides documentation that the proceeds were used for construction of the Company's manufacturing plant, proceeds from the loan will be maintained in a restricted deposit account with the Lender. As of March 31, 2018, the Company had $487,000 remaining in this restricted deposit account, which is recorded as restricted cash included in current assets. The June 2014 Secured Promissory Note contains representations and warranties by the Company and the Lender, certain indemnification provisions in favor of the Lender and customary covenants (including limitations on other debt, liens, acquisitions, investments and dividends), and events of default (including payment defaults, breaches of covenants, a material impairment in the Lender's security interest or in the collateral, and events relating to bankruptcy or insolvency). The June 2014 Secured Promissory Note contains several restrictive covenants and the most significant of which requires the Company to maintain a debt to net worth ratio of no greater than 4.0 to 1.0 at all times. The Company is in compliance with all related covenants, or has received an appropriate waiver of these covenants.

Secured Convertible Promissory Note

On October 12, 2017, the Company and Dwight W. Anderson ("Anderson") entered into a $1,000,000 convertible promissory note, which was restated in its entirety by a convertible promissory note entered into by the Company and Anderson on October 23, 2017 (the "October 2017 Convertible Note"). The October 2017 Convertible Note was an unsecured promissory note in the aggregate principal amount of up to $6,000,000. The Company's ability to borrow under the October 2017 Convertible Note was subject to Anderson's approval and due on October 23, 2020 (the " Anderson Maturity Date"). Under the terms of the October 2017 Convertible Note, from the date of the closing through December 31, 2017, the October 2017 Convertible Note bore interest at a rate of 1% per annum, payable in arrears on the Anderson Maturity Date, unless earlier converted into shares of the Company's common stock as described below.

Thereafter, beginning January 1, 2018, the October 2017 Convertible Note bore interest at a rate of 10% per annum, payable in arrears on the Anderson Maturity Date, unless earlier converted into shares of the Company's common stock as described below.

Any or all of the principal or accrued interest under the October 2017 Convertible Note was convertible into shares of the Company's common stock at a rate of one share of common stock per $1.00 of converting principal or interest, rounded down to the nearest share with any fractional amounts cancelled, at the election of Anderson by delivery of written notice to the Company. In addition, upon the consummation of a qualified equity financing of the Company prior to the Anderson Maturity Date, the aggregate outstanding principal balance of the October 2017 Convertible Note and all accrued and unpaid interest thereon could be converted, at the option of Anderson, into that number of the securities issued and sold in such financing, determined by dividing (a) such aggregate principal and accrued interest amounts, by (b) the purchase price per share or unit paid by the purchasers of the Company's securities issued and sold in such financing. Notwithstanding the foregoing, Anderson's ability to affect any such conversions was limited by applicable provisions governing issuances of shares of the Company's common stock under the rules of The Nasdaq Capital Market, subject to the Company's receipt of any applicable waivers thereof, and any amounts not issuable to Anderson in the Company's equity securities as a result of this limitation will be payable in cash.

On December 15, 2017, the Company entered into the Securities Purchase Agreement with an affiliate of Anderson and certain other accredited investors (collectively, the "Buyers"). In conjunction with the transaction contemplated in the Securities Purchase Agreement, Anderson was entitled to convert any portion of the balance outstanding under the October 2017 Convertible Note and any accrued interest into shares of the Company's common stock at a rate of one share of common stock per $0.50. Anderson's ability to affect conversions at the $0.50 rate was subject to, among other things, approval of the Company's shareholders, which was received on January 31, 2018.

On December 22, 2017, the Company and Anderson amended and restated in its entirety the terms of the October 2017 Convertible Note ("Secured December 2017 Convertible Note"). The Secured December 2017 Convertible Note was a secured promissory note in the aggregate principal amount of up to $6,000,000, at Anderson's sole discretion, due on October 12, 2020 (the "Maturity Date"). As of February 5, 2018, the outstanding principal balance under the Secured December Convertible Note was $6,000,000. The interest rate and conversion terms of the Secured December 2017 Convertible Note remained unchanged from the terms of the October 2017 Convertible Note as described above.

On February 5, 2018, the holder converted the outstanding principal of $6,000,000 under the Secured December 2017 Convertible Note into common shares of the Company in accordance with the terms of the Securities Purchase Agreement which provided for conversion of the outstanding balance at a rate of $0.50 per common share. After the conversion into common shares on February 5, 2018, there was no outstanding balance under the Secured December 2017 Convertible Note.

The Company accounted for the full conversion of the Secured December 2017 Convertible Note using the accounting guidance related to an induced debt conversion of convertible notes. Under the induced conversion guidance, the Company recognized a loss on conversion in the amount of $9,867,000 associated with the change between the debt's original terms and the induced conversion terms. This loss related to the induced conversion feature was partially offset by a gain on extinguishment of $6,424,000 of certain other elements of the Secured December 2017 Convertible Note.

The accounting for the change due to the Secured December 2017 Convertible Note is as follows (in thousands):

December 31, 2017	$3,490
Increase in debt	2,000
Conversion of debt into equity	(6,000)
Change in discount, net	510
March 31, 2018	$-

LSQ Financing

On March 24, 2017, the Company entered into an Invoice Purchase Agreement (the "LSQ Financing") with LSQ Funding Group, L.C. ("LSQ"), pursuant to which LSQ may elect to purchase up to $7,000,000 of eligible customer invoices from the Company. The Company's obligations under the LSQ Financing are secured by a lien on substantially all of the Company's personal property; such lien is first priority with respect to the Company's accounts receivable, inventory, and related property, pursuant to an intercreditor agreement, dated March 22, 2017 (the "Three Party Intercreditor Agreement"), with Gordon Snyder, an individual, as administrative agent for the Snyder lenders (the "Snyder Agent"), on behalf of the Snyder lenders, and the agent for the holders of the August 2015 Senior Secured Promissory Notes.

Advances by LSQ may be made at an advance rate of 80% of the face value of the receivables being sold. The Company also pays to LSQ (i) an invoice purchase fee equal to 1% of the face amount of each purchased invoice, at the time of the purchase, and (ii) a funds usage fee equal to 0.035%, payable monthly in arrears. An aging and collection fee is charged at the time when the purchased invoice is collected, calculated as a percentage of the face amount of such invoice while unpaid (which percentage ranges from 0% to 0.35% depending upon the duration the invoice remains outstanding). The original LSQ Financing was effective for one year with automatic one year renewals thereafter unless terminated within a 30-day window near the end of the then-effective term; a termination fee is due upon early termination by the Company if such termination is not requested within such 30-day window. The agreement contains representations and warranties by the Company and LSQ, certain indemnification provisions in favor of LSQ and customary covenants (including limitations on other debt, liens, acquisitions, investments and dividends), and events of default (including payment defaults, breaches of covenants, a material impairment in LSQ's security interest or in the collateral, and events relating to bankruptcy or insolvency). The Company is in compliance with all terms of the agreement,

In January 2018, the Company notified LSQ that it would be terminating the LSQ Financing in March 2018. In March 2018, the Company and LSQ amended the LSQ Financing agreement and extended the term for an additional 60 days. The events of default under the LSQ Financing include failure to pay amounts due, failure to turn over amounts due to LSQ within a cure period, breach of covenants, falsity of representations, and certain insolvency events. As of March 31, 2018, $1,604,000 was outstanding under the LSQ Financing.

7. Warrants

The following table summarizes information about the Company's common stock warrants outstanding as of March 31, 2018 (in thousands, except exercise price data):

DESCRIPTION	ISSUE DATE	EXPIRATION DATE	NUMBER OF SHARES SUBJECT TO WARRANTS ISSUED	EXERCISE PRICE
In connection with June 2013 Credit Facility (June 2013 Warrants)	June 2013	June 2023 (1)	27	$ 8.40
In connection with August 2015 Senior Secured Promissory Notes (August 2015 Warrants)	August 2015	August 2023	4,000	$ 1.91
In connection with October 2012 and April 2013 Secured Promissory Notes (November 2016 Warrants)	November 2016	November 2026	125	$ 2.38
In connection with June 2017 Consulting Agreement (November 2017 Warrants)	June 2017	June 2027	80	$ 1.10
In connection with February 2018 Financing Transaction (February 2018 Warrants 1)	February 2018	December 2020	43,350	$ 1.00
In connection with February 2018 Financing Transaction (February 2018 Warrants 2)	February 2018	December 2020	5,143	$ 1.25
			52,725	

As of March 31, 2018, the weighted average remaining contractual life and exercise price for these warrants is 3.0 years and $1.10, respectively.

(1) The June 2013 Warrants expire upon the earlier to occur of (i) the date listed above; (ii) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any transfer of more than 50% of the voting power of the Company, reorganization, merger or consolidation, but excluding any merger effected exclusively for the purpose of changing the domicile of the Company); or (iii) a sale of all or substantially all of the assets of the Company unless the Company's stockholders of record as constituted immediately prior to such acquisition or sale will, immediately after such acquisition or sale (by virtue of securities issued as consideration for the Company's acquisition or sale or otherwise), hold at least fifty percent (50%) of the voting power of the surviving or acquiring entity.

8. Share-Based Plans

As of March 31, 2018, there were 5,343,000 options outstanding, 931,000 restricted stock units outstanding and 4,883,000 share-based awards available for grant under the outstanding equity incentive plans.

For the three months ended March 31, 2018 and 2017, the Company recognized share-based compensation of $491,000 and $582,000, respectively.

During the three months ended March 31, 2018 and 2017, the Company granted options to purchase 2,396,000 and 31,000 shares of common stock, respectively, at a weighted-average exercise price of $1.87 and $2.10, respectively. During the three months ended March 31, 2018 there were no options exercised. During the three months ended March 31, 2017, options to purchase an aggregate of 14,000 shares were exercised at a weighted-average exercise price of $1.21 per share.

The following table summarizes the activity of restricted stock units from December 31, 2017 to March 31, 2018 (in thousands, except weighted average grant date fair value):

	SHARES OUTSTANDING	WEIGHTED AVERAGE GRANT DATE FAIR VALUE
Nonvested at December 31, 2017	335	$ 0.94
Granted	368	1.60
Vested	(283)	1.54
Forfeited	(32)	1.06
Nonvested at March 31, 2018	388	$ 1.14

During the three months ended March 31, 2018, the Company granted 105,000 restricted stock units in partial satisfaction of incentive compensation due to certain executives as of December 31, 2017. There were no such grants during the three months ended March 31, 2017. This grant resulted in reclass of $205,000 from accrued liabilities to additional paid in capital as of March 31, 2018.

9. Commitments and Contingencies

Operating Leases

In September 2013 and then amended in April 2014, the Company entered into a lease agreement for approximately 27,300 square feet of office and laboratory space located in Davis, California. The initial term of the lease is for a period of 60 months and commenced in August 2014. The monthly base rent is $44,000 per month for the first 12 months with a 3% increase each year thereafter. Concurrent with this amendment, in April 2014, the Company entered into a lease agreement with an affiliate of the landlord to lease approximately 17,400 square feet of office and laboratory space in the same building complex in Davis, California. The initial term of the lease is for a period of 60 months and commenced in August 2014. The monthly base rent is $28,000 with a 3% increase each year thereafter.

On January 19, 2016, the Company entered into an agreement with a sublessee to sublease approximately 3,800 square feet of vacant office space located in Davis, California pursuant to the terms of its lease agreement. The initial term of the sublease is for a period of approximately 43 months and commenced on February 1, 2016. The monthly base rent is approximately $5,000 per month for the first 12 months with a 5% increase each year thereafter.

Litigation

On April 3, 2018, the Company was named as a defendant in a complaint filed by Piper Jaffray, Inc. (“Piper”) with the Superior Court of the State of Delaware. The Company was informed of and received Piper’s complaint and related documents on April 5, 2018, following the filing of the Company’s Annual Report on Form 10-K for the year ended December 31, 2017. Piper’s complaint alleges one breach of contract claim, specifically, that the Company breached an engagement letter with Piper by failure to pay a $2,000,000 transaction fee, which Piper alleges is due under the engagement letter as a result of the Company’s consummation of its private placement and debt refinancing transactions in February 2018. Piper’s complaint includes a demand for payment the foregoing transaction fee, in addition to interest and costs and expenses incurred in pursuing the action, including reasonable attorneys’ fees. While the Company believes Piper’s complaint is without merit, this matter is at an early stage, and the outcome of this matter is not presently determinable

10. Related Party Transactions

August 2015 Senior Secured Promissory Notes

On August 20, 2015, the Company entered into a purchase agreement with Ivy Science & Technology Fund, Waddell & Reed Advisors Science & Technology Fund and Ivy Funds VIP Science and Technology, each an affiliate of Waddell & Reed, which is a beneficial owner of more than 5% of the Company’s common stock. Pursuant to such purchase agreement, the Company sold to such affiliates senior secured promissory notes (“August 2015 Senior Secured Promissory Notes”) in the aggregate principal amount of $40,000,000. The August 2015 Senior Secured Promissory Notes bear interest at a rate of 8% per annum. The first interest payment was payable December 31, 2015 and until February 5, 2018, interest was payable semi-annually on June 30 and December 31. Until February 5, 2018, principal payments of $10,000,000, $10,000,000, and $20,000,000 were payable on the third, fourth and fifth anniversaries of the closing date of the August 2015 Senior Secured Promissory Notes. Debt due to related parties as of March 31, 2018 was $7,285,000. The fair value of the Company’s debt due to related parties was $3,588,000 and $21,714,000 as of March 31, 2018 and December 31, 2017, respectively. This debt was valued by applying the same ratio of the value of common stock the lender agreed to take as consideration for a reduction in the outstanding principal balance and applying this ratio to the outstanding principal balance. The August 2015 Senior Secured Promissory Notes contain representations and warranties by the Company and the lenders, certain indemnification provisions in favor of the lenders and customary covenants (including limitations on other debt, liens, acquisitions, investments and dividends), and events of default (including payment defaults, breaches of covenants, a material impairment in the Lender’s security interest or in the collateral, and events relating to bankruptcy or insolvency). The August 2015 Senior Secured Promissory Notes contain several restrictive covenants and the most significant of which requires the Company to maintain a minimum cash balance of $15,000,000. This covenant was waived in the second quarter of 2016. The Company is in compliance with all other related covenants, or has received an appropriate waiver of these covenants.

On February 5, 2018, the holders of the August 2015 Senior Secured Promissory Notes, pursuant to an amendment dated December 15, 2017, converted $35,000,000 of the then outstanding debt into 20,000,000 shares of common stock and warrants to purchase 4,000,000 shares of common stock (such conversion, the “Waddell Debt Conversion”). After the conversion, $5,000,000 in principal remained outstanding. Simultaneously with the Waddell Debt Conversion, the maturity of the August 2015 Senior Secured Promissory Notes was extended to December 31, 2022, and payment of all future interest was deferred to maturity on December 31, 2022, and Ospraie was granted a right of first refusal to acquire the August 2015 Senior Secured Promissory Notes.

In conjunction with the Waddell Debt Conversion, the Company accounted for the partial debt extinguishment under the troubled debt restructuring accounting guidance. The Company recognized a gain of $9,622,000 for the three months ended March 31, 2018 on partial extinguishment of the August 2015 Senior Secured Promissory Notes. Because the Company recognized a gain on the partial extinguishment of debt, the Company was required to include all future interest and additional consideration, which included accrued interest, under the terms of this agreement as a reduction of the gain. As a result, the amount of the debt on the Company’s balance sheet related to the August 2015 Senior Secured Promissory Notes is $7,285,000, as compared to $5,000,000 of contractual principal amount outstanding thereunder. Going forward, subject to future amendments to debt agreement or costs, the Company will not recognize future interest expense on the August 2015 Senior Secured Promissory Notes.

The accounting for the change due to the August 2015 Senior Secured Promissory Notes is as follows (in thousands):

December 31, 2017	$37,822	
Conversion of debt into equity	(35,000)	
Change in discount, net	2,178	
Accrued and future interest expense	2,285	(1)
March 31, 2018	$7,285	

(1) Includes reclassification of $324 thousand in accrued interest to debt.

11. Equity Offering and Related Transactions

On February 5, 2018 pursuant to a private placement, the Company issued 70,514,000 shares of common stock and warrants to purchase 48,493,000 shares of common stock. Of the shares issued, 44,000,000, 25,714,000 and 800,000 shares were issued pursuant to the Securities Purchase Agreement, certain debt agreement amendments (see Notes 6 and 10) and as part of a placement agent fee, respectively. Of the warrants, warrants to purchase 41,333,000, 5,143,000 and 2,017,000 shares were issued pursuant to the Securities Purchase Agreement, certain debt agreements (see Notes 6 and 10) and as part of a placement agent fee, respectively. For further discussion of the warrants, see Note 7.

The gross proceeds from the 44,000,000 shares issued under the Securities Purchase Agreement were $30,000,000 which included the conversion of $6,000,000 in convertible under the then outstanding December 2017 Convertible Note. Also, the Company converted $10,000,000 in debt under the October 2012 and April 2013 Secured Promissory Notes and $35,000,000 in debt under the Senior Secured Promissory Notes into a total of 25,714,000 shares. The estimated net proceeds from this private placement, inclusive of the cash received from the December 2017 Convertible Note, was $27,300,000. The Company incurred $2,700,000 in expenses associated with the private placement and debt conversion of which $2,180,000 was related to the equity component of these transactions.

The Company classified the warrants issued in connection with the Securities Purchase Agreement and conversion of debt into equity as equity. As a result of the financing transaction discussed above, the Company’s additional paid in capital and common stock increased by $64,312,000 and $1,000, respectively. The Company allocated the value of the financing transaction to the common shares issued in the amount of $53,385,000 and to the warrants issued in the amount of $10,928,000 based on the relative fair values of each on the transaction date.

12. Subsequent Events

Common Stock Offering

In April 2018, the Company completed an underwritten public offering of 8,366,250 registered shares of its common stock. The public offering price of the shares sold in the offering was $1.65 per share. The total gross proceeds to the Company from the offerings were $13,800,000. The estimated aggregate net proceeds to the Company from common stock sold in the offering totaled approximately $12,700,000.

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

You should read the following discussion of our financial condition and results of operations in connection with our condensed consolidated financial statements and the related notes included elsewhere in this Quarterly Report on Form 10-Q and with our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the Securities and Exchange Commission (the "Annual Report").

In addition to historical condensed consolidated financial information, this Quarterly Report on Form 10-Q contains forward-looking statements that reflect our plans, estimates and beliefs. Forward-looking statements are identified by words such as "believe," "will," "may," "estimate," "continue," "anticipate," "intend," "should," "plan," "expect," "predict," "could," "potentially" or the negative of these terms or similar expressions. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition, or state other "forward-looking" information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements. For example, forward-looking statements include any statements regarding the strategies, prospects, plans, expectations or objectives of management for future operations, the progress, scope or duration of the development of product candidates or programs, clinical trial plans, timelines and potential results, the benefits that may be derived from product candidates or the commercial or market opportunity in any target indication, our ability to protect intellectual property rights, our anticipated operations, financial position, revenues, costs or expenses, statements regarding future economic conditions or performance, statements of belief and any statement of assumptions underlying any of the foregoing. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere, including Part II, Item 1A—"Risk Factors," in this Quarterly Report on Form 10-Q, and in Part I—Item 1A—"Risk Factors" of our Annual Report. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available to our management. These statements, like all statements in this report, speak only as of their date, and we undertake no obligation to update or revise these statements in light of future developments. We caution investors that our business and financial performance are subject to substantial risks and uncertainties.

Overview

We make bio-based pest management and plant health products. Bio-based products are comprised of naturally occurring microorganisms, such as bacteria and fungi, and plant extracts. Our current products target the major markets that use conventional chemical pesticides, including certain agricultural and water markets, where our bio-based products are used as alternatives for, or mixed with, conventional chemical products. We also target new markets for which (i) there are no available conventional chemical pesticides or (ii) the use of conventional chemical pesticides may not be desirable or permissible either because of health and environmental concerns (including for organically certified crops) or because the development of pest resistance has reduced the efficacy of conventional chemical pesticides. Six of seven of our current products, including our newest biological fungicide, Stargus/Amplitude, are approved by the United States Environmental Protection Agency ("EPA") and registered as "biopesticides." Our first non-EPA product is Haven, a plant health product, is a "biostimulant" which requires state registrations, but does not require EPA registration. We believe our current portfolio of products and our pipeline address the growing global demand for effective, efficient and environmentally responsible products to control pests, increase crop yields and reduce crop stress.

The agricultural industry is increasingly dependent on effective and sustainable pest management practices to maximize yields and quality in a world of increased demand for agricultural products, rising consumer awareness of food production processes and finite land and water resources. In addition, our research has shown that the global market for biopesticides is growing substantially faster than the overall market for pesticides. This demand is in part a result of conventional growers acknowledging that there are tangible benefits to adopting bio-based pest management products into integrated pest management ("IPM") programs, as well as increasing consumer demand for organic food. We seek to capitalize on these global trends by providing both conventional and organic growers with solutions to a broad range of pest management needs through strategies such as adding new products to our product portfolio, continuing to broaden the commercial applications of our existing product lines, leveraging growers' positive experiences with existing product lines, educating growers with on-farm product demonstrations and controlled product launches with key target customers and other early adopters. To that end, in March 2016 we entered into an agreement with Isagro USA to distribute Bio-Tam 2.0, a biofungicide for soil-borne disease control and grapevine trunk disease control that complements our existing products, particularly Regalia, in May 2017, we entered into an agreement with Jet Harvest Solutions to sell their contact biofungicide, Jet-Ag, in most regions of the United States, and we continue to launch new product lines, with first sales of Haven and Stargus/Amplitude in 2017. We believe this approach enables us to stay ahead of our competition in providing innovative pest management solutions, enhances our sales process at the distributor level and helps us to capture additional value from our products.

Our research and development efforts are focused on supporting existing commercial products, including Regalia, Grandevo, Venerate Majestene/Zelto, Haven and Stargus/Amplitude, with a focus on reducing cost of product revenues, further understanding the modes of action, manufacturing support and improving formulations. In addition, our internal efforts in development and commercialization are focused on two promising product candidates, MBI-601 (Ennoble) biofumigant, which is EPA-registered, and MBI-014 (formerly MBI-010), a bioherbicide. Simultaneously, we are seeking collaborations with third parties to develop and commercialize more early stage candidates on which we have elected not to expend significant internal resources given our reduced budget. We believe this prioritization plan, together with our competitive strengths, including our leadership in the biologicals industry, commercially available products, robust pipeline of novel product candidates, proprietary discovery and development processes and industry experience, position us for growth.

We sell our crop protection products to leading agrichemical customers while also working directly with growers to increase existing and generate new product demand. To date, we have marketed our bio-based pest management and plant health products for agricultural applications to U.S. growers, through distributors and our own sales force, and we have focused primarily on high value specialty crops such as grapes, citrus, tomatoes and leafy greens. A large portion of our sales are currently attributable to conventional growers who use our bio-based pest management products either to replace conventional chemical pesticides or enhance the efficacy of their IPM programs. In addition, a portion of our sales are attributable to organic farmers who cannot use conventional pesticides and have few alternatives for pest management. As we continue to demonstrate the efficacy of our bio-based pest management and plant health products on new crops or for new applications, we may either continue to sell our products through our in-house sales force or collaborate with third parties for distribution to select markets.

Although we have historically sold a significant majority of our products in the United States, expanding our international presence and commercialization is an important component of our growth strategy. Regalia, Venerate and Grandevo are currently available in select international markets under distribution agreements with major agrichemical companies or regional distributors. Currently, our plan is to focus first on countries where we can gain the fastest registration approval to permit product launches while also pursuing key countries and regions with the largest and fastest growing biopesticide and plant health product markets for specialty crops and selected row crops. We are working with regional or national distributors in key countries who have brand recognition and established customer bases and who can conduct field trials and grower demonstrations and lead or assist in regulatory processes and market development.

We currently market our water treatment product, Zequanox, directly to a selected group of U.S. power and industrial companies. Due to our prioritization plan, we have not committed sufficient resources to Zequanox in order to market it full-scale. We signed an exclusive distribution agreement with Solenis for in-pipe uses. In addition, we continue to work with state, federal and bi-national partners to further develop Zequanox in the Great Lakes/Upper Mississippi River Basin as a habitat restoration tool and potential harmful algal bloom management tool. We believe that Zequanox presents a unique opportunity for generating long-term revenue as there are limited water treatment options available to date, most of which are time-consuming, costly or subject to high levels of regulation. Our ability to generate significant revenues from Zequanox from in-pipe treatments is dependent on our ability to persuade customers to evaluate the costs of our Zequanox products compared to the overall cost, and environmental impact, of the chlorine treatment process, the primary current alternative to using Zequanox, rather than the cost of purchasing chemicals alone. In the fourth quarter of 2015, we implemented a new process at our manufacturing plant that reduced the cost of product revenues to be more competitive with other mussel treatment chemicals. Sales of Zequanox have remained lower than our other products due to our prioritization of our crop protection business, the length of the treatment cycle, the longer sales cycle (the bidding process with utility companies and governmental agencies occurs on a yearly or multi-year basis), the unique nature of the treatment approach for each customer based on the extent of the infestation, and the design of their facility.

Although our initial EPA-approved master labels cover our products' anticipated crop-pest use combinations, we launch early formulations of our pest management and plant health products to targeted customers under commercial labels that list a limited number of crops and applications that our initial efficacy data can best support. We then gather new data from experiments, field trials and demonstrations, gain product knowledge and get feedback to our research and development team from customers, researchers and agricultural agencies. Based on this information, we enhance our products, refine our recommendations for their use in optimal IPM programs, expand our commercial labels and submit new product formulations to the EPA and other regulatory agencies. For example, we began sales of Regalia SC, an earlier formulation of Regalia, in the Florida fresh tomatoes market in 2008, while a more effective formulation of Regalia with an expanded master label, including listing for use in organic farming, was under review by the EPA. In 2011, we received EPA approval of a further expanded Regalia master label covering hundreds of crops and various new uses for applications to soil and through irrigation systems, and we recently expanded sales of Regalia in large-acre row crops as a plant health product, in addition to its beneficial uses as a fungicide. In January 2016, we launched a new formulation of Regalia that no longer contains a solvent that is difficult to source and may experience future regulatory restrictions. This new formulation of Regalia disperses better in water and is easier to mix and rinse from containers and spray equipment. In addition, in June 2016, we launched a new formulation of Grandevo, Grandevo WDG, which offers improved handling and better, more convenient packaging. The water dispersible granule mixes easily in spray tanks with no dust or foam, which saves valuable time in the preparation and application processes. Similarly, ongoing field development research on the microbe used in Venerate, one of our insecticide products, led to our October 2015 registration of Majestene as a nematicide. We believe we have opportunities to broaden the commercial applications and expand the use of our existing products lines to help drive significant growth for our company.

Our total revenues were $4.3 million and $4.2 million for the three months ended March 31, 2018 and 2017, respectively. We generate our revenues primarily from product sales, which are principally attributable to sales of our Regalia, Grandevo and Venerate product lines, but which also included sales of Majestene, Zequanox, Bio-Tam 2.0, Haven, Stargus/Amplitude and Jet-Ag. We believe that prior to our February Stock and Debt Conversion Transaction, concerns and rumors regarding our ability to continue operations impacted our ability to grow more robustly. Going forward, we believe our revenues may largely be impacted by weather, natural disasters and other factors affecting planting and growing seasons and incidence of pests and plant disease, and, accordingly, the decisions by our distributors, direct customers and end users about the types and amounts of pest management and plant health products to purchase and the timing of use of such products.

We currently rely, and expect to continue to rely, on a limited number of customers for a significant portion of our revenues since we sell to highly concentrated, traditional distributor-type customers. Customers to which 10% or more of our total revenues are attributable for any one of the periods presented consist of the following:

	CUSTOMER A		CUSTOMER B		CUSTOMER C		CUSTOMER D		CUSTOMER E	
Three months ended March 31,										
2018	23	%	14	%	0	%	9	%	6	%
2017	18	%	0	%	15	%	13	%	12	%

While we expect product sales to a limited number of customers to continue to be our primary source of revenues, as we continue to develop our pipeline and introduce new products to the marketplace, we anticipate that our revenue stream will be diversified over a broader product portfolio and customer base.

Our cost of product revenues was $2.2 million and $2.3 million for the three months ended March 31, 2018 and 2017, respectively. Cost of product revenues consists principally of the cost of inventory, which includes the cost of raw materials, and third party services and allocation of operating expenses of our manufacturing plant related to procuring, processing, formulating, packaging and shipping our products. Cost of product revenues also include charges recorded for write-downs of inventory and idle capacity at our manufacturing plant. We expect our cost of product revenues related to the cost of inventory to increase and cost of product revenues relating to write-downs of inventory and idle capacity of our manufacturing plant to decrease as we expand sales and increase production of our existing commercial products Regalia, Grandevo, Venerate, Majestene, Zequanox, Haven and Stargus. We expect to see a gradual increase in gross margin over the life cycle of each of our products as we improve production processes, gain efficiencies and increase product yields. These increases may be offset by additional charges for inventory write-downs and idle capacity at our manufacturing plant until overall volume in the plant increases significantly, however we are expecting these charges to decrease over time.

Our research, development and patent expenses have historically comprised a significant portion of our operating expenses, amounting to $2.5 million and $2.4 million for the three months ended March 31, 2018 and 2017, respectively. We are seeking collaborations with third parties to develop and commercialize more early stage candidates, which we have elected not to expend significant resources on given our reduced budget.

Selling, general and administrative expenses incurred to establish and build our market presence and business infrastructure have generally comprised the remainder of our operating expenses, amounting to $5.0 million and $5.3 million for the three months ended March 31, 2018 and 2017, respectively. We have been building a sales and marketing organization that provides for increased training and a better ability to educate and support customers and for our product development staff to undertake responsibility for technical sales support, field trials and demonstrations to promote sales growth. We expect that our selling, general and administrative expenses to remain approximately flat in all departments with the exception of sales and marketing. In 2018, we are increasing our marketing communications campaigns and putting more "boots on the ground", which should increase grower demand, or pull-through, and develop new customers, as well as expand business with existing customers.

Historically, we have funded our operations from the issuance of shares of common stock, preferred stock, warrants and convertible notes, the issuance of debt and entry into financing arrangements, product sales, payments under strategic collaboration and distribution agreements and government grants, but we have experienced significant losses as we invested heavily in research and development. We expect to incur additional losses related to our investment in the continued development, expansion and marketing of our product portfolio.

On December 15, 2017, we entered into a securities purchase agreement (the "Securities Purchase Agreement") with certain investors named therein, including Ospraie Ag Science LLC ("Ospraie"). On February 5, 2018, pursuant to the Securities Purchase Agreement, we issued to these investors, an aggregate of 44,000,001 shares of common stock and warrants to purchase 41,333,333 of common stock for an aggregate purchase price of $30,000,000, including the conversion to units of $6,000,000 of principal amounts outstanding under a series of debt agreements with a third party for the issuance of convertible debt ("Secured December 2017 Convertible Note").

In addition, on February 5, 2018, we converted, pursuant to an amendment, dated December 15, 2017, to the senior secured promissory notes we had previously sold to affiliates of Waddell & Reed Financial, Inc. ("August 2015 Secured Promissory Notes") $35,000,000 aggregate principal amount of the August 2015 Senior Secured Promissory Notes into an aggregate of 20,000,000 shares of common stock and warrants to purchase 4,000,000 shares of common stock (such conversion, the "Waddell Debt Conversion"), such that $5,000,000 of principal under the August 2015 Senior Secured Promissory Notes is outstanding as of March 31, 2018. Also on February 5, 2018, we converted, pursuant to an amendment, dated December 15, 2017, to various debt agreements entered into in 2013 and 2014 (the "October 2012 and April 2013 Secured Promissory Notes"), $10,000,000 aggregate principal amount of indebtedness outstanding under the October 2012 and April 2013 Secured Promissory Notes to an aggregate of 5,714,285 shares of common stock and warrants to purchase 1,142,856 shares of common stock (such conversion, the "Snyder Debt Conversion"), such that $2,450,000 of principal under the October 2012 and April 2013 Secured Promissory Notes is outstanding as of March 31, 2018. Simultaneously with the Snyder Debt Conversion, the maturity of the October 2012 and April 2013 Secured Promissory Notes was extended to December 31, 2022, the interest was reduced from 14% to 8% and all interest payments under the October 2012 and April 2013 Secured Promissory Notes were deferred to the maturity of the October 2012 and April 2013 Secured Promissory Notes on December 31, 2022.

In April 2018, we completed an underwritten public offering of 8,336,250 registered shares of common stock. The public offering price of the shares sold in the offering was $1.65 per share. The total gross proceeds to the Company from the offerings were $13.8 million. The estimated aggregate net proceeds to the Company from common stock sold in the offering totaled approximately $12.7 million.

Critical Accounting Policies and Estimates

Our condensed consolidated financial statements and the related notes included elsewhere in this Quarterly Report on Form 10-Q are prepared in accordance with GAAP. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, net revenue, costs and expenses, and any related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Changes in accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and our actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

We believe that the assumptions and estimates associated with revenue recognition, including assumptions and estimates used in determining the timing and amount of revenue to recognize, inventory valuation and share-based compensation have the greatest potential impact on our consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates. In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, to clarify the principles of recognizing revenue and create common revenue recognition guidance between U.S. GAAP and International Financial Reporting Standards. Under ASU 2014-09, revenue is recognized when a customer obtains control of promised goods or services and is recognized at an amount that reflects the consideration expected to be received in exchange for such goods or services. As documented in Note 2 of the condensed consolidated financial statements, the adoption of this standard had a material impact on these financial statements and is expected to have a material impact on our future financial statements. During the three months ended March 31, 2018, our revenues were $0.5 million greater than they would have been if we had accounting for revenue under the standard effective for the three months ended March 31, 2018. We expect that the implementation of this new standard will continue to have a material impact on our financial statements from quarter to quarter.

Key Components of Our Results of Operations

Product Revenues

Product revenues consist of revenues generated primarily from sales to customers, net of rebates and cash discounts. Product revenues constituted 98% and 99% of our total revenues for the three months ended March 31, 2018 and 2017, respectively. Product revenues in the United States constituted 82% of our total revenues for each of the three months ended March 31, 2018 and 2017.

License Revenues

License revenues generally consist of revenues recognized under our strategic collaboration and distribution agreements for exclusive distribution rights, either for Regalia, for other commercial products, or for our broader pipeline of products, for certain geographic markets or for market segments that we are not addressing directly through our internal sales force. Our strategic collaboration and distribution agreements generally outline overall business plans and include payments we receive at signing and for the achievement of certain testing validation, regulatory progress and commercialization events. As these activities and payments are associated with exclusive rights that we provide over the term of the strategic collaboration and distribution agreements, revenues related to the payments received are deferred and recognized as revenues over the term of the exclusive period of the respective agreements, which we estimate to be between 5 and 17 years based on the terms of the contract and the covered products and regions. For the three months ended March 31, 2018 and 2017, license revenues constituted 2% and 1%, respectively of total revenues. As of March 31, 2018, including agreements with related parties discussed below, we had received an aggregate of $3.4 million in payments under our strategic collaboration and distribution agreements. In addition, there will be an additional $0.3 million in payments due on certain anniversaries of regulatory approval and an additional $0.8 million in payments under these agreements that we could potentially receive if the testing validation, regulatory progress and commercialization events occur.

Cost of Product Revenues and Gross Profit

Cost of product revenues consists principally of the cost of raw materials, including inventory costs and third-party services related to procuring, processing, formulating, packaging and shipping our products. As we have used our Bangor, Michigan manufacturing plant to produce certain of our products, cost of product revenues includes an allocation of operating costs including direct and indirect labor, productions supplies, repairs and maintenance, depreciation, utilities and property taxes. The amount of indirect labor and overhead allocated to finished goods is determined on a basis presuming normal capacity utilization. Operating costs incurred in excess of production allocations, considered idle capacity, are expensed to cost of product revenues in the period incurred rather than added to the cost of the finished goods produced. Cost of product revenues may also include charges due to inventory adjustments and reserves. In addition, costs associated with license revenues have been included in cost of product revenues as they have not been significant. Gross profit is the difference between total revenues and cost of product revenues. Gross margin is gross profit expressed as a percentage of total revenues.

We have entered into in-license technology agreements with respect to the use and commercialization of four of our commercially available product lines, Regalia, Grandevo, Zequanox and Haven, and certain products under development. Under these licensing arrangements, we typically make royalty payments based on net product revenues, with royalty rates varying by product and ranging between 2% and 5% of net sales, subject in certain cases to aggregate dollar caps. These royalty payments are included in cost of product revenues, but they have historically not been significant. The exclusivity and royalty provisions of these agreements are generally tied to the expiration of underlying patents. The patents for Regalia and Zequanox expired in 2017 and the in-licensed U.S. patent for Grandevo is expected to expire in 2024. There is, however, a pending in-licensed patent application relating to Grandevo, which could expire later than 2024 if issued. The licensed patents for Haven begin to expire in 2019. After the termination of these provisions, we may continue to produce and sell these products. While third parties thereafter may develop products using the technology under expired patents, we do not believe that they can produce competitive products without infringing other aspects of our proprietary technology, including pending patent applications related to Regalia, Grandevo, Zequanox, and Haven and we therefore do not expect the expiration of the patents or the related exclusivity obligations to have a significant adverse financial or operational impact on our business.

We expect to see increases in gross profit over the life cycle of each of our products as gross margins are expected to increase over time as production processes improve and as we gain efficiencies and increase product yields. While we expect margins to improve on a product-by-product basis, our overall gross margins may vary as we introduce new products. In particular, we may experience downward pressure on overall gross margins as we rollout Haven and Stargus/Amplitude and expand sales of Grandevo and Zequanox. Gross margin has been and will continue to be affected by a variety of factors, including plant utilization, product manufacturing yields, changes in production processes, new product introductions, product mix and average selling prices.

In July 2012, we acquired a manufacturing facility, which we repurposed for manufacturing operations. We began full-scale manufacturing using this facility in 2014. We continue to use third party manufacturers for Venerate, Majestene, Haven, and Stargus/Amplitude, and for spray-dried powder formulations of Grandevo and Zequanox. We expect gross margins to improve using this facility when sales volumes recover enough to reduce overhead and idle capacity charges from our facility.

Research, Development and Patent Expenses

Research, development and patent expenses include personnel costs, including salaries, wages, benefits and share-based compensation, related to our research, development and patent staff in support of product discovery and development activities. Research, development and patent expenses also include costs incurred for laboratory supplies, field trials and toxicology tests, quality control assessment, consultants and facility and related overhead costs.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist primarily of personnel costs, including salaries, wages, benefits and share-based compensation, related to our executive, sales, marketing, finance and human resources personnel, as well as professional fees, including legal and accounting fees, and other selling costs incurred related to business development and to building product and brand awareness. We create brand awareness through programs such as speaking at industry events, trade show displays and hosting local-level grower and distributor meetings. In addition, we dedicate significant resources to technical marketing literature, targeted advertising in print and online media, webinars and radio advertising. Costs related to these activities, including travel, are included in selling expenses.

We expect selling, general, and administrative expenses to remain approximately flat in all departments with the exception of sales and marketing. In 2018, we are increasing our marketing communications campaigns and putting more "boots on the ground", which we believe should increase grower demand, or pull-through, and develop new customers, as well as expand business with existing customers.

Interest Expense

We recognize interest expense on notes payable and other debt obligations. In June 2014, we entered into a $10.0 million promissory note with a variable interest rate that varies with the prime rate. Accordingly, our interest expense will increase as the prime rate increases.

In August 2015, we issued and sold the August 2015 Secured Promissory Notes to affiliates of Waddell & Reed Financial, Inc. in the aggregate principal amount of $40.0 million with a fixed interest rate of 8%. In accordance with the related accounting guidance, because we recognized a gain on the partial extinguishment of debt, we were required to include all future interest and additional consideration, which included accrued interest, under the terms of this agreement as a reduction of the gain. As a result, the amount of the debt on the Company's balance sheet related to the August 2015 Senior Secured Promissory Notes is $7,285,000, as compared to $5,000,000 of contractual principal amount outstanding thereunder. Going forward, subject to future amendments to debt agreement or costs, we will not recognize future interest expense on the August 2015 Senior Secured Promissory Notes.

As of December 31, 2017, we had $12,450,000 in outstanding principal related to the October 2012 and April 2013 Secured Promissory Notes. In February 2018, $10,000,000 aggregate principal amount of indebtedness outstanding under the October 2012 and April 2013 Secured Promissory Notes was converted into an aggregate of 5,714,285 shares of common stock and warrants to purchase 1,142,856 shares of common stock in the Snyder Debt Conversion, such that $2,450,000 of principal under the October 2012 and April 2013 Secured Promissory Notes is outstanding as of March 31, 2018. Simultaneously with the Snyder Debt Conversion, the maturity of the October 2012 and April 2013 Secured Promissory Notes was extended to December 31, 2022, the interest was reduced from 14% to 8% due to the Snyder Debt Conversion and all interest payments were deferred to maturity. In accordance with the related accounting guidance, because we recognized a gain on the partial extinguishment of debt, we were required to include all future interest and additional consideration, which included accrued interest, under the terms of this agreement as a reduction of the gain. As a result, the amount of the debt on our balance sheet related to the October 2012 and April 2013 Secured Promissory Notes is $3,411,000, as compared to $2,450,000 of contractual principal amount outstanding thereunder. Going forward, subject to future amendments to debt agreement or costs, we will not recognize future interest expense on the October 2012 and April 2013 Secured Promissory Notes.

Starting in October 2017, we entered into the Secured December 2017 Convertible Note. As of February 5, 2018, the outstanding principal balance under the Secured December Convertible Note was $6,000,000. The interest rate from January 1, 2018 to February 5, 2018 was 10% per annum.

On February 5, 2018, the holder converted the entire outstanding principal of $6,000,000 under the Secured December 2017 Convertible Note into shares of our common stock at a rate of $0.50 per share. After the conversion into common stock on February 5, 2018, there was no outstanding balance under the Secured December 2017 Convertible Note.

Interest Income

Interest income consists primarily of interest earned on cash balances. Our interest income will vary each reporting period depending on our average cash balances during the period and market interest rates.

Income Tax Provision

Since our inception, we have been subject to income taxes principally in the United States. We anticipate that as we further expand our sales into foreign countries, we will become subject to taxation based on the foreign statutory rates and our effective tax rate could fluctuate accordingly.

Income taxes are computed using the asset and liability method, under which deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are estab