Alliqua BioMedical, Inc.
Form 10-K
February 22, 2019

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended: December 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: **001-36278**

Alliqua BioMedical, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**58-2349413**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
2150 Cabot Blvd West, Suite B	
Langhorne, PA	**19047**
(Address of principal executive office)	(Zip Code)

Registrant's telephone number, including area code: **(215) 702-8550**

Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of each class	Name of each exchange on which registered
Common Stock, $0.001 par value	**The NASDAQ Stock Market LLC**

Securities registered pursuant to Section 12(g) of the Exchange Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No þ

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ¨ No þ

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 þ No ¨

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

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

Large accelerated filer ¨ Accelerated filer ¨

Non-accelerated filer þ

Smaller reporting company þ Emerging growth company ¨

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

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

The aggregate market value of the voting and non-voting common equity of the registrant held by non-affiliates, computed by reference to the closing sales price of such stock, as of June 30, 2018 was $7,482,045.00. (For purposes of determination of the aggregate market value, only directors, executive officers and 10% or greater shareholders have been deemed affiliates.)

The number of shares outstanding of the registrant’s common stock, par value $0.001 per share, as of February 22, 2019 was 5,005,211 shares.

ALLIQUA BIOMEDICAL, INC.

TABLE OF CONTENTS

PART I

Unless the context otherwise indicates, the terms "we," "us" and "our" as used in this Annual Report on Form 10-K refer to Alliqua BioMedical, Inc. and its directly and indirectly owned subsidiaries on a consolidated basis.

ITEM 1. BUSINESS

Forward-Looking Statements

This Annual Report on Form 10-K contains "forward-looking statements," which include information relating to future events, future financial performance, strategies, expectations, competitive environment and regulation. Words such as "may," "should," "could," "would," "predict," "potential," "continue," "expect," "anticipate," "future," "intend," "plan," "belie similar expressions, as well as statements in future tense, identify forward-looking statements. Forward-looking statements should not be read as a guarantee of future performance or results and may not be accurate indications of when such performance or results will actually be achieved. Forward-looking statements are based on information we have when those statements are made or our good faith belief as of that time with respect to future events and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Important factors that could cause such differences include, but are not limited to:

- the occurrence of any event, change or other circumstances that could give rise to the termination of the merger agreement with Adynxx, Inc. and/or the merger agreement with TO Pharmaceuticals, LLC;
- our stockholders failing to approve the merger with Adynxx, Inc.;
- an increase in the amount of costs, fees, expenses and other charges related to the merger agreement with Adynxx, Inc. or the merger agreement with TO Pharmaceuticals, LLC;
- the ability to realize the benefits expected to result from the merger transaction with Adynxx, Inc. and/or the merger transaction with TO Pharmaceuticals LLC;
- other risks associated with the mergers, including anticipated tax treatment, unforeseen liabilities and future capital expenditures;
- risks associated with our ability to identify and realize business opportunities following the mergers;

- inadequate capital;

- risks arising from the diversion of management's attention from our ongoing business operations;

- the uncertainty regarding the adequacy of our liquidity to complete announced business combinations;

- our ability to obtain reimbursement from third party payers for our products;

- our ability to obtain regulatory approval of any future products we may develop;

- market acceptance of our future products;

- our plans to make significant additional outlays of working capital before we expect to generate significant revenues and the uncertainty regarding when we will begin to generate significant revenues, if we are able to do so;

- adverse economic conditions and/or intense competition;

- loss of a key customer or supplier;

- entry of new competitors and products;

- adverse federal, state and local government regulation;

- technological obsolescence of our manufacturing operations;

- technical problems with our research and product development;

- price increases for supplies and components; and

- the inability to carry out our business plans.

For a discussion of these and other risks that relate to our business and investing in shares of our common stock, you should carefully review the risks and uncertainties described under the heading "Part I – Item 1A. Risk Factors" and elsewhere in this Annual Report on Form 10-K. The forward-looking statements contained in this Annual Report on Form 10-K are expressly qualified in their entirety by this cautionary statement. We do not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

Our Company

We manufacture a high-water content, electron beam cross-linked, aqueous polymer hydrogels, or gels, used for wound care, medical diagnostics, transdermal drug delivery and cosmetics. We believe that we are one of the leading manufacturers of high-performance gels in the United States. We specialize in custom gels by capitalizing on proprietary manufacturing technologies. We have historically served as a contract manufacturer, supplying our gels to third parties who incorporate them into their own products. Our contract manufacturing business provides custom hydrogels to the OEM market.

Adynxx Merger

On October 11, 2018, we, Embark Merger Sub Inc., a Delaware corporation and a wholly-owned subsidiary ("Adynxx Merger Sub"), and Adynxx, Inc., a privately-held Delaware corporation ("Adynxx"), entered into an Agreement and Plan of Merger and Reorganization (the " Adynxx Merger Agreement"), pursuant to which, among other things, subject to the satisfaction or waiver of the conditions set forth in the Adynxx Merger Agreement, Adynxx Merger Sub will merge with and into Adynxx, with Adynxx becoming a wholly-owned subsidiary of us and the surviving corporation of the merger (the "Adynxx Merger").

Subject to the terms and conditions of the Adynxx Merger Agreement, at the effective time of the Adynxx Merger (the "Effective Time"), (a) each outstanding share of Adynxx common stock, on an as-converted basis taking into consideration all outstanding common stock, preferred stock, restricted stock and all other securities convertible or exercisable for Adynxx common stock, will be converted into the right to receive the number of shares of our common stock (the "Common Stock") equal to the exchange ratio described below; (b) each outstanding Adynxx stock option that has not previously been exercised prior to the Effective Time will be assumed by us; and (c) each outstanding warrant to acquire Adynxx capital stock that has not previously been exercised prior to the Effective Time will be assumed by us.

Under the exchange ratio formula in the Adynxx Merger Agreement, as of immediately after the Adynxx Merger, but excluding the effect of certain financings (as further described in the Adynxx Merger Agreement), the former Adynxx securityholders are expected to own approximately 86% of the aggregate number of shares of Common Stock issued and outstanding following the consummation of the Adynxx Merger (the "Post-Closing Shares"), and our stockholders as of immediately prior to the Merger are expected to own approximately 14% of the aggregate number of Post-Closing Shares. This exchange ratio will be fixed immediately prior to the Effective Time to reflect our and Adynxx's equity capitalization as of immediately prior to such time. In addition, to the extent Adynxx consummates a Permitted Financing, as specifically defined in the Adynxx Merger Agreement, in excess of $10 million dollars prior to the Effective Time, the exchange ratio may be further adjusted in a manner that would reduce the percentage of the aggregate number of Post-Closing Shares held by our stockholders as of immediately prior to the Adynxx Merger.

Immediately following the Adynxx Merger, the name of the Company will be changed from "Alliqua BioMedical, Inc." to "Adynxx, Inc." At the Effective Time, the Adynxx Merger Agreement contemplates that the Board of Directors of the Company will consist of such directors selected by Adynxx; we will have the right to designate one member. Our executive officers immediately after the Effective Time will be designated by Adynxx.

The transactions contemplated by the Adynxx Merger Agreement must be approved by affirmative vote of the majority of votes cast affirmatively or negatively. In addition to the receipt of our approval of our stockholders, each party's obligation to consummate the Adynxx Merger is conditioned upon certain other customary closing conditions.

Spin-Off and Merger of AquaMed

On November 27, 2018, AquaMed Technologies, Inc. ("AquaMed"), our wholly-owned subsidiary, AQ TOP, LLC, a Delaware limited liability company and a wholly-owned subsidiary of AquaMed ("TOP Merger Sub"), and TO Pharmaceuticals, LLC, a Delaware limited liability company ("TOP"), entered into an Agreement and Plan of Merger (the "TOP Merger Agreement"), pursuant to which, among other things, subject to the satisfaction or waiver of the conditions set forth in the TOP Merger Agreement, TOP Merger Sub will merge with and into TOP, with TOP becoming a wholly-owned subsidiary of the AquaMed and the surviving company of the merger (the "TOP Merger").

The TOP Merger is expected to occur after our consummation of the following steps:

(1) Pursuant to an Asset Contribution and Separation Agreement to be entered into by and between us and AquaMed (the "Separation Agreement") prior to consummation of the TOP Merger, we will transfer certain assets and liabilities utilized primarily in connection with our custom hydrogels contract manufacturing business to AquaMed (the "Separation"),

(2) AquaMed will issue a to be determined number of shares of its common stock to us in consideration of the contribution of assets pursuant to the Separation Agreement (the "Distribution Consideration"),

(3) We will distribute to our stockholders all of the issued and outstanding shares of common stock, par value $0.001 per share, of AquaMed by way of a pro rata dividend (the "Distribution" and together with the Separation, the "Spin-Off"), and

(4) We intend to consummate the previously announced reverse merger transaction with Adynxx, pursuant to that certain Agreement and Plan of Merger and Reorganization, dated as of October 11, 2018, by and among Alliqua, Embark Merger Sub, Inc. and Adynxx.

At the effective time of the TOP Merger, all of the outstanding membership units of TOP will be converted into the right to receive, in the aggregate, merger consideration consisting of shares of AquaMed common stock. Immediately after the effective time of the TOP Merger and consummation of the Private Placement (as specifically defined in the TOP Merger Agreement), before giving effect to any fees payable in equity to financial advisors or other intermediaries, the current members of TOP and the third-party investors that participate in the Private Placement are expected to hold approximately 90% of the total number of shares of AquaMed common stock outstanding (on a fully diluted basis).

Completion of the Asset Sale Transaction with Celularity

On May 7, 2018, we completed the sale of substantially all of our assets (the "AST") to Celularity, Inc. ("Celularity"), including certain assets comprising our MIST, Biovance and Interfyl product lines (the "Purchased Assets") pursuant to the terms of the Asset Purchase Agreement (the "APA"), dated January 5, 2018 with Celularity. As consideration for the Purchased Assets, Celularity paid a purchase price of $29.0 million in cash. No debt or significant liabilities were assumed by Celularity.

Under the terms of the APA, we retained certain specified assets, including, among other things, cash, accounts receivable and our hydrogel contract manufacturing business, including our SilverSeal and Hydress product lines.

In connection with the completion of the AST, we terminated our Credit Agreement and Guaranty (the "Credit Agreement"), dated as of May 29, 2015, as amended, by and among us, AquaMed ("Guarantor"), and Perceptive Credit Holdings LP ("Perceptive"). Additionally, we terminated the related Pledge and Security Agreement, dated as of May 29, 2015, by and among us, Guarantor and Perceptive. The Credit Agreement provided for a senior secured term loan in a single borrowing to us in the initial principal amount of approximately $15.5 million, of which approximately $12.0 million remained outstanding on the termination date. The full unpaid principal amount of the term loan and associated fees were paid off.

Products and Services

We maintain our legacy contract manufacturing business, which provides custom hydrogels to the OEM market.

Contract Manufacturing

In connection with our legacy contract manufacturing business; we develop, manufacture and market high water content, electron beam cross-linked, aqueous polymer hydrogels, or gels, used for wound care, medical diagnostics, transdermal drug delivery and cosmetics. We specialize in custom gels by capitalizing on proprietary manufacturing technologies. Our products are manufactured using proprietary and non-proprietary mixing, coating and cross-linking technologies. Together, these technologies enable us to produce gels that can satisfy rigid tolerance specifications with respect to a wide range of physical characteristics (e.g., thickness, water content, adherence, absorption, moisture vapor transmission rate (a measure of the passage of water vapor through a substance) and release rate) while maintaining product integrity. Additionally, we have the manufacturing ability to offer broad choices in the selection of liners onto which the gels are coated. Consequently, our customers are able to determine tolerances in moisture vapor transmission rate and active ingredient release rates while personalizing color and texture.

Planned Future Operations

We intend to continue to maximize stockholder interests with a goal of returning value to our stockholders. We intend to pay a special dividend to our stockholders and consummate the Spin-Off, the Adynxx Merger and the TOP Merger in the first half of 2019.

If we consummate the Spin-Off and TOP Merger, the assets and liabilities associated with our legacy contract manufacturing business will be contributed to AquaMed in connection with the Separation, all of the issued and outstanding shares of AquaMed common stock will be distributed to our stockholders in the Distribution and TOP will become a wholly-owned subsidiary of AquaMed in the TOP Merger. After the consummation of such transactions, AquaMed will be an independent company and we will no longer engage in our legacy contract manufacturing business.

Immediately after the Spin-Off we expect to consummate the Adynxx Merger with Adynxx whereby Adynxx will become our wholly-owned subsidiary. If we consummate the Spin-Off and Adynxx Merger, our business and operations will no longer include our legacy contract manufacturing business and will become the business and operations of Adynxx.

If we do not receive stockholder approval for the Adynxx Merger, the Adynxx Merger will not occur and Adynxx will not become our wholly-owned subsidiary. The consummation of the Adynxx Merger, however, is a condition to the closing of the Spin-Off. In the event that our stockholders do not approve the Adynxx Merger and the Adynxx Merger is not consummated, then we may, in our discretion, determine not to effect the Spin-Off, in which case, AquaMed will remain our wholly-owned subsidiary and we will retain our the assets and liabilities associated with our legacy contract manufacturing business.

Subject to the risks mentioned below, if the Adynxx Merger or the Spin-Off does not occur we will explore other strategic options or we may seek merger or licensing opportunities to bring additional assets into our product portfolio.

Industry and Markets

The Hydrogel Industry. Hydrogels are currently being marketed in the U.S. and abroad for the following applications:

- Drug Delivery. Delivering medication through hydrogel patches has important advantages over traditional methods of drug delivery. Hydrogel patches are less intrusive, painless, allow for pre-planned medication time periods, can potentially release medication in a manner consistent with the body's own glandular activity (by avoiding dosage spikes and/or digestive alteration), and minimize side effects related to the medication via injection or ingestion.

- Other Medical Applications. Hydrogel patches are being used for transdermal applications such as hormone replacement therapy and contraception, treatment of acne, shingles, diabetes, motion sickness, treatment of angina with nitroglycerin and treatment of smoking addiction using nicotine and palliatives (i.e., pain relievers).

- Non-Prescription Therapeutic Applications. Hydrogel patches are also used in the medical community and are also directly marketed to consumers for topical application of over the counter ("OTC") drugs such as non-prescription acne treatments, pain relievers, diet preparations, cough suppressants, treatment of warts, calluses and corns, and pain relief.

- Moist Wound and Burn Dressings. Hydrogel dressings have long been used for treating wounds and burns. Clinical trials have demonstrated the benefits of moist wound healing versus traditional dressings. Some of these benefits include immediate anti-inflammatory effects, allowing for freer cell flow and less scarring, increased absorption of exudate, and accelerated healing.

- Components of Medical Devices. Several medical devices utilize hydrogels as components. These devices include active drug delivery systems such as iontophoresis, warming and cooling devices, and medical electrodes.

- Cosmetic Applications. Hydrogel patches and applications can deliver cosmetic skin care products to consumers and skin care providers for uses that include moisturizers, face masks, cooling masks and applicators.

Sales and Marketing

We continue to focus on sales and marketing efforts in the United States. As of December 31, 2018, we did not have any employees solely dedicated to sales, however, some of our employees perform in a sales capacity in addition to their other duties.

Customers

During the year ended December 31, 2018 and 2017, two customers accounted for 77% and 81% of our total net revenue from continuing operations, respectively. We are uncertain as to the larger customer’s intentions to use our services during the fiscal year ending December 31, 2019.

Technology and Manufacturing

Hydrogels are manufactured by introducing a hydrophilic polymer into water to create a feed mix. The feed mix is then coated on to a liner and exposed to radiation. The polymers used, when exposed to radiation, cross link faster than they degrade, creating a matrix that gives the gels a solid form. Active ingredients such as prescription or OTC medication, skin care, wound healing or other materials can be added before or after cross-linking. Materials that do not survive the irradiation process (or are modified thereby) are added after the cross-linking process is completed. Once the products have been mixed and cross-linked they form sheets that can either be delivered directly to customers or first cut and shaped according to customer or our specifications, as appropriate. We believe that many of the processes described above are proprietary to us and provide us with competitive advantages.

Competition

We believe that our manufacturing capabilities, along with the high barrier to entry (the substantial cost of acquiring an electron beam as compared to other cross-linking devices and the cost and extended time required for installing this beam) and current minimal level of competition for high performance gels, affords us the opportunity to be a leader in the applications that require tight tolerances and/or incorporate active ingredients. We believe that awareness of our product, low cost, speed to market and manufacturing techniques, are advantages that will be conveyed to its customer base through a combination of consumer product entries, expansion within current original equipment manufacturer bases and institutional reach programs such as trade magazines, trade shows and through senior management contacts. To our knowledge, we are one of three manufacturers using electron beam technology for high performance hydrogels for the wound care, cosmetic and drug delivery industries.

Sources and Availability of Raw Materials; Principal Suppliers

In general, raw materials essential to our businesses are readily available from multiple sources. For reasons of quality assurance, availability, or cost effectiveness, certain components and raw materials are available only from a sole supplier. The principal suppliers for our raw materials are Dow Chemical Company (Chempoint), Berry Global, Inc., DeWolf Chemical, Inc. and BASF Corporation (Univar Inc). Our policy is to maintain sufficient inventory of components so that our production will not be significantly disrupted even if a particular component or material is not available for a period of time.

Because we have no direct control over these suppliers, interruptions or delays in the products and services provided by these parties may be difficult to remedy in a timely fashion. In addition, if such suppliers are unable or unwilling to deliver the necessary products or raw materials, we may be unable to redesign or adapt our technology to work without such raw materials or products or find alternative suppliers or manufacturers. In such events, we could experience interruptions, delays, increased costs or quality control problems, or be unable to sell the applicable products, all of which could have a significant adverse impact on our revenue.

Other than as discussed above, we believe that, due to the size and scale of production of our suppliers, there should be adequate supply of raw materials from our manufacturers.

Patents, Proprietary Rights and Trademarks

We own or license trademarks covering our company and our products. Our policy is to file patent applications to protect technology, inventions and improvements that are important to the development of our business. We also rely upon trade secrets and continuing technological innovations to develop and maintain our competitive position.

We currently hold patent rights to one patent in Europe, which covers the use of lignin for inhibiting restenosis and thrombosis formation and coated medical devices where the coating includes lignin. These patent rights are set to expire in September 2021. In addition, we hold an exclusive license with right to sub-license from Specialty Pharmaceutical Products, L.L.C. to two issued patents, one in the U.S. and one in Europe, which cover technology relating to a transdermal patch containing transcutol. The transdermal patch is effective to deliver lidocaine to a patient. These licensed patent rights are expected to expire in April 2032. We also rely upon trade secrets and continuing technological innovations to develop and maintain our competitive position.

Government Regulation

Product Regulation. Under the Federal Food, Drug and Cosmetic Act, medical devices are classified by the FDA into one of three classes — Class I, Class II or Class III — depending on the degree of risk associated with each medical device and the extent of control needed to ensure safety and effectiveness. While some applications of hydrogels fall under the jurisdiction of the FDA, hydrogels are generally classified as Class I exempt devices and the majority of the hydrogel products that we manufacture are thereby exempt from the FDA filing of any regulatory submissions and/or pre-market notification requirements. To the extent that any FDA regulatory submissions are required, we will be required to file these submissions and maintain all appropriate documentation. With respect to registering the manufacturing facility with the FDA under the Code of Federal Regulations, 21 CFR 820.1, Scope: Part A, it is stated that the regulation does not apply to manufacturers of component parts of finished devices. Currently, hydrogels are sold as component parts to various medical device/cosmetic manufacturers.

Quality Assurance Requirements. The FDA enforces regulations to ensure that the methods used in, and the facilities and controls used for, the manufacture, processing, packing and holding of drugs, medical devices and/or HCT/Ps conform with current good manufacturing (CGMP) and/or CGTP. The CGMP regulations the FDA enforces are comprehensive and cover all aspects of manufacturing operations, from receipt of raw materials to finished product distribution, insofar as they bear upon whether drugs meet all the identity, strength, quality and purity characteristics required of them. The CGMP regulations for devices, called the Quality System Regulation, are also comprehensive and cover all aspects of device manufacture, from pre-production design validation to installation and servicing, insofar as they bear upon the safe and effective use of the device and whether the device otherwise meets the requirements of the Federal Food, Drug and Cosmetic Act. CGTPs are narrower in scope than CGMPs. CGTP requires a quality program to prevent, detect, and correct deficiencies that could increase communicable disease risk. To assure compliance requires a continuous commitment of time, money and effort in all operational areas.

The FDA also conducts periodic inspections of drug, device and registered HCT/P facilities to assess their current CGMP/CGTP status. If the FDA were to find serious non-compliant manufacturing or processing practices during such an inspection, it could take regulatory actions that could adversely affect our business, results of operations, financial condition and cash flows. With respect to domestic establishments, the FDA could initiate product seizures

or in some instances require product recalls and seek to enjoin a product's manufacture and distribution. In certain circumstances, violations could support civil penalties and criminal prosecutions. In addition, if the FDA concludes that a company is not in compliance with CGMP requirements, sanctions may be imposed that include preventing that company from receiving the necessary licenses to export its products and classifying that company as an "unacceptable supplier", thereby disqualifying that company from selling products to federal agencies.

We conduct audits of our outside manufacturers and believe that we and our suppliers and outside manufacturers are currently in compliance with CGMP/CGTP requirements. We are currently registered as a device manufacturer and human tissue distributor with the FDA and we intend to register as a drug facility with the FDA when we are required to do so.

Environmental Regulation. We are subject to various laws and governmental regulations concerning environmental matters and employee safety and health in the U.S. and other countries. We have made, and continue to make, significant investments to comply with these laws and regulations. We cannot predict the future capital expenditures or operating costs required to comply with environmental laws and regulations. We believe that we are currently compliant with applicable environmental, health and safety requirements in all material respects. However, we cannot assure you that current or future regulatory, governmental, or private action will not have a material adverse effect on our performance, results or financial condition.

In the future, if a loss contingency related to environmental matters, employee safety, health or conditional asset retirement obligations is recognized, we would record a liability for the obligation and it may result in a material impact on net income for the annual or interim period during which the liability is recorded. The investigation and remediation of environmental obligations generally occur over an extended period of time, and therefore we do not know if these events would have a material adverse effect on our financial condition, liquidity, or cash flow, nor can we assure you that such liabilities would not have a material adverse effect on our performance, results or financial condition.

Federal and State Anti-kickback, Self-referral, False Claims and Similar Laws. Our relationships with physicians, hospitals and the marketers of our products are subject to scrutiny under various federal anti-kickback, self-referral, false claims and similar laws, often referred to collectively as healthcare fraud and abuse laws. Healthcare fraud and abuse laws are complex, and even minor, inadvertent violations can give rise to claims that the relevant law has been violated. Certain states have similar fraud and abuse laws, imposing substantial penalties for violations. Any government investigation or a finding of a violation of these laws would likely result in a material adverse effect on the market price of our common stock, as well as our business, financial condition and results of operations. We believe that we are currently compliant with applicable anti-kickback, self-referral, false claims in all material respects.

Employees

As of December 31, 2018, we had six full-time employees. Of these employees, two are involved with finance, sales, marketing, and administration and four are involved with manufacturing, clinical and regulatory matters. Our employees are not represented by a labor union or other collective bargaining groups, and we consider relations with our employees to be good. We currently plan to retain and utilize the services of outside consultants for additional

research, testing, regulatory, legal compliance and other services on an as needed basis.

ITEM 1A. RISK FACTORS

There are numerous and varied risks, known and unknown, that may prevent us from achieving our goals. You should carefully consider the risks described below and the other information included in this Annual Report on Form 10-K, including the consolidated financial statements and related notes. If any of the following risks, or any other risks not described below, actually occur, it is likely that our business, financial condition, and/or operating results could be materially adversely affected. The risks and uncertainties described below include forward-looking statements and our actual results may differ from those discussed in these forward-looking statements.

Risks Related to the Adynxx Merger with Adynxx.

If the proposed Adynxx Merger is not consummated, our business could suffer materially and our stock price could decline.

The consummation of the proposed Adynxx Merger is subject to a number of closing conditions, including the approval by our stockholders, approval by Nasdaq of our application for initial listing of common stock in connection with the Adynxx Merger, and other customary closing conditions.

If the proposed Adynxx Merger is not consummated, we may be subject to a number of material risks, and our business and stock price could be adversely affected, as follows:

- We have incurred and expects to continue to incur significant expenses related to the proposed Adynxx Merger even if the Adynxx Merger is not consummated.

- the Adynxx Merger Agreement contains covenants relating to our solicitation of competing acquisition proposals and the conduct of our business between the date of signing the Adynxx Merger Agreement and the closing of the Adynxx Merger. As a result, significant business decisions and transactions before the closing of the Adynxx Merger require the consent of Adynxx. Accordingly, we may be unable to pursue business opportunities that would otherwise be in our best interest as a standalone company. If the Adynxx Merger Agreement is terminated after we have invested significant time and resources in the transaction process, we will have a limited ability to continue its current operations without obtaining additional financing to fund our operations.

- We could be obligated to pay Adynxx a $249,000 termination fee in connection with the termination of the Adynxx Merger Agreement, depending on the reason for the termination.

- Our customers, prospective customers, collaborators and other business partners and investors in general may view the failure to consummate the Adynxx Merger as a poor reflection on our business or prospects.

- some of our suppliers, distributors, collaborators and other business partners may seek to change or terminate their relationships with us as a result of the proposed Adynxx Merger.

- as a result of the proposed Adynxx Merger, current and prospective employees could experience uncertainty about their future roles within the combined company. This uncertainty may adversely affect our ability to retain its key employees, who may seek other employment opportunities.

· Our management team may be distracted from day to day operations as a result of the proposed Adynxx Merger.

- the market price of our common stock may decline to the extent that the current market price reflects a market assumption that the proposed Adynxx Merger will be completed.

In addition, if the Adynxx Merger Agreement is terminated and our Board of Directors determines to seek another business combination, it may not be able to find a third party willing to provide equivalent or more attractive consideration than the consideration to be provided by each party in the Adynxx Merger. In such circumstances, our Board of Directors may elect to, among other things, divest all or a portion of our business, or take the steps necessary to liquidate all of our business and assets, and in either such case, the consideration that we receive may be less attractive than the consideration to be received by Alliqua pursuant to the Merger Agreement.

Even if the Adynxx Merger is consummated, our stockholders may not realize a benefit from the Adynxx Merger commensurate with the ownership dilution they will experience in connection with the Adynxx Merger.

If the combined company of the Adynxx Merger is unable to realize the strategic and financial benefits currently anticipated from the Adynxx Merger, our stockholders will have experienced substantial dilution of their ownership interest without receiving any commensurate benefit. Significant management attention and resources will be required to integrate the two companies. Delays in this process could adversely affect the combined company's business, financial results, financial condition and stock price following the Adynxx Merger. Even if the combined company were able to integrate the business operations successfully, there can be no assurance that this integration will result in the realization of the full benefits of synergies, innovation and operational efficiencies that may be possible from this integration and that these benefits will be achieved within a reasonable period of time.

During the pendency of the Adynxx Merger, we may not be able to enter into a business combination with another party and will be subject to contractual limitations on certain actions because of restrictions in the Adynxx Merger Agreement.

Covenants in the Adynxx Merger Agreement impede our ability to make acquisitions or complete other transactions that are not in the ordinary course of business pending completion of the Adynxx Merger. As a result, if the Adynxx Merger is not completed, we may be at a disadvantage to our competitors. In addition, while the Adynxx Merger Agreement is in effect and subject to limited exceptions, we are prohibited from soliciting, initiating, encouraging or taking actions designed to facilitate any inquiries or the making of any proposal or offer that could lead to the entering into certain extraordinary transactions with any third party, such as a sale of assets, an acquisition of our common stock, a tender offer for our common stock, a merger or other business combination outside the ordinary course of business. Any such transactions could be favorable to our stockholders.

The Adynxx Merger is expected to result in a limitation on our ability to utilize our net operating loss carryforward.

Under Section 382 of the Code, use of our net operating loss carryforwards ("NOLs") will be limited if we experience a cumulative change in ownership of greater than 50% in a moving three-year period. We will experience an ownership change as a result of the Adynxx Merger and therefore our ability to utilize our NOLs and certain credit carryforwards remaining at the Effective Time will be limited. The limitation will be determined by the fair market value of our common stock outstanding prior to the ownership change, multiplied by the applicable federal rate. Limitations imposed on our ability to utilize NOLs could cause U.S. federal and state income taxes to be paid earlier than would be paid if such limitations were not in effect and could cause such NOLs to expire unused, in each case reducing or eliminating the benefit of such NOLs.

The issuance of shares of our common stock to Adynxx stockholders in the Adynxx Merger will substantially dilute the voting power of our current stockholders. Having a minority share position may reduce the influence that current stockholders have on the management of us.

Pursuant to the terms of the Merger Agreement, at the Effective Time of the merger, the former Adynxx security holders are expected to own approximately 86% of the aggregate number of Post-Closing Shares of the Company, and the stockholders of the Company as of immediately prior to the Merger are expected to own approximately 14% of the aggregate number of Post-Closing Shares of the Company, subject to certain adjustments as set forth in the Merger Agreement. Accordingly, the issuance of the shares of Company common stock to Adynxx equity holders in the Merger will significantly reduce the ownership stake and relative voting power of each share of Company common stock held by current Company stockholders. Consequently, following the merger, the ability of the Company's current stockholders to influence the management of the Company will be substantially reduced.

9

There is no assurance when or if the Adynxx Merger will be completed. Any delay in completing the Adynxx Merger may substantially reduce the benefits that we expect to obtain from the Adynxx Merger.

Completion of the Adynxx Merger is subject to the satisfaction or waiver of a number of conditions as set forth in the Adynxx Merger Agreement. There can be no assurance that we and Adynxx will be able to satisfy the closing conditions or that closing conditions beyond their control will be satisfied or waived. If the Adynxx Merger and the integration of the companies' respective businesses are not completed within the expected timeframe, such delay may materially and adversely affect the synergies and other benefits that we expect to achieve as a result of the Adynxx Merger and could result in additional transaction costs or other effects associated with uncertainty about the Adynxx Merger.

We and Adynxx can agree at any time to terminate the Adynxx Merger Agreement, even if Adynxx stockholders have already adopted the Adynxx Merger Agreement and thereby approved the Adynxx Merger and the other transactions contemplated by the Adynxx Merger Agreement. We and Adynxx can also terminate the Adynxx Merger Agreement under other specified circumstances.

The issuance of our common stock in connection with the Adynxx Merger could decrease the market price of our common stock.

In connection with the Adynxx Merger and as part of the merger consideration, we expect to issue shares of common stock to Adynxx equity holders. The anticipated issuance of our common stock in the Adynxx Merger may result in fluctuations in the market price of our common stock, including a stock price decrease.

Failure to complete the Adynxx Merger could negatively affect the value of our common stock and our future business and financial results.

If the Adynxx Merger is not completed, our ongoing businesses could be adversely affected and we will be subject to a variety of risks associated with the failure to complete the Adynxx Merger, including without limitation the following:

- diversion of management focus and resources from operational matters and other strategic opportunities while working to implement the Adynxx Merger;

- reputational harm due to the adverse perception of any failure to successfully complete the Adynxx Merger; and

- having to pay certain costs relating to the Adynxx Merger, such as legal, accounting, financial advisory, filing and printing fees.

If the Adynxx Merger is not completed, these risks could materially affect the market price of our common stock and our business and financial results and may result in the cessation of our operations.

Risks Related to the Spin-Off

The Spin-Off, including the TOP Merger, may not be completed on the currently contemplated timeline or terms, or at all, may be more expensive than anticipated and may not achieve the intended benefits.

There can be no assurance as to whether or when the proposed Spin-Off or the TOP Merger will occur. Following the Spin-Off, we will no longer own any assets or be subject to any liabilities relating to the custom hydrogel manufacturing business. While we may remain subject to liabilities related to the operation of the custom hydrogel manufacturing business prior to the time of the Spin-Off, AquaMed is expected to indemnify us for all such liabilities incurred prior to the Spin-Off; however, there can be no assurances that we will be able to successfully enforce such indemnity to cover all or a portion of any such liabilities.

In addition, the consummation of the TOP Merger is subject to certain conditions, including, without limitation, (i) the effectiveness of the registration statement filed with the SEC and the approval for listing on the Nasdaq Capital Market of the shares of AquaMed common stock to be issued in the Spin-Off, (ii) the accuracy of the parties' representations and warranties and the performance of their respective covenants contained in the TOP Merger Agreement, and (iii) consummation of the Private Placement. The consummation of the Spin-Off is subject to the foregoing conditions, plus certain additional conditions, including, without limitation (i) the Adynxx Merger Agreement being in full force and effect and the Adynxx Merger being consummated immediately following the Spin-Off and (ii) our satisfaction that the Spin-Off will not result in any material tax payable by us. In addition, our registration statement filed with the SEC with respect to the shares of AquaMed common stock to be issued in the Spin-Off is currently undergoing a review by SEC staff as part of the registration process. We cannot control this registration process in all respects as some matters are outside our control, including the length and scope of the review by the SEC. For these and other reasons, the Spin-Off and TOP Merger may not be completed on the terms or timeline contemplated, if at all.

We expect that the process of completing the Spin-Off and TOP Merger will be time-consuming and involve significant costs and expenses, which may be significantly higher than what we currently anticipate, may increase in the event that the timing of the transaction is delayed and may not yield a benefit if the transaction is not completed. In particular, if the Spin-Off is not completed prior to the Adynxx Merger, the combined company will continue to incur all of the costs and other obligations associated with the operation of the custom hydrogel manufacturing business,

which could divert resources from the combined company's business.

10

The Spin-Off is a taxable transaction and we and our stockholders may be subject to a tax liability in connection with the distribution of shares of AquaMed.

For U.S. federal income tax purposes, the Distribution will not be eligible for treatment as a tax-free distribution. Accordingly, each holder of our common stock who receives shares of AquaMed common stock in the Spin-Off generally will be treated as if such stockholder received a taxable distribution in an amount equal to the fair market value of AquaMed common stock received (including any fractional share deemed to be received by and sold on behalf of the stockholder), which will result in: (a) a dividend to the extent of such stockholder's ratable share of our current and accumulated earnings and profits; then (b) a reduction in such stockholder's basis in our common stock (but not below zero) to the extent the amount received exceeds the amount referenced in clause (a); and then (c) gain from the sale or exchange of our common stock to the extent the amount received exceeds the sum of the amounts referenced in clauses (a) and (b). Accordingly, the amount of taxable income realized by each stockholder in the Spin-Off may depend upon its basis in its Alliqua stock, but such tax liability may be significant.

In addition, a corporate level U.S. federal income tax will be payable by the consolidated group of which we are the common parent if gain realized in the Spin-Off exceeds any net operating losses that may be available to offset such gain. The tax would be based upon the gain, if any, computed as the difference between the fair market value of the AquaMed common stock and our adjusted basis in such stock. We expect that it will have sufficient losses available to fully offset any gain realized as a result of the Spin-Off.

Potential indemnification liabilities in connection with the Spin-Off could materially and adversely affect us.

In connection with the Spin-Off, we will provide indemnification obligations designed to make us financially responsible for liabilities retained by us following the Spin-Off. If we are required to indemnify AquaMed under those circumstances, we could be subject to substantial liabilities.

After the Spin-Off, certain of our directors and officers may have actual or potential conflicts of interest because of their previous or continuing positions at Alliqua.

Because of their current or former positions with us, certain of AquaMed's expected directors own our common stock and equity awards. Following the Spin-Off, even though AquaMed's Board of Directors is expected to consist of a majority of directors who are independent, some of its directors will continue to have a financial interest in our common stock and equity awards. Continuing ownership of our common stock and equity awards, or service as a director at both companies could create, or appear to create, potential conflicts of interest if AquaMed has disagreements with us about any continuing contracts between AquaMed and us or faces decisions that could have

different implications for AquaMed and us.

Risks Related to Our Future Operations if We Consummate the Spin-Off and the Adynxx Merger.

The market price of the combined company's common stock may decline as a result of the Adynxx Merger.

The market price of the combined company's common stock may decline as a result of the Merger for a number of reasons including if:

- the combined company does not achieve the perceived benefits of the Merger as rapidly or to the extent anticipated by financial or industry analysts;
- the effect of the Merger on the combined company's business and prospects is not consistent with the expectations of financial or industry analysts; or
- investors react negatively to the effect on the combined company's business and prospects from the Merger.

Adynxx is a clinical development stage pharmaceutical company and has never been profitable. Adynxx expects to incur additional losses in the future and may never be profitable.

After the consummation of the Spin-Off and the Adynxx Merger, all of our business and operations will be the business and operations of Adynxx. Adynxx is a clinical development stage pharmaceutical company. Adynxx has not commercialized any product candidates or recognized any revenues from product sales. All of Adynxx's product candidates are still in the preclinical or clinical development stage, and none has been approved for marketing or is being marketed or commercialized. Adynxx's product candidates will require significant additional development, clinical studies, regulatory clearances and additional investment before they can be commercialized. Adynxx cannot be certain when or if any of its product candidates will obtain the required regulatory approval.

Adynxx has never been profitable or generated positive cash flow from operation. Adynxx may incur significant additional losses as it continues to focus its resources on prioritizing, selecting and advancing its product candidates. Adynxx's ability to generate revenue and achieve profitability depends mainly upon its ability, alone or with others, to successfully develop its product candidates, obtain the required regulatory approvals in various territories and commercialize its product candidates. Adynxx may be unable to achieve any or all of these goals with regard to its product candidates. As a result, we may never be profitable or achieve significant and/or sustained revenues.

11

Risks Related to Our Company

We have experienced significant losses and expect losses to continue for the foreseeable future.

We have incurred annual net losses of $8.4 million and $25.7 million, during the years ended December 31, 2018 and 2017, respectively. As of December 31, 2018, we had an accumulated deficit of $158.4 million. We expect to incur additional operating losses in the foreseeable future.

We may need to raise additional capital, and we cannot be sure that additional financing will be available.

Our ability to obtain future financing will depend on, among other things, our financial condition, results of operations and prospects, as well as on the condition of the capital markets or other credit markets at the time we seek financing. Increased volatility and disruptions in the financial markets could make it more difficult and more expensive for us to obtain financing. In addition, the adoption of new statutes and regulations, the implementation of recently enacted laws or new interpretations or the enforcement of older laws and regulations applicable to the financial markets or the financial services industry could result in a reduction in the amount of available credit or an increase in the cost of credit.

Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We believe that our success will depend, in part, upon our ability to retain David Johnson, our Chief Executive Officer. There can be no assurance that we will be able to find and attract additional qualified employees or retain our Chief Executive Officer and other key personnel. Our inability to hire qualified personnel, or the loss of services of or Chief Executive Officer or key personnel who may be hired in the future may have a material and adverse effect on our business.

Our acquisition strategy may not produce the intended growth in revenue and operating income.

As part of our strategy for growth, we may make acquisitions and enter into strategic alliances such as joint ventures and joint development agreements. However, we may not be able to identify suitable acquisition candidates, complete

acquisitions or integrate acquisitions successfully, and our strategic alliances may not prove to be successful. Such acquisitions could reduce shareholders' ownership, require us to incur debt, expose us to liabilities and result in amortization expenses related to intangible assets with definite lives. In addition, acquisitions involve other risks, including diversion of management resources otherwise available for ongoing development of our business and risks associated with entering new markets with which we have limited experience or where distribution alliances with experienced distributors are not available. Our future profitability may depend in part upon our ability to further develop our resources to adapt to these new products or business areas and to identify and enter into satisfactory distribution networks. Moreover, we may fail to realize the anticipated benefit of any acquisition as rapidly as expected or at all, or the acquired business may not perform in accordance with our expectations. We may also incur significant expenditures in anticipation of an acquisition that is never realized. There can be no assurance that difficulties encountered in connection with acquisitions will not have a material adverse effect on our business, financial condition and results of operations.

Our future success depends upon market acceptance of our existing and future products.

We believe that our success will depend in part upon the acceptance of our existing and future products by the medical community, hospitals and physicians and other health care providers, third-party payers, and end-users. Such acceptance may depend upon the extent to which the medical community and end-users perceive our products as safer, more effective or cost-competitive than other similar products. Ultimately, for our new products to gain general market acceptance, it may also be necessary for us to develop marketing partners for the distribution of our products. There can be no assurance that our new products will achieve significant market acceptance on a timely basis, or at all. Failure of some or all of our future products to achieve significant market acceptance could have a material adverse effect on our business, financial condition, and results of operations.

We are dependent on significant customers.

Our hydrogel manufacturing business is currently its sole source of revenue, and much of this revenue is generated from a limited number of clients, who account for a substantial percentage of our total revenues. For the fiscal year ended December 31, 2018, two major customers accounted for approximately 77% of our revenue, with each customer individually accounting for 63%, and 14%, respectively. The loss of any of our significant customers would have a significantly negative effect on our overall operations.

We operate in a highly competitive industry and face competition from large, well-established medical device manufacturers as well as new market entrants.

Competition from other medical device companies and from research and academic institutions is intense, expected to increase, subject to rapid change and significantly affected by new product introductions and other market activities of industry participants. In addition to competing with universities and other research institutions in the development of products, technologies and processes, we compete with other companies in acquiring rights to products or technologies from those institutions. A number of factors may limit the market acceptance of our products, including the timing of regulatory approvals and market entry relative to competitive products, the availability of alternative products, and the price of our products relative to alternative products, the availability of third party reimbursement and the extent of marketing efforts by third party distributors or agents that we retain. There can be no assurance that our products will receive market acceptance in a commercially viable period of time, if at all. Furthermore, there can be no assurance that we can develop products that are more effective or achieve greater market acceptance than competitive products, or that our competitors will not succeed in developing or acquiring products and technologies that are more effective than those being developed by us, that would render our products and technologies less competitive or obsolete.

Our competitors enjoy several competitive advantages over us, including some or all of the following:

- large and established distribution networks in the United States and/or in international markets;
- greater financial, managerial and other resources for products research and development, sales and marketing efforts and protecting and enforcing intellectual property rights;
- significantly greater name recognition;
- more expansive portfolios of intellectual property rights;
- greater experience in obtaining and maintaining regulatory approvals and/or clearances from the FDA and other regulatory agencies.

Our competitors' products will compete directly with our products. In addition, our competitors as well as new market entrants may develop or acquire new treatments, products or procedures that will compete directly or indirectly with our products. The presence of this competition in our market may lead to pricing pressure which would make it more difficult to sell our products at a price that will make us profitable or prevent us from selling our products at all. Our failure to compete effectively would have a material and adverse effect on our business, results of operations and

financial condition.

We have limited sales, marketing and distribution capabilities.

We currently have limited sales, marketing and distribution capabilities. We must either develop our own sales, marketing and distribution capabilities, which will be expensive and time consuming, or make arrangements with third parties to perform these services for us. If we enter into third party arrangements, the third parties may not be capable of successfully selling any of our products. If we decide to market any of our products on our own, we will have to commit significant resources to developing a marketing and sales force and supporting distribution capabilities. If we decide to enter into arrangements with third parties for performance of these services, we may find that they are not available on terms acceptable to us, or at all. If we are not able to establish and maintain successful arrangements with third parties or build our own sales and marketing infrastructure, our business and financial condition will be adversely affected.

We and our manufacturers are required to comply with current good manufacturing practices ("cGMPs") and current good tissue practices ("cGTPs") and could be subject to suspensions or product withdrawals if found non-compliant.

We rely on collaborative relationships with third-party contractors to manufacture various aspects of our products. Reliance on third-party contractors subjects us to a number of risks, including regulatory compliance issues. We may be responsible for the failures of our third-party contractors. The FDA regulates the facilities, processes and procedures used to manufacture and market medical products in the United States. Manufacturing facilities must be registered with the FDA and all products made in such facilities must be manufactured in accordance with cGMP, regulations enforced by the FDA. Compliance with cGMP regulations require the dedication of substantial resources and requires significant expenditures. The FDA periodically inspects our manufacturing facilities and those of our contractors. The inspections are generally random, however, and we cannot predict with certainty when the FDA will inspect our facilities or those of our contractors. Any failure of regulatory standards of compliance by us or on the part of our third-party contractors may compel the FDA to take actions to recall products or to suspend, or withdraw one or more of our product approvals. We or our third-party contractors may also be subject to additional FDA actions as identified in the subsequent section. Further, in the event that we need to use an additional contractor or transfer our processes or methods to manufacture our products to an alternative contractor; or if the FDA decides to curtail or cease our operations or cease or curtail our contractor due to manufacturing problems, the FDA's actions could result in product delays which could adversely affect our business, results of operations, and financial condition and cash flow.

We are subject to governmental regulations.

As a manufacturer of medical products, we are generally subject to regulation by the U.S. Food and Drug Administration and the Federal Trade Commission, among other state and federal governmental authorities in the U.S., with respect to the manufacturing, marketing, labeling, record keeping, claims and advertising of our products. Our hydrogel manufacturing facility is also subject to various state regulations.

Failure to comply with applicable regulatory requirements can result in, among other things, suspensions or withdrawals of approvals or clearances, seizures or recalls of products, injunctions against the manufacture, holding, distribution, marketing and sale of a product, civil and criminal sanctions. Furthermore, changes in existing regulations or the adoption of new regulations could prevent us from obtaining, or affect the timing of, future regulatory approvals. Meeting regulatory requirements and evolving government standards may delay marketing of our products for a considerable period of time, impose costly procedures upon our activities and result in a competitive advantage to larger companies that compete against us.

If we are unable to protect our intellectual property rights adequately, we may not be able to compete effectively.

Our success depends in part on our ability to protect the proprietary rights to the technologies used in our products. We rely on patent protection, as well as a combination of trademark laws and confidentiality, noncompetition and other contractual arrangements to protect our proprietary technology. However, these legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep a competitive advantage. Our patents and patent applications, if issued, may not be broad enough to prevent competitors from introducing similar products into the market. Our patents, if challenged or if it attempts to enforce them, may not necessarily be upheld by the courts. In addition, patent protection in foreign countries may be different from patent protection under U.S. laws and may not be favorable to us. Efforts to enforce any of our proprietary rights could be time-consuming and expensive, which could adversely affect our business and prospects and divert management’s attention.

We are dependent on proprietary know-how, and a failure to protect our proprietary know-how would harm our business and operation.

We rely on trade secret protection to protect our interests in proprietary know-how and for processes for which patents are difficult to obtain or enforce. We may not be able to protect our trade secrets adequately. In addition, we rely on non-disclosure and confidentiality agreements with employees, consultants and other parties to protect, in part, trade secrets and other proprietary technology. These agreements may be breached and we may not have adequate remedies for any breach. Moreover, others may independently develop equivalent proprietary information, and third parties may

otherwise gain access to our trade secrets and proprietary knowledge. Any disclosure of confidential data into the public domain or to third parties could allow competitors to learn our trade secrets and use the information in competition against us.

Despite our efforts to protect our proprietary rights, there is no assurance that such protections will preclude our competitors from developing and/or marketing similar products. While we are not aware of any third party intellectual property that would materially affect our business, our failure or inability to obtain patents and protect our proprietary information could result in our business being adversely affected.

If we are not able to establish and maintain successful arrangements with third parties or successfully build our own sales and marketing infrastructure, we may not be able to commercialize our products, which would adversely affect our business and financial condition.

To commercialize our products, we must continue to develop our own sales, marketing and distribution capabilities, which will be expensive and time consuming, or make arrangements with third parties to perform these services for us. The third parties may not be capable of successfully selling any of our products. We will have to commit significant resources to developing a marketing and sales force and supporting distribution capabilities. If we decide to enter into arrangements with third parties for performance of these services, we may find that they are not available on terms acceptable to us, or at all.

We may face intellectual property infringement claims that could be time-consuming, costly to defend and could result in our loss of significant rights and, in the case of patent infringement claims, the assessment of treble damages.

On occasion, we may receive notices of claims of our infringement, misappropriation or misuse of other parties' proprietary rights. We may have disputes regarding intellectual property rights with the parties that have licensed those rights to us. We may also initiate claims to defend our intellectual property. Intellectual property litigation, regardless of its outcome, is expensive and time-consuming, could divert management's attention from our business and have a material negative effect on our business, operating results or financial condition. In addition, the outcome of such litigation may be unpredictable. If there is a successful claim of infringement against us, we may be required to pay substantial damages—including treble damages if we were to be found to have willfully infringed a third party's patent—to the party claiming infringement, and to develop non-infringing technology, stop selling our products or using technology that contains the allegedly infringing intellectual property or enter into royalty or license agreements that may not be available on acceptable or commercially practical terms, if at all. Our failure to develop non-infringing technologies or license the proprietary rights on a timely basis could harm our business. In addition, modifying our products to exclude infringing technologies could require us to seek re-approval or clearance from various regulatory bodies for our products, which would be costly and time consuming. Also, we may be unaware of pending patent applications that relate to our technology. Parties making infringement claims on future issued patents may be able to obtain an injunction that would prevent us from selling our products or using technology that contains the allegedly infringing intellectual property, which could harm our business.

14

We may face product liability claims that could result in costly litigation and significant liabilities, and we may not be able to maintain adequate product liability insurance.

Our business exposes us to the risk of product liability claims that are inherent in the testing, manufacturing and marketing of medical devices. This risk exists even if a device is cleared or approved for commercial sale by the FDA and manufactured in facilities licensed and regulated by the FDA or an applicable foreign regulatory authority. Manufacturing and marketing of our commercial devices may expose us to product liability and other tort claims. Additionally, regardless of the merit or eventual outcome, product liability claims may result in:

- litigation costs;
- distraction of management's attention from our primary business;
- impairment of our business reputation;
- the inability to commercialize our devices;
- device recall or withdrawal from the market;
- withdrawal of clinical trial participants;
- substantial monetary awards to patients or other claimants; or
- loss of revenue.

Although we have, and intend to maintain, liability insurance, the coverage limits of our insurance policies may not be adequate, and one or more successful claims brought against us may have a material adverse effect on our business and results of operations. If we are unable to obtain insurance in the future at an acceptable cost or on acceptable terms with adequate coverage, we will be exposed to significant liabilities.

We are reliant upon two manufacturers for key ingredients of the manufacture of our hydrogels.

The Dow Chemical Company (Chempoint), Berry Global, Inc., DeWolf Chemical, Inc. and BASF Corporation (Univar Inc) are the principal manufacturers of the two polymers, polyethylene oxide and polyvinylpyrrolidone, that we primarily use in the manufacture of hydrogels. Although we have not experienced significant production delays attributable to supply changes, we believe that developing alternative sources of supply for the polymers used to make our current hydrogels would be difficult over a short period of time. Because we have no direct control over our third-party suppliers, interruptions or delays in the products and services provided by these third parties may be difficult to remedy in a timely fashion. In addition, if such suppliers are unable or unwilling to deliver the necessary raw materials or products, we may be unable to redesign or adapt our technology to work without such raw materials or products or find alternative suppliers or manufacturers. In such events, we could experience interruptions, delays, increased costs or quality control problems, which would have a material and adverse effect on our business, results of operations and financial condition.

Security breaches and other disruptions could compromise our information and expose it to liability, which would cause our business and reputation to suffer.

In the ordinary course of our business, we use networks to collect and store sensitive data, including intellectual property, proprietary business information and that of our customers, suppliers and business partners, personally identifiable information of our customers and employees, and data relating to patients who use our products. The secure processing, maintenance and transmission of this information is critical to our operations. Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance or other disruptions. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, and regulatory penalties, disrupt our operations and the services we provide to customers, damage our reputation, and cause a loss of confidence in our products and services, which could adversely affect our operating margins, revenues and competitive position.

Risks Related to Ownership of Our Common Stock and Warrants

The issuance of additional equity securities may negatively impact the trading price of our common stock.

We have issued equity securities in the past and may continue to issue equity securities to finance our activities in the future. We may not be able to sell shares or other securities in any offering at a price per share that is equal to or greater than the price per share previously paid by investors. In addition, outstanding options and warrants to purchase our common stock may be exercised and additional options and warrants may be issued, resulting in the issuance of additional shares of common stock. The issuance by us of additional equity securities or securities convertible into or exchangeable or exercisable for common stock, may result in additional dilution to our stockholders, and even the perception that such an issuance may occur could have a negative impact on the trading price of our common stock.

We may not pay dividends on our common stock or such dividends may not be within the announced range.

We have previously announced our intent to pay a special dividend in the range of $1.00 to $1.20 per share. All future payments of dividends, however, are at the discretion of our Board of Directors and will depend on our earnings, capital requirements, operating conditions, transaction expenses related to the Adynxx Merger, the TOP Merger and the Spin-Off and such other factors as our Board of Directors may deem relevant. As a result, we can provide no assurance that our stockholders will receive future dividends or that any special dividend will be paid to our stockholders within the previously announced range.

Our stock price has been and may continue to be volatile, which could result in substantial losses for investors.

The market price of our common stock has been and is likely to continue to be highly volatile and could fluctuate widely in response to various factors, many of which are beyond our control, including the following:

- technological innovations or new products and services by or our competitors;
- additions or departures of key personnel;
- sales of our common stock, particularly under any registration statement for the purposes of selling any other securities, including management shares;
- our ability to execute our business plan;
- operating results that fall below expectations;
- loss of any strategic relationship;
- industry developments;
- economic, political and other external factors; and
- period-to-period fluctuations in our financial results.

In addition, the securities markets have from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These market fluctuations may also significantly affect the market price of our common stock.

Our stock price, and the stock price of many other life science companies, have suffered significant declines over the past 12 months.

Market prices for securities of life sciences companies, particularly companies like ours with limited product revenues, have been highly volatile and have suffered sharp losses over the past 12 months. As a result of these declines, it has become much harder for life sciences companies, like us, to raise money, as needed, in the capital markets. As such, should we desire to sell equity in the future to raise capital, such capital may not be available on favorable terms, or at all. In addition, any such capital raises could be highly dilutive to current stockholders. Depressed valuations of our stock will also make it harder for us to consummate strategic transactions or acquisitions, which have historically been a significant part of our growth strategy, absent significant dilution to our current investors.

There can be no assurance that our internal controls over financial reporting will be able to detect fraud or other issues.

The ongoing internal control provisions of Section 404 of the Sarbanes-Oxley Act of 2002 require us to identify material weaknesses in internal control over financial reporting, which is a process to provide reasonable assurance regarding the reliability of financial reporting for external purposes in accordance with accounting principles generally accepted in the United States. Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our internal controls and disclosure controls will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. In addition, the design of a control system must reflect the fact that there are resource constraints and the benefit of controls must be relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, in our company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple errors or mistakes. Further, controls can be circumvented by individual acts of some persons, by collusion of two or more persons, or by management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving our stated goals under all potential future conditions. Over time, a control may be inadequate because of changes in conditions, such as growth of the company or increased transaction volume, or the degree of compliance with the policies or procedures may deteriorate. Because of inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

In addition, discovery and disclosure of a material weakness, by definition, could have a material adverse impact on our financial statements. Such an occurrence could discourage certain customers or suppliers from doing business with us, cause downgrades in our future debt ratings leading to higher borrowing costs and affect how our stock trades. This could, in turn, negatively affect our ability to access public debt or equity markets for capital.

Our Board of Directors can authorize the issuance of preferred stock, which could diminish the rights of holders of our common stock and make a change of control of it more difficult even if it might benefit our stockholders.

Generally, our Board of Directors is authorized to issue shares of preferred stock in one or more series and to fix the voting powers, preferences and other rights and limitations of the preferred stock. However, pursuant to the Adynxx

Merger Agreement, we have agreed not issue any such shares of preferred stock without the prior consent of Adynxx. In the event that the Adynxx Merger Agreement is terminated, we may issue shares of preferred stock with a preference over our common stock with respect to dividends or distributions on liquidation or dissolution, or that may otherwise adversely affect the voting or other rights of the holders of common stock. Issuances of preferred stock, depending upon the rights, preferences and designations of the preferred stock, may have the effect of delaying, deterring or preventing a change of control, even if that change of control might benefit our stockholders.

Offers or availability for sale of a substantial number of shares of our common stock may cause the price of our common stock to decline.

Sales of a significant number of shares of our common stock in the public market could harm the market price of our common stock and make it more difficult for us to raise funds through future offerings of common stock. As additional shares of our common stock become available for resale in the public market, the supply of our common stock will increase, which could decrease the price of our common stock.

In addition, if our stockholders sell substantial amounts of our common stock in the public market, upon the expiration of any statutory holding period under Rule 144, upon the expiration of lock-up periods applicable to outstanding shares, or upon the exercise of outstanding options or warrants, it could create a circumstance commonly referred to as an "overhang," in anticipation of which the market price of our common stock could fall. The existence of an overhang, whether or not sales have occurred or are occurring, could also make it more difficult for us to raise additional financing through the sale of equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about it or our business. Although we currently have research coverage by securities and industry analysts, you should not invest in our common stock in anticipation that we will increase such coverage. If one or more of the analysts who covers us at any given time downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analyst's ceases coverage of us or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price and trading volume to decline.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable

ITEM 2. PROPERTIES

As of December 31, 2018, we operated two offices, with our corporate headquarters and manufacturing facility located in Langhorne, Pennsylvania, where we lease approximately 16,500 square feet of space. We maintain offices in Yardley, Pennsylvania, where we lease approximately 9,000 square feet of space. We believe that all our facilities are well maintained and are suitable and adequate for our current needs. Effective February 1, 2019, we signed a sublease agreement with The Pinnacle Health Group, Inc. to sublease the office space in Yardley, Pennsylvania through the term of the lease, expiring on April 30, 2023.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may become involved in lawsuits, investigations and claims that arise in the ordinary course of business. As of the date of this filing, we are not party to any material litigation nor are we aware of any such threatened or pending legal proceedings that we believe could have a material adverse effect on our business, financial condition or operating results.

There are no material proceedings in which any of our directors, officers or affiliates or any registered or beneficial shareholder of more than 5% of our common stock is an adverse party or has a material interest adverse to our interest.

The class action complaint filed on February 22, 2018 was settled in April 2018 for an immaterial amount, $0.125 million.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market for Common Stock

Our common stock has been listed on The NASDAQ Capital Market under the symbol "ALQA" since January 28, 2014.

Holders of Record

As of February 22, 2018, there were approximately 5,005,211 holders of record of our common stock.

Issuer Purchases of Equity Securities

We did not repurchase any of our equity securities during the fourth quarter of the fiscal year ended December 31, 2018.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes included in this report. This discussion and analysis contains forward-looking statements based on our current expectations, assumptions, estimates and projections. These forward-looking statements involve risks and uncertainties. Our actual results could differ materially from those indicated in these forward-looking statements as a result of certain factors, as more fully discussed in Item 1 of this report, entitled "Business," under "Forward-Looking Statements" and Item 1A of this report, entitled "Risk Factors."

Overview

We manufacture a high-water content, electron beam cross-linked, aqueous polymer hydrogels, or gels, used for wound care, medical diagnostics, transdermal drug delivery and cosmetics. We believe that we are one of the leading manufacturers of high-performance gels in the United States. We specialize in custom gels by capitalizing on proprietary manufacturing technologies. We have historically served as a contract manufacturer, supplying our gels to third parties who incorporate them into their own products. Our contract manufacturing business provides custom hydrogels to the OEM market.

Recent Events

Adynxx Merger

On October 11, 2018, we, Adynxx Merger Sub and Adynxx entered into the "Adynxx Merger Agreement, pursuant to which, among other things, subject to the satisfaction or waiver of the conditions set forth in the Adynxx Merger Agreement, Adynxx Merger Sub will merge with and into Adynxx, with Adynxx becoming a wholly-owned subsidiary of us and the surviving corporation of the merger.

Subject to the terms and conditions of the Adynxx Merger Agreement, at the Effective Time, (a) each outstanding share of Adynxx common stock, on an as-converted basis taking into consideration all outstanding common stock, preferred stock, restricted stock and all other securities convertible or exercisable for Adynxx common stock, will be converted into the right to receive the number of shares of our common stock equal to the exchange ratio described below; (b) each outstanding Adynxx stock option that has not previously been exercised prior to the Effective Time will be assumed by us; and (c) each outstanding warrant to acquire Adynxx capital stock that has not previously been exercised prior to the Effective Time will be assumed by us.

Under the exchange ratio formula in the Adynxx Merger Agreement, as of immediately after the Adynxx Merger, but excluding the effect of certain financings (as further described in the Adynxx Merger Agreement), the former Adynxx securityholders are expected to own approximately 86% of the Post-Closing Shares, and our stockholders as of

immediately prior to the Merger are expected to own approximately 14% of the aggregate number of Post-Closing Shares. This exchange ratio will be fixed immediately prior to the Effective Time to reflect our and Adynxx's equity capitalization as of immediately prior to such time. In addition, to the extent Adynxx consummates a Permitted Financing, as specifically defined in the Adynxx Merger Agreement, in excess of $10 million dollars prior to the Effective Time, the exchange ratio may be further adjusted in a manner that would reduce the percentage of the aggregate number of Post-Closing Shares held by ours stockholders as of immediately prior to the Adynxx Merger.

Immediately following the Adynxx Merger, the name of the Company will be changed from "Alliqua BioMedical, Inc." to "Adynxx, Inc." At the Effective Time, the Adynxx Merger Agreement contemplates that the Board of Directors of the Company will consist of such directors selected by Adynxx; we will have the right to designate one member. Our executive officers immediately after the Effective Time will be designated by Adynxx.

The transactions contemplated by the Adynxx Merger Agreement must be approved by the affirmative vote of a majority of the voting power of issued and outstanding shares of our common stock. In addition to the receipt of our approval of our stockholders, each party's obligation to consummate the Adynxx Merger is conditioned upon certain other customary closing conditions.

Spin-Off and Merger of AquaMed Technologies, Inc.

On November 27, 2018, AquaMed Technologies, Inc. ("AquaMed"), our wholly-owned subsidiary, AQ TOP, LLC, a Delaware limited liability company and a wholly-owned subsidiary of AquaMed, and TO Pharmaceuticals, LLC, a Delaware limited liability company ("TOP"), entered into an Agreement and Plan of Merger (the "TOP Merger Agreement"), pursuant to which, among other things, subject to the satisfaction or waiver of the conditions set forth in the TOP Merger Agreement, TOP Merger Sub will merge with and into TOP, with TOP becoming a wholly-owned subsidiary of AquaMed and the surviving company of the merger.

The TOP Merger is expected to occur after our consummation of the following steps:

(1) Pursuant to the Separation Agreement, prior to consummation of the TOP Merger, we will effect the Separation,

(2) AquaMed will issue the Distribution Consideration,

(3) We will consummate the Distribution, and

(4) We intend to consummate Adynxx Merger.

At the effective time of the TOP Merger, all of the outstanding membership units of TOP will be converted into the right to receive, in the aggregate, merger consideration consisting of shares of AquaMed common stock. Immediately after the effective time of the TOP Merger and consummation of the Private Placement (as specifically defined in the TOP Merger Agreement), before giving effect to any fees payable in equity to financial advisors or other intermediaries, the current members of TOP and the third-party investors that participate in the Private Placement are expected to hold approximately 90% of the total number of shares of AquaMed common stock outstanding (on a fully diluted basis).

The Company's operations contemplated under the Adynxx Merger Agreement are classified as Held for Use.

Completion of the Asset Sale Transaction with Celularity

On May 7, 2018, we completed the Asset Sale Transaction ("AST") with Celularity, Inc. ("Celularity") pursuant to the terms of the Asset Purchase Agreement ("APA"). As consideration for the Purchased Assets, Celularity paid a purchase price of $29.0 million in cash. No debt or significant liabilities were assumed by Celularity.

Under the terms of the APA, we retained certain specified assets, including, among other things, cash, accounts receivable and our hydrogel contract manufacturing business, including our SilverSeal and Hydress product lines.

In connection with the completion of the AST, we terminated our Credit Agreement with Perceptive Credit Holdings LP ("Perceptive"). Additionally, we terminated the related Pledge and Security Agreement, dated as of May 29, 2015, by and among us, Guarantor and Perceptive. The Credit Agreement provided for a senior secured term loan in a single borrowing to us in the initial principal amount of approximately $15.5 million, of which approximately $12.0 million remained outstanding on the termination date. The full unpaid principal amount of the term loan and associated fees were paid off.

The operations sold under the APA have been reclassified to discontinued operations in the second quarter of 2018, when our shareholders approved the sale. The AST was completed on May 7, 2018.

Contract Manufacturing Business

During the years ended December 31, 2018 and 2017, one customer accounted for 63% and 65% of total net revenue from continuing operations, respectively. We are uncertain as to this customer's intentions to use our services during the fiscal year ending December 31, 2019.

Argentum Asset Sale

On August 31, 2017, we entered into an Asset Purchase Agreement (the "Argentum Purchase Agreement") with Argentum Medical, LLC ("Argentum") whereby we agreed to sell to Argentum all of the our rights, including (i) all

distribution rights, exclusivity rights, intellectual property rights and marketing rights to the TheraBond product line and (ii) the unsold inventory of TheraBond products and work in process previously purchased by us in existence as of the closing, which occurred upon execution and delivery of the Argentum Purchase Agreement. In consideration for the sale of the TheraBond product line and the unsold TheraBond inventory to Argentum by us, Argentum agreed to pay (i) $3.6 million for the TheraBond product line and certain other agreements between the parties and (ii) up to $112,000 for the unsold TheraBond inventory upon our completion of our obligations to deliver all remaining and qualifying unsold TheraBond inventory, as specified in the Argentum Purchase Agreement. Of the $3.6 million of consideration, $300,000 is deposited in an indemnity escrow account under standard terms and conditions. This amount is classified under current assets of discontinued operations on our balance sheet as of December 31, 2017. As a result of the foregoing, we no longer distribute Therabond and past sales of Therabond are accounted for as a discontinued operations.

Liquidity and Capital Resources

The AST was completed on May 7, 2018. As consideration for the Purchased Assets, Celularity paid consideration to us of $29.0 million in cash. No debt or significant liabilities were assumed by Celularity in the AST. A portion of the proceeds, approximately $14.8 million, was used to extinguish our debt obligations and associated costs to Perceptive under the Credit Agreement.

Net cash used in operating activities was $9.7 million and $10.7 million for the years ended December 31, 2018 and 2017, respectively, primarily to fund our net loss of approximately $8.4 million in 2018 and $25.7 million in 2017.

Net cash provided in investing activities was $29.3 million and $3.9 million for the years ended December 31, 2018, and 2017, respectively. Cash provided by investing activities during the year ended December 31, 2018 was primarily due to the consideration received from Celularity in connection with the AST. Cash provided by investing activities during the year ended December 31, 2017 included $3.4 million received from the sale of the rights to the TheraBond product to Argentum, $0.65 million, net, received from Soluble Systems, LLC in repayment of a bridge loan and offset $0.179 million in purchases of improvements and equipment.

Net cash used in financing activities for the year ended December 31, 2018 consisted of $14.6 million in the payment of obligations owed to Perceptive under the Credit Agreement, offset by $1.7 million received from proceeds of a Bridge Loan Note with Perceptive. Net cash provided by financing activities for the year ended December 31, 2017 consisted of $5.9 million of net proceeds received from the issuance of our common stock offset by $1.7 million in the payment of obligations owed to Perceptive under the Credit Agreement and $0.7 million utilized to pay the cash portion of the contingent consideration related to the acquisition of Celleration, Inc. in 2015.

At December 31, 2018, current assets totaled $9.3 million and current liabilities totaled $1.4 million. As a result, we had working capital of $7.9 million at December 31, 2018. As of December 31, 2018, we had cash and cash equivalents totaling approximately $8.9 million compared to $2.2 million at December 31, 2017.

Given our current cash position and reduced cash burn, we believe substantial doubt has been mitigated and we have sufficient resources to support our planned operations for a year from the date these financial statements are issued.

Results of Operations

Year Ended December 31, 2018 Compared to the Year Ended December 31, 2017

Overview.

Our operations intended to be sold under the Adynxx Merger Agreement and distributed in the Spin-Off have not been reclassified to discontinued operations since they are classified as Held for Use. These operations will be presented in continuing operations until the Adynxx Merger Agreement is approved by our stockholders. Upon stockholder approval of the Adynxx Merger Agreement, these operations will be reclassified to discontinued operations.

For the years ended December 31, 2018 and 2017, we had a net loss of $8.4 million and $25.7 million, respectively. Included in the operating loss for the year ended December 31, 2018 was non-cash stock-based compensation of $1.0 million. Included in the operating loss for the year ended December 31, 2017, was non-cash stock-based compensation of $2.0 million, and an increase in the fair value adjustments to contingent consideration of $35,000. Impairment charges of $10.3 million were also included in our operating loss for the year ended December 31, 2017.

Revenues, net. For the year ended December 31, 2018 revenues increased by $0.2 million, or 10%, to $2.2 million from $2.0 million for the year ended December 31, 2017. The increase in our overall revenue was primarily due to increase orders from our contract manufacturing customers, particularly Bard Shannon Limited.

The components of revenue were as follows for the years ended December 31, 2018 and 2017 (in thousands):

	Year Ended December 31,	
	2018	2017
Revenues		
Product	$ 3	$ 27
Contract manufacturing	2,213	1,992
Total revenues, net	$ 2,216	$ 2,019

Gross profit. Our gross profit was $0.5 million for the year ended December 31, 2018 compared to gross profit of $0.2 million for the year ended December 31, 2017. The improved results for the year ended December 31, 2018, as

compared to 2017 was primarily due to a customer mix shifting toward higher margin projects, reduction in headcount from six in 2017 to four in 2018 and a stricter emphasis on operating efficiency. Gross margin was approximately 22% for the year ended December 31, 2018. Gross margin was approximately 9% for the year ended December 31, 2017.

The components of cost of revenues are as follows for the years ended December 31, 2018 and 2017 (in thousands):

	Year Ended December 31,	
	2018	2017
Cost of revenues		
Materials and finished products	$ 624	$ 456
Stock-based compensation	33	45
Compensation and benefits	387	468
Depreciation and amortization	289	289
Equipment, production and other expenses	387	583
Total cost of revenues	$ 1,720	$ 1,841

Selling, general and administrative expenses. The following table highlights selling, general and administrative expenses by type for the years ended December 31, 2018 and 2017 (in thousands):

	Year Ended December 31,	
	2018	2017
Selling, general and administrative expenses		
Compensation and benefits	$ 1,197	$ 1,843
Stock-based compensation	288	245
Depreciation and amortization	42	27
Other expenses and professional fees	3,251	3,188
Total selling, general and administrative expenses	$ 4,778	$ 5,303

Selling, general and administrative expenses decreased by $0.5 million, to $4.8 million for the year ended December 31, 2018, as compared to $5.3 million for the year ended December 31, 2017.

Compensation and benefits decreased by $0.6 million, to $1.2 million for the year ended December 31, 2018, as compared to $1.8 million for the year ended December 31, 2017. The decrease in compensation and benefits was primarily due to the decrease in the average number of full-time employees in 2018 of two compared to 2017 of nine. Stock-based compensation increased by $0.043 million, to $0.288 million for the year ended December 31, 2018, as compared to $0.245 million for the year ended December 31, 2017. The increase in stock-based compensation is primarily due to the accelerated vesting of employee stock options and restricted stock awards resulting from the completion of the AST on May 7, 2018.

Other expenses and professional fees increased by $0.063 million to $3.3 million for the year ended December 31, 2018, as compared to $3.2 million for the year ended December 31, 2017. Other expense and professional fees consisted of costs associated with our general management, including information technology, legal fees, travel and consulting fees. The increase is primarily due to higher legal and consulting expenses.

Business Development Costs. During the year ended December 31, 2018, we incurred $1.0 million in costs related to business development opportunities. These costs were mainly due to transactional costs we incurred in relation to professional fees, including accounting, legal and consulting fees exploring business strategy and business combination; in the past these were in selling, general and administrative expenses, however, because they are not of a normal course of business, these have been reclassified to the separate caption of business development costs.

On October 5, 2016, we entered into a merger agreement to acquire the business of Soluble Systems, LLC (“Soluble”) through a series of transactions. On February 27, 2017, we terminated this agreement.

We advanced Soluble $1.4 million, $1.0 million during the year ended December 31, 2016 and $0.4 million on January 30, 2017.

On October 27, 2017, we received $1.0 million under an agreement with Soluble in connection with amounts advanced to Soluble by us. With the receipt of this $1.0 million, we acknowledged that all amounts due from Soluble are paid in full. During the year ended December 31, 2017, we recorded a reduction in business development costs of $0.365 million which consisted of the recovery of bad debt expense of $0.650 million, offset by approximately $0.285 million of other business development costs.

Warrant modification expense. During the year ended December 31, 2017, we recognized $803,000 of warrant modification expense in connection with the amendment of the warrant issued to Perceptive. In connection with entry into the January 2017 forbearance agreement, as amended March and June 2017, we also amended and restated the warrant issued to Perceptive in connection with the closing of the Credit Agreement in May 2015. The amended and

restated warrant is exercisable for 210,000 shares of our common stock. The expense recorded during the year ended December 31, 2017 represents the incremental value of the modified warrant as compared to the original warrant, both valued as of the respective modification dates. This is currently reflected in discontinued operations.

Loss on early extinguishment of debt. During the year ended December 31, 2018, we recorded an expense of $1.7 million in connection with the completion of the AST with Celularity and payoff of the Perceptive debt on May 7, 2018. During the year ended December 31, 2017, we recorded an expense of $0.182 million in connection with the completion of the Argentum Asset Sale and partial payoff of the Perceptive debt on August 31, 2017.

Change in fair value of warrant liability. During the year ended December 31, 2018, we recognized an expense of $0.026 million for the change in fair value of warrant liability due to the increased stock price as of December 31, 2018 versus December 31, 2017 During the year ended December 31, 2017, we recognized a credit of $0.692 million for the change in fair value of warrant liability due to the decreased stock price as of December 31, 2017 versus December 31, 2016.

Loss from Discontinued Operations. During the year ended December 31, 2018, we sold our rights to the Biovance, Interfyl and MIST product lines, as well as our remaining Biovance, Interfyl and MIST inventory. This sale resulted in a loss from discontinued operations of approximately $1.4 million for the year ended December 31, 2018, which consists of a $6.9 million loss from discontinued operations as well as $5.5 million recognized as a gain on the sale of the assets. During the year ended December 31, 2017, we had a loss from discontinued operations of $21.4 million in connection with our discontinued Biovance, Interfyl and MIST product lines and Therabond product line, which consisted of a $23.2 million loss from discontinued operations as well as a $1.7 million recognized gain on the sale of assets.

During the year ended December 31, 2018, we recorded income tax expense of approximately $546,000 reflected in discontinued operations. The gain on sale of assets to Celularity resulted in current state tax expense, primarily due to limitations on the use of net operating loss carryforwards in certain state jurisdictions. During the year ended December 31, 2017, we recorded an income tax benefit of approximately $743,000 reflected in discontinued operations. The income tax benefit is primarily attributable to the change in the useful life of the MIST Therapy tradename from indefinite to definite, which necessitates a write-down of the deferred tax liability associated with the asset.

The United States enacted the Tax Cuts and Jobs Act (“Act”) on December 22, 2017, most provisions of which took effect in years beginning after December 31, 2017. The Act made substantial changes to U.S. taxation of corporations, including a reduction in the U.S. federal corporate income tax rate from 34% to 21% and changes to limitations on the deductibility of executive compensation. The effect on deferred tax assets and liabilities of a change in law or tax rates is recognized in income in the period that includes the enactment date. We have historically incurred losses, therefore, the benefit for both years was offset by a full valuation.

After the enactment of the Act, the SEC issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Act. In our financial statements for the period ended December 31, 2017, we calculated an estimate of the impact of the Act related to the remeasurement of our net U.S. deferred tax asset due to the change in U.S. federal corporate income tax rate. The provisional amount recorded was deferred tax expense of $14.6 million, but which was fully and equally offset by a deferred tax benefit related to a corresponding reduction in our valuation allowance. In addition, due to changes in executive compensation rules pursuant to the Act, the Company determined that approximately $1.3 million of deferred tax asset for stock compensation may not be realizable. The Company had previously recorded a valuation allowance against the deferred tax asset so this adjustment had no impact on the financial statements for the period ended December 31, 2017. During the quarter ended December 31, 2018, the Company completed the accounting for the income tax effects of the Act, which resulted in an immaterial change in the net deferred tax asset, before valuation allowance, as of the enactment date. For additional discussion of the impact on the income tax provision, other income tax balances and related disclosures, see "Note 15 – Income Taxes" in the Notes accompanying the audited Consolidated Financial Statements.

Off Balance Sheet Arrangements

As of December 31, 2018, we had no off-balance sheet arrangements in the nature of guarantee contracts, retained or contingent interests in assets transferred to unconsolidated entities (or similar arrangements serving as credit, liquidity or market risk support to unconsolidated entities for any such assets), or obligations (including contingent obligations) arising out of variable interests in unconsolidated entities providing financing, liquidity, market risk or credit risk support to us, or that engage in leasing, hedging or research and development services with us.

Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with generally accepted accounting principles requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of our financial statements and the reported amounts of revenues and expenses during the reporting period. The accounting policies that we believe require more significant estimates and assumptions include valuing equity securities and derivative financial instruments issued in financing transactions, allowance for doubtful accounts, inventory reserves, deferred taxes and related valuation allowances, and the fair values of long lived assets, intangibles, goodwill and contingent consideration. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ significantly from these estimates under different assumptions or conditions. There have been no material changes to these estimates for the periods presented in this Annual Report.

We believe that of our significant accounting policies, which are described below and in Note 2 to our audited consolidated financial statements included in this Item 7 of this Annual Report, the following accounting policies involve a greater degree of judgment and complexity. Accordingly, these are the policies we believe are the most critical to aid in fully understanding and evaluating our financial condition and results of operations.

Goodwill and Other Indefinite-Lived Intangible Assets

Goodwill and other indefinite-lived intangible assets are tested for impairment annually, at the end of the fourth quarter of each fiscal year, and between annual tests if an event occurs or circumstances change that would indicate it is more likely than not that the carrying amount may be impaired. Impairment testing for goodwill is done at a reporting unit level. A reporting unit is defined as an operating segment or one level below an operating segment, called a component. However, two or more components of an operating segment will be aggregated and deemed a single reporting unit if the components have similar economic characteristics. We operate as one reporting unit.

Authoritative accounting guidance allows us to first assess qualitative factors to determine whether it is necessary to perform a more detailed quantitative impairment test for goodwill and other indefinite-lived intangible assets. We may elect to bypass the qualitative assessment and proceed directly to the quantitative test for any reporting unit or indefinite-lived intangible assets. Qualitative factors that we consider as part of our assessment include a comparison of the most recent valuation to reporting unit carrying amounts, change in our market capitalization and its implied impact on reporting unit fair value, industry and market conditions, macroeconomic conditions, trends in product costs and financial performance of our businesses. If we perform the quantitative test for any reporting units or indefinite-lived intangible assets, we generally use a discounted cash flow method to estimate fair value. The discounted cash flow method is based on the present value of projected cash flows. Assumptions used in these cash flow projections are generally consistent with our internal forecasts. The estimated cash flows are discounted using a rate that represents the weighted average cost of capital. The weighted average cost of capital is based on a number of variables, including the equity-risk premium and risk-free interest rate. Management believes the assumptions used for the impairment tests are consistent with those that would be utilized by a market participant performing similar analyses and valuations. Adverse changes in future market conditions or weaker operating results compared to our expectations may impact our projected cash flows and estimates of weighted average cost of capital, which could result in a potential impairment charge if we are unable to recover the carrying value of our goodwill and other intangible assets.

On May 7, 2018, we completed the previously announced AST with Celularity pursuant to the terms of the APA. As consideration for the Purchased Assets, Celularity paid a purchase price of $29.0 million in cash. No debt or significant liabilities were assumed by Celularity.

Under the terms of the APA, we retained certain specified assets, including, among other things, cash, accounts receivable and our hydrogel contract manufacturing business, including our SilverSeal and Hydress product lines.

In connection with the completion of the AST, we terminated our Credit Agreement with Perceptive. Additionally, we terminated the related Pledge and Security Agreement, dated as of May 29, 2015, by and among us, Guarantor and Perceptive. The Credit Agreement provided for a senior secured term loan in a single borrowing to us in the initial principal amount of approximately $15.5 million, of which approximately $12.0 million remained outstanding on the termination date. The full unpaid principal amount of the term loan and associated fees were paid off.

We proceeded directly to the quantitative analysis considering the consideration to be received and the assets sold under the APA. As a result of this test, our goodwill was determined to be impaired and an impairment charge of $10.3 million was recorded for the year ended December 31, 2017.

As of May 7, 2018, due to the completion of the Celularity AST, the Goodwill and Intangible Assets have been written off. There were no Goodwill and Intangible Assets as of December 31, 2018.

23

Impairment of Long-Lived Assets Subject to Amortization

We amortize intangible assets with finite lives over their estimated useful lives and review them for impairment at least annually or whenever an impairment indicator exists. We continually monitor events and changes in circumstances that could indicate carrying amounts of our long-lived assets, including our intangible assets, may not be recoverable. When such events or changes in circumstances occur, we assess recoverability by determining whether the carrying value of such assets will be recovered through the undiscounted expected future cash flows. If the future undiscounted cash flows are less than the carrying amount of these assets, we recognize an impairment loss based on the excess of the carrying amount over the fair value of the assets.

Due to the APA, our long-lived asset group related to the Purchased Assets was sold or otherwise disposed of significantly before the end of its previously estimated useful life. We, therefore, tested our long-lived assets for recoverability as of December 31, 2017. These long-lived assets consist of property, plant and equipment and intangible assets subject to amortization.

The expected consideration under the APA for the sale of the long-lived asset group related to the Purchased Assets approximate the net book value of these assets at December 31, 2017. Therefore, no impairment charge was recorded for long-lived assets during the year ended December 31, 2017.

As of May 7, 2018, due to the completion of the Celularity AST, the Goodwill and Intangible Assets have been written off. There were no Goodwill and Intangible Assets as of December 31, 2018.

Recent Accounting Standards

Recently issued accounting pronouncements are addressed in Note 2 in the Notes to Consolidated Financial Statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not required.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Our Consolidated Financial Statements and the relevant notes to those statements are attached to this report beginning on page F-1.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We conducted an evaluation of the effectiveness of our "disclosure controls and procedures" ("Disclosure Controls"), as defined by Rules 13a-15(e) and 15d-15(e) of the Exchange Act, as of December 31, 2018, the end of the period covered by this Annual Report on Form 10-K. The Disclosure Controls evaluation was done under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our Disclosure Controls were effective at the reasonable assurance level as of December 31, 2018.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the consolidated financial statements for external reporting purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness of internal control over financial reporting to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate over time.

Management, including our Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of our internal control over financial reporting as of December 31, 2018. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in *Internal Control—Integrated Framework (2013)*. Based on its assessment and those criteria, management has concluded that we maintained effective internal control over financial reporting as of December 31, 2018.

Changes in Internal Control over Financial Reporting

We regularly review our system of internal control over financial reporting to ensure we maintain an effective internal control environment. As we expand, we make changes to our processes and systems to improve controls and we continue to create and enhance the design and documentation of our internal control processes to ensure effective controls over financial reporting.

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information with respect to this item will be set forth in our definitive proxy statement for the 2019 Annual Meeting of Stockholders, which shall be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year covered by this report, (our “Proxy Statement”), and is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

Information with respect to this item will be set forth in our Proxy Statement, and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information with respect to this item will be set forth in our Proxy Statement, and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information with respect to this item will be set forth in our Proxy Statement, and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information with respect to this item will be set forth in our Proxy Statement, and is incorporated herein by reference.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following documents are filed as part of this report:

(1) Financial Statement Schedules:

(2) Financial Statement Schedules:

None

(3) Exhibits:

See "Index to Exhibits" for a description of our exhibits.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ALLIQUA
BIOMEDICAL, INC.

By: /s/ DAVID JOHNSON
David Johnson
President and Chief
Executive Officer

Date: February 22, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ DAVID JOHNSON David Johnson	President, Chief Executive Officer and Director (principal executive officer)	February 22, 2019
/s/ JOSEPH WARUSZ Joseph Warusz	Chief Financial Officer, Treasurer and Secretary (principal financial and accounting officer)	February 22, 2019
/s/ JOSEPH LEONE Joseph Leone	Director	February 22, 2019
/s/ GARY RESTANI Gary Restani	Director	February 22, 2019
/s/ JEFFREY SKLAR Jeffrey Sklar	Director	February 22, 2019
/s/ MARK WAGNER Mark Wagner	Director	February 22, 2019

27

Index to Exhibits

Exhibit No.	Description
2.1	Agreement and Plan of Merger, dated May 5, 2014, by and between Alliqua, Inc., ALQA Merger Sub, Inc., Choice Therapeutics, Inc. and E. James Hutchens, as the Stockholder Representative, incorporated by reference to Exhibit 2.1 to the Form 8-K filed May 6, 2014.
2.2	Agreement and Plan of Merger, dated June 5, 2014, by and between Alliqua, Inc. and Alliqua BioMedical, Inc., incorporated by reference to Exhibit 2.1 to the Form 8-K filed June 11, 2014.
2.3**	Agreement and Plan of Merger, dated February 2, 2015, by and among Alliqua BioMedical, Inc., ALQA Cedar, Inc., Celleration, Inc. and certain representatives of the stockholders of Celleration, Inc., as identified therein, incorporated by reference to Exhibit 2.1 to the Form 8-K filed February 2, 2015.
2.4**	Contribution Agreement and Plan of Merger, dated October 5, 2016, by and among Alliqua BioMedical, Inc., Alliqua Holdings, Inc., Chesapeake Merger Corp., and Soluble Systems, LLC, incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed on October 6, 2016.
2.5**	Asset Purchase Agreement, dated January 5, 2018, by and between Alliqua BioMedical, Inc. and Celularity Inc., incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed on January 5, 2018.
2.6**	Asset Purchase Agreement, dated August 31, 2017, by and between Alliqua BioMedical, Inc. and Argentum Medical, LLC, incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed on September 5, 2017.
2.7**	Agreement and Plan of Merger, dated November 27, 2018, by and among AquaMed Technologies, Inc., TO Pharmaceuticals, LLC and AQ TOP, LLC (incorporated by reference to Exhibit 2.1 to Alliqua BioMedical Inc.'s Form 8-K, filed with the SEC on November 28, 2018)
2.8*	Amendment No. 1, dated January 8, 2019, to Agreement and Plan of Merger
2.9**	Agreement and Plan of Merger and Reorganization, dated October 11, 2018, by and among Alliqua BioMedical, Inc., Adynxx, Inc. and Embark Merger Sub Inc. (incorporated by reference to Exhibit 2.1 to Current Report on Form 8-K, filed with the SEC on October 12, 2018)
2.10	Amendment No. 1, dated November 7, 2018, to the Agreement and Plan of Merger and Reorganization, dated October 11, 2018, by and among Alliqua BioMedical, Inc., Adynxx, Inc. and Embark Merger Sub Inc., incorporated by reference to Exhibit 2.2 to the Current Report on Form 8-K filed on November 13, 2018
2.11	Form of Voting Agreement, by and between Alliqua BioMedical, Inc. and its directors and officers, incorporated by reference to Exhibit 2.2 to the Current Report on Form 8-K filed on October 12, 2018.
3.1	Certificate of Incorporation of Alliqua BioMedical, Inc., incorporated by reference to Exhibit 3.1 to the Form 8-K filed June 11, 2014.
3.2	Certificate of Amendment to Certificate of Incorporation of Alliqua BioMedical, Inc., incorporated by reference to Exhibit 3.3 to the Form 8-K filed June 11, 2014.
3.3	Certificate of Amendment to Certificate of Incorporation of Alliqua BioMedical, Inc., incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed on May 6, 2016.
3.4	Certificate of Amendment to Certificate of Incorporation of Alliqua BioMedical, Inc., incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed on October 5, 2017.
3.5	Bylaws of Alliqua BioMedical, Inc., incorporated by reference to Exhibit 3.2 to the Form 8-K filed June 11, 2014.
4.1	Form of Warrant used in connection with February 16, 2012 private placement, incorporated by reference to Exhibit 10.2 to the Form 8-K filed February 21, 2012.

4.2	Form of Warrant used in connection with August 14, 2012 private placement, incorporated by reference to Exhibit 10.2 to the Form 8-K filed August 16, 2012.
4.3	Form of Warrant used in connection with November 8, 2012 private placement, incorporated by reference to Exhibit 10.2 to the Form 8-K filed November 14, 2012.
4.4	Form of Warrant used in connection with February 22, 2013 private placement, incorporated by reference to Exhibit 10.2 to the Form 8-K filed February 25, 2013.
4.5	Form of Warrant used in connection with April and May 2013 private placement, incorporated by reference to Exhibit 10.2 to the Form 8-K filed April 26, 2013.
4.6	Form of Warrant used in connection with June 28, 2013 private placement, incorporated by reference to Exhibit 10.2 to the Form 8-K filed July 5, 2013.
4.7	Form of $0.10 Warrant used in connection with October 22, 2013 private placement, incorporated by reference to Exhibit 10.2 to the Form 8-K filed October 28, 2013.
4.8	Warrant issued to Celgene Corporation on November 18, 2013, incorporated by reference to Exhibit 4.12 to the Form 10-K filed December 31, 2013.
4.9	Form of Warrant used in connection with November 18, 2013 private placement, incorporated by reference to Exhibit 4.13 to the Form 10-K filed December 31, 2013.
4.10	Form of Warrant, dated April 14, 2014, by and between Alliqua, Inc. and certain accredited investors, incorporated by reference to Exhibit 10.2 to the Form 8-K filed April 15, 2014.
4.11	Form of Warrant, dated April 3, 2017, by and between Alliqua BioMedical, Inc. and H.C. Wainwright & Co. LLC and its designees, incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed April 4, 2017.
10.1+	2001 Incentive Stock Purchase Plan, incorporated by reference to Exhibit 10.2 to the Form S-8 filed on May 8, 2003.
10.2+	Form of Nonstatutory Stock Option Agreement under the 2001 Incentive Stock Purchase Plan, incorporated by reference to Exhibit 10.2 to the Form 10-K/A filed May 16, 2013.
10.3+	Form of Incentive Stock Option Agreement under the 2001 Incentive Stock Purchase Plan, incorporated by reference to Exhibit 10.3 to the Form 10-K/A filed May 16, 2013.

10.4+	Form of Indemnification Agreement, incorporated by reference to Exhibit 10.2 to the Form 8-K filed January 5, 2011.
10.5	Exclusive License Agreement, dated as of July 15, 2011, by and between Noble Fiber Technologies, LLC and Alliqua Biomedical, Inc., incorporated by reference to Exhibit 10.1 to the Form 8-K filed July 20, 2011.
10.6	Collateral Assignment of 510(k) Rights, dated as of July 15, 2011, by and between Noble Fiber Technologies, LLC and Alliqua Biomedical, Inc., incorporated by reference to Exhibit 10.1 to the Form 8-K filed July 20, 2011.
10.7+	2011 Long-Term Incentive Plan, incorporated by reference to Exhibit 10.1 to the Form 8-K filed December 20, 2011.
10.8	Form of Securities Purchase Agreement, by and among Alliqua, Inc. and certain purchasers set forth therein, incorporated by reference to Exhibit 10.1 to the Form 8-K filed February 21, 2012.
10.9	Securities Purchase Agreement, dated as of August 14, 2012, by and among Alliqua, Inc. and certain purchasers set forth therein, incorporated by reference to Exhibit 10.1 to the Form 8-K filed August 16, 2012.
10.10	Securities Purchase Agreement, dated as of November 8, 2012, by and among Alliqua, Inc. and certain purchasers set forth therein, incorporated by reference to Exhibit 10.1 to the Form 8-K filed November 14, 2012.
10.11+	First Amendment to the 2011 Long-Term Incentive Plan, incorporated by reference to Exhibit 10.1 to the Form 8-K filed December 20, 2012.
10.12+	Form of Nonstatutory Stock Option Agreement under the 2011 Long-Term Incentive Plan, incorporated by reference to Exhibit 10.32 to the Form 10-K/A filed May 16, 2013.
10.13+	Form of Incentive Stock Option Agreement under the 2011 Long-Term Incentive Plan, incorporated by reference to Exhibit 10.33 to the Form 10-K/A filed May 16, 2013.
10.14+	Executive Employment Agreement, dated as of February 4, 2013, between Alliqua, Inc. and David Johnson, incorporated by reference to Exhibit 10.1 to the Form 8-K filed February 7, 2013.
10.15+	Indemnification Agreement, dated as of February 4, 2013, in favor of David Johnson, incorporated by reference to Exhibit 10.3 to the Form 8-K filed February 7, 2013.
10.16	Securities Purchase Agreement, dated as of February 22, 2013, by and among Alliqua, Inc. and certain purchasers set forth therein, incorporated by reference to Exhibit 10.1 to the Form 8-K filed February 25, 2013.
10.17	Securities Purchase Agreement, dated as of April 11, 2013, by and among Alliqua, Inc. and certain purchasers set forth therein, incorporated by reference to Exhibit 10.1 to the Form 8-K filed April 26, 2013.
10.18	Securities Purchase Agreement, dated as of June 28, 2013, by and among Alliqua, Inc. and certain purchasers set forth therein, incorporated by reference to Exhibit 10.3 to the Form 8-K filed July 5, 2013.
10.19+	Nonqualified Stock Option Agreement, dated September 3, 2013, between Brian Posner and Alliqua, Inc., incorporated by reference to Exhibit 10.2 to the Form 8-K filed September 9, 2013.
10.20^	Distributor Agreement, dated September 23, 2013, by and between Sorbion GmbH & Co KG and Alliqua Biomedical, Inc., incorporated by reference to Exhibit 10.5 to the Form 10-Q filed November 12, 2013.
10.21^	License, Marketing and Development Agreement, dated as of November 14, 2013, by and between Anthrogenesis Corporation, d/b/a CCT, and Alliqua, Inc., incorporated by reference to Exhibit 10.48 to the Form 10-K filed December 31, 2013.
10.22^	Supply Agreement, dated as of November 14, 2013, by and between Anthrogenesis Corporation and Alliqua, Inc., incorporated by reference to Exhibit 10.49 to the Form 10-K filed December 31, 2013.
10.23	Stock Purchase Agreement, dated as of November 14, 2013, by and between Celgene Corporation and Alliqua, Inc., incorporated by reference to Exhibit 10.50 to the Form 10-K filed December 31, 2013.
10.24	Securities Purchase Agreement, dated as of November 18, 2013, by and among Alliqua, Inc. and certain purchasers set forth therein, incorporated by reference to Exhibit 10.51 to the Form 10-K filed December 31, 2013.

10.25	First Amendment to Executive Employment Agreement dated December 20, 2013, by and between Alliqua, Inc. and David Johnson, incorporated by reference to Exhibit 10.1 to the Form 8-K filed December 27, 2013.
10.26	Nonqualified Stock Option Agreement dated December 20, 2013, by and between Alliqua, Inc. and David Johnson, incorporated by reference to Exhibit 10.2 to the Form 8-K filed December 27, 2013.
10.27+	Form of Restricted Stock Award Agreement under the 2011 Long-Term Incentive Plan, incorporated by reference to Exhibit 10.62 to the Form 10-K filed December 31, 2013.
10.28+	Form of Restricted Stock Award Agreement for 2013 Executive Bonuses under the 2011 Long-Term Incentive Plan, incorporated by reference to Exhibit 10.63 to the Form 10-K filed December 31, 2013.
10.29+	Form of Nonqualified Stock Option Agreement (outside of any incentive plan), incorporated by reference to Exhibit 99.8 to the Form S-8 filed January 23, 2014.
10.30	Form of Securities Purchase Agreement, dated April 14, 2014, by and between Alliqua, Inc. and certain accredited investors, incorporated by reference to Exhibit 10.1 to the Form 8-K filed April 15, 2014.
10.31	Form of Letter Agreement, dated April 11, 2014, by and between Alliqua, Inc. and certain holders of warrants to purchase Common Stock of Alliqua, Inc., incorporated by reference to Exhibit 10.3 to the Form 8-K filed April 15, 2014.
10.32+	Alliqua BioMedical, Inc. 2014 Long-Term Incentive Plan, incorporated by reference to Exhibit 10.1 to the Form 8-K filed June 11, 2014.
10.33^	Supply Agreement, dated April 10, 2014, by and between Alliqua, Inc. and Anthrogenesis Corporation, d/b/a Celgene Cellular Therapeutics, incorporated by reference to Exhibit 10.4 to the Form 10-Q filed August 11, 2014.
10.34^	First Amendment to Supply Agreement, dated April 10, 2014 by and between Alliqua, Inc. and Anthrogenesis Corporation, d/b/a Celgene Cellular Therapeutics, incorporated by reference to Exhibit 10.5 to the Form 10-Q filed August 11, 2014.
10.35^	First Amendment to License, Marketing and Development Agreement, dated September 30, 2014, by and between Alliqua, Inc. and Anthrogenesis Corporation, d/b/a Celgene Cellular Therapeutics, incorporated by reference to Exhibit 10.1 to the Form 10-Q filed November 5, 2014.

10.36^	Second Amendment to Supply Agreement, dated September 30, 2014, by and between Alliqua, Inc. and Anthrogenesis Corporation, d/b/a Celgene Cellular Therapeutics, incorporated by reference to Exhibit 10.2 to the Form 10-Q filed November 5, 2014.
10.37	Voting Agreement, dated February 2, 2015, by and between Alliqua BioMedical, Inc. and each of the stockholders of Celleration, Inc., as identified therein, incorporated by reference to Exhibit 10.1 to Amendment No. 1 to Registration Statement on Form S-4 filed on April 2, 2015.
10.40^	Second Amendment to the License, Marketing and Development Agreement, dated April 30, 2015, by and between Alliqua BioMedical, Inc. and Anthrogenesis Corporation, d/b/a Celgene Cellular Therapeutics, incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 6, 2015.
10.41+	First Amendment to the Alliqua BioMedical, Inc. 2014 Long-Term Incentive Plan, incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the Securities and Exchange Commission on May 6, 2015.
10.42+	Form of Incentive Stock Option Agreement under the 2014 Long-Term Incentive Plan, incorporated by reference to Exhibit 99.3 to the Form S-8 filed August 6, 2015.
10.43+	Form of Nonqualified Stock Option Agreement under the 2014 Long-Term Incentive Plan, incorporated by reference to Exhibit 99.4 to the Form S-8 filed August 6, 2015.
10.44+	Form of Restricted Stock Award Agreement under the 2014 Long-Term Incentive Plan, incorporated by reference to Exhibit 99.5 to the Form S-8 filed August 6, 2015.
10.45+	Form of Restricted Stock Unit Agreement under the 2014 Long-Term Incentive Plan, incorporated by reference to Exhibit 99.6 to the Form S-8 filed August 6, 2015.
10.47	Pledge and Security Agreement, dated May 29, 2015, by and among Alliqua BioMedical, Inc., Perceptive Credit Opportunities Fund, LP and those certain subsidiary guarantor party thereto, incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed with the Securities and Exchange Commission on June 1, 2015.
10.48	Warrant, dated May 29, 2015, by and between Alliqua BioMedical, Inc. and Perceptive Credit Opportunities Fund, LP, incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed with the Securities and Exchange Commission on June 1, 2015.
10.52	First Amendment to Distributor Agreement, dated July 31, 2015, by and between Alliqua BioMedical, Inc. and BSN Medical, Inc., an affiliate of Sorbion GmbK & Co KG, incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 5, 2015.
10.53	Purchase Agreement, dated June 30, 2016, by and between Alliqua BioMedical, Inc. and BSN medical, Inc., incorporated by reference to Exhibit 10.3 to the Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 9, 2016.
10.54	Transition Agreement, dated June 30, 2016, by and between Alliqua BioMedical, Inc. and BSN medical, Inc., incorporated by reference to Exhibit 10.4 to the Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 9, 2016.
10.57	Amended Warrant, dated January 26, 2017, by and between Alliqua BioMedical, Inc. and Perceptive Credit Holdings, LP., incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed with the Securities and Exchange Commission on January 30, 2017.
10.58	Form of Securities Purchase Agreement, dated February 27, 2017, by and between Alliqua BioMedical, Inc. and certain accredited investors, incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the Securities and Exchange Commission on February 28, 2017.
10.60	Amended Warrant, dated March 7, 2017, by and between Alliqua BioMedical, Inc. and Perceptive Credit Holdings, LP., incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed with the Securities and Exchange Commission on March 13, 2017.

10.61	Amended Warrant, dated April 6, 2017, by and between Alliqua BioMedical, Inc. and Perceptive Credit Holdings, LP., incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the Securities and Exchange Commission on April 12, 2017.
10.64+	Second Amendment to the Alliqua BioMedical, Inc. 2014 Long-Term Incentive Plan, effective as of June 23, 2017, incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the Securities and Exchange Commission on June 23, 2017
21.1*	List of Subsidiaries
23.1*	Consent of Independent Registered Public Accounting Firm to the Form 10-K.
31.1*	Certification of Chief Executive Officer Pursuant to Section 302 of Sarbanes-Oxley Act of 2002
31.2*	Certification of Chief Financial Officer Pursuant to Section 302 of Sarbanes-Oxley Act of 2002
32.1*	Certification of Chief Executive Officer Pursuant to Section 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification of Chief Financial Officer Pursuant to Section 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101*	The following materials from the Company's Annual Report on Form 10-K for the year ended December 31, 2018, formatted in XBRL (eXtensible Business Reporting Language), (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Stockholders' Equity, (iv) Consolidated Statements of Cash Flows, and (v) Notes to the Consolidated Financial Statements

* Filed herewith.

**Certain exhibits and schedules have been omitted and the Company agrees to furnish supplementary to the Securities and Exchange Commission a copy of any omitted exhibits upon request.

^ Confidential treatment has been granted with respect to certain portions of this exhibit.

+ Management contract or compensatory plan or arrangement.

ALLIQUA BIOMEDICAL, INC. AND SUBSIDIARIES

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of

Alliqua BioMedical, Inc. and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Alliqua BioMedical, Inc. and Subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, stockholders' equity and cash flows for each of two years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included

examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Marcum llp

Marcum llp

We have served as the Company's auditor since 2010.

New York, NY

February 22, 2019

ALLIQUA BIOMEDICAL, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)

	December 31, 2018	December 31, 2017
ASSETS:		
Current Assets:		
Cash and cash equivalents	$ 8,880	$ 2,181
Accounts receivable, net	34	99
Inventory, net	101	93
Prepaid expenses and other current assets	226	41
Current assets of discontinued operations	60	5,062
Total current assets	9,301	7,476
Improvements and equipment, net	200	522
Other assets	178	173
Assets of discontinued operations - noncurrent	-	24,769
Total assets	$ 9,679	$ 32,940
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	$ 564	$ 684
Accrued expenses and other current liabilities	385	712
Warrant liability	156	130
Current liabilities of discontinued operations	271	15,443
Total current liabilities	1,376	16,969
Other long-term liabilities	51	59
Long term liabilities of discontinued operations	-	245
Total liabilities	1,427	17,273
Commitments and Contingencies		
Stockholders' Equity		
Preferred Stock, par value $0.001 per share, 1,000,000 shares authorized, no shares issued and outstanding	-	-
Common Stock, par value $0.001 per share, 95,000,000 shares authorized; 5,005,211 and 4,986,034 shares issued and outstanding as of December 31, 2018 and December 31, 2017, respectively	5	5
Additional paid-in capital	166,674	165,672
Accumulated deficit	(158,427)	(150,010)
Total stockholders' equity	8,252	15,667

Total liabilities and stockholders' equity	$ 9,679	$ 32,940

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

ALLIQUA BIOMEDICAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except share and per share data)

	Year Ended December 31,	
	2018	2017
Revenue, net of returns, allowances and discounts	$2,216	$2,019
Cost of revenues	1,720	1,841
Gross profit	496	178
Operating expenses		
Selling, general and administrative	4,778	5,303
Business development costs/(benefit)	1,014	(365)
Total operating expenses	5,792	4,938
Loss from operations	(5,296)	(4,760)
Other (expense) income		
Interest income	24	6
Change in fair value of warrant liability	(26)	692
Loss on early extinguishment of debt, net	(1,706)	(182)
Total other (expense) income	(1,708)	516
Loss from continuing operations before tax	(7,004)	(4,244)
Income tax expense	-	-
Loss from continuing operations	(7,004)	(4,244)
Discontinued operations:		
Loss from discontinued operations, net of tax of $0 and $0.7 million for the years ended December 31, 2018 and 2017, respectively	(6,901)	(23,159)
Gain on sale of assets, $0.5 million and $0 for the years ended December 31, 2018 and 2017, respectively	5,488	1,696
Loss from discontinued operations, net of tax	(1,413)	(21,463)
Net loss	$(8,417)	$(25,707)
Net loss per basic and diluted common share:		

Loss from continuing operations	$(1.42)	$(0.99)
Discontinued operations:		
Loss from discontinued operations, net of tax of $0 and $0.7 million for the years ended December 31, 2018 and 2017, respectively	(1.40)	(5.40)
Gain on sale of assets, $0.5 million and $0 for the years ended December 31, 2018 and 2017, respectively	1.11	0.40
Total from discontinued operations	(0.29)	(5.00)
Net loss per basic and diluted common share	$(1.71)	$(5.99)
Weighted average shares used in computing net loss per basic and diluted common share	4,923,393	4,291,600

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

ALLIQUA BIOMEDICAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(in thousands, except for share and per share data)

	Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance, December 31, 2016	2,966,904	$ 3	$ 156,390	$ (124,303)	$ 32,090
Issuance common stock for cash, net of issuance costs of $695	1,639,825	2	5,847		5,849
Stock-based compensation (A)	181,936	-	2,393		2,393
Issuance of common stock in connection with the contingent consideration of the Celleration, Inc. acquisition (B)	101,243	-	675		675
Issuance of common stock in connection with the contingent consideration of the Choice Therapeutics acquisition (C)	131,579	-	500		500
Payment of withholding taxes related to stock-based employee compensation	(35,453)	-	(133)		(133)
Net loss				$ (25,707)	$ (25,707)
Balance, December 31, 2017	4,986,034	$ 5	$ 165,672	$ (150,010)	$ 15,667
Stock-based compensation	20,000	-	1,004		1,004
Payment of withholding taxes related to stock-based employee compensation	(823)	-	(2)		(2)
Net loss				$ (8,417)	$ (8,417)
Balance, December 31, 2018	5,005,211	$ 5	$ 166,674	$ (158,427)	$ 8,252

(A) Includes $374,000 that was part of accrued expenses as of December 31, 2016, which was credited to equity upon the issuance of 60,000 restricted common shares during the year ended December 31, 2017.

(B) Includes $675,000 that was part of contingent consideration as of December 31, 2016, which was credited to equity upon the issuance of 101,243 common shares during the year ended December 31, 2017.

(C) Includes $500,000 that was part of contingent consideration as of December 31, 2016, which was credited to equity upon the issuance of 131,579 common shares during the year ended December 31, 2017.

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

ALLIQUA BIOMEDICAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	Year Ended December 31,	
	2018	2017
Operating Activities		
Net loss	$(8,417)	$(25,707)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,881	5,415
Amortization of deferred lease incentive	(21)	(45)
Loss on disposal of property and equipment	89	2
Impairment charges	-	10,300
Deferred income tax expense	-	(743)
Provision for doubtful accounts	13	122
Reserve for note receivable	-	(650)
(Recovery) Provision for excess and slow moving inventory	(8)	68
Stock-based compensation expense	1,004	2,020
Deferred rent	2	2
Accrued interest receivable	-	-
Amortization of debt issuance and discount costs	254	824
Loss on early extinguishment of debt	1,706	182
Warrant modification expense	-	803
Change in fair value of warrant liability	26	(692)
Fair value adjustment of contingent consideration liability	-	35
Gain on sale of assets	(5,488)	(1,696)
Changes in operating assets and liabilities:		
Accounts receivable	3,153	(621)
Inventory	(120)	792
Prepaid expenses and other assets	(31)	550
Accounts payable	(1,354)	(1,004)
Accrued expenses and other liabilities	(2,399)	(629)
Net Cash Used in Operating Activities	(9,710)	(10,672)
Investing Activities		
Proceeds from sale of assets	29,000	3,411
Purchase of improvements and equipment	-	(179)
Issuance of bridge loan	-	(350)
Release of escrow deposit	300	-
Proceeds from bridge loan	-	1,000
Net Cash Provided by Investing Activities	29,300	3,882

Financing Activities		
Contingent purchase price payments	-	(675)
Net proceeds from bridge loan	1,712	-
Repayment of long-term debt	(14,135)	(1,618)
Fees paid on early extinguishment of debt	(466)	(32)
Net proceeds from issuance of common stock	-	5,849
Payment of withholding taxes related to stock-based employee compensation	(2)	(133)
Net Cash (Used In) Provided by Financing Activities	(12,891)	3,391
Net Increase (Decrease) in Cash and Cash Equivalents	6,699	(3,399)
Cash and Cash Equivalents - Beginning of year	2,181	5,580
Cash and Cash Equivalents - End of year	$8,880	$2,181
Supplemental Disclosure of Cash Flows Information		
Cash paid during the year for:		
Interest	$362	$1,008
Taxes	$480	$-
Non-cash investing and financing activities:		
2016 Accrued bonus awarded in equity	$-	$374
Common stock issued for contingent purchase price payments	-	1,175

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

ALLIQUA BIOMEDICAL, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Description of Business and Basis of Presentation

Alliqua BioMedical, Inc. ("Alliqua" or the "Company") manufactures high water content, electron beam cross-linked, aqueous polymer hydrogels, or gels, used for wound care, medical diagnostics, transdermal drug delivery and cosmetics. The Company believes that it is one of the leading manufacturers of high-performance gels in the United States. The Company specializes in custom gels by capitalizing on proprietary manufacturing technologies. The Company has, historically, served as a contract manufacturer, supplying its gels to third parties who incorporate them into their own products.

Recent Developments

Merger Agreement with TO Pharmaceuticals, LLC.

On November 27, 2018, AquaMed Technologies, Inc. ("AquaMed"), a wholly-owned subsidiary of Alliqua, AQ TOP, LLC, a Delaware limited liability company and a wholly-owned subsidiary of AquaMed , and TO Pharmaceuticals, LLC, a Delaware limited liability company ("TOP"), entered into an Agreement and Plan of Merger (the "TOP Merger Agreement"), pursuant to which, among other things, subject to the satisfaction or waiver of the conditions set forth in the TOP Merger Agreement, AquaMed will merge with and into TOP, with TOP becoming a wholly-owned subsidiary of AquaMed and the surviving company of the merger (the "TOP Merger"). The TOP Merger is intended to qualify for federal income tax purposes as a tax-free contribution under the provisions of Section 351(a) of the Internal Revenue Code of 1986, as amended.

The TOP Merger will occur after the consummation by Alliqua of the following steps:

(1) Pursuant to an Asset Contribution and Separation Agreement to be entered into by and between Alliqua and AquaMed (the "Separation Agreement") prior to consummation of the TOP Merger, Alliqua will transfer certain assets and liabilities utilized primarily in connection with its custom hydrogels contract manufacturing business to AquaMed (the "Separation"),

(2) AquaMed will issue a to be determined number of shares of common stock to Alliqua in consideration of the contribution of assets pursuant to the Separation Agreement (the "Distribution Consideration"),

(3) Alliqua will distribute to its stockholders all of the issued and outstanding shares of common stock, par value $0.001 per share, of AquaMed by way of a pro rata dividend (the "Distribution"), and

(4) Alliqua will consummate the previously announced reverse merger transaction with Adynxx, Inc. ("Adynxx"), pursuant to that certain Agreement and Plan of Merger and Reorganization, dated as of October 11, 2018, by and among Alliqua, Embark Merger Sub, Inc. and Adynxx.

At the effective time of the TOP Merger, all of the outstanding membership units of TOP will be converted into the right to receive, in the aggregate, merger consideration consisting of shares of AquaMed common stock. Immediately after the effective time of the TOP Merger and consummation of the Private Placement (as defined below), before giving effect to any fees payable in equity to financial advisors or other intermediaries, the current members of TOP and the third-party investors that participate in the Private Placement are expected to hold approximately 90% of the total number of shares of AquaMed common stock outstanding (on a fully diluted basis).

The consummation of the TOP Merger is subject to certain customary and other conditions, including (i) the completion of the Separation and the Distribution, (ii) the effectiveness of the registration statement on Form S-1 filed with the SEC with respect to, and the approval for listing on the NASDAQ Capital Market of, the shares of AquaMed common stock to be issued in the Distribution and the TOP Merger, (iii) receipt of binding commitments from third-party investors to consummate a private placement of AquaMed's common stock in a minimum aggregate amount of $10 million immediately prior to the effective time of the TOP Merger (the "Private Placement") (iv) the accuracy of the parties' representations and warranties and the performance of their respective covenants contained in the TOP Merger Agreement, and (v) receipt of an independent third-party valuation of the AquaMed common stock to be issued in the Distribution.

The TOP Merger Agreement contains customary and other representations, warranties and covenants, including a covenant for AquaMed to use (i) commercially reasonable efforts to consummate and make effective the Separation and payment of the Distribution Consideration contemplated by the Distribution Agreement in accordance with its terms and (ii) reasonable best efforts to consummate the Private Placement.

Merger Agreement with Adynxx

On October 11, 2018, the Company, Embark Merger Sub Inc., a Delaware corporation and wholly-owned subsidiary of the Company ("Merger Sub"), and Adynxx, Inc., a privately-held Delaware corporation ("Adynxx"), entered into an Agreement and Plan of Merger and Reorganization (the "Adynxx Merger Agreement"), pursuant to which, among other things, subject to the satisfaction or waiver of the conditions set forth in the Adynxx Merger Agreement, Merger Sub will merge with and into Adynxx, with Adynxx becoming a wholly-owned subsidiary of the Company and the surviving corporation of the merger (the "Adynxx Merger"). Subject to the terms and conditions of the Adynxx Merger Agreement, at the effective time of the Adynxx Merger (the "Effective Time"), (a) each outstanding share of Adynxx common stock, on an as-converted basis taking into consideration all outstanding common stock, preferred stock, restricted stock and all other securities convertible or exercisable for Adynxx common stock, will be converted into the right to receive the number of shares of the Company's common stock (the "Company Common Stock") equal to the exchange ratio described below; (b) each outstanding Adynxx stock option that has not previously been exercised prior to the Effective Time will be assumed by the Company; and (c) each outstanding warrant to acquire Adynxx capital stock that has not previously been exercised prior to the Effective Time will be assumed by the Company.

Under the exchange ratio formula in the Adynxx Merger Agreement, as of immediately after the Adynxx Merger, but excluding the effect of certain financings (as further described in the Adynxx Merger Agreement), the former Adynxx securityholders are expected to own approximately 86% of the aggregate number of shares of the Company Common Stock issued and outstanding following the consummation of the Adynxx Merger (the "Post-Closing Shares"), and the stockholders of the Company as of immediately prior to the Adynxx Merger are expected to own approximately 14% of the aggregate number of Post-Closing Shares. This exchange ratio will be fixed immediately prior to the Effective Time to reflect the Company's and Adynxx's equity capitalization as of immediately prior to such time. In addition, to the extent Adynxx consummates a Permitted Financing, as specifically defined in the Adynxx Merger Agreement, in excess of $10.0 million dollars prior to the Effective Time, the exchange ratio may be further adjusted in a manner that would reduce the percentage of the aggregate number of Post-Closing Shares held by stockholders of the Company as of immediately prior to the Adynxx Merger.

Immediately following the Adynxx Merger, the name of the Company will be changed from "Alliqua BioMedical, Inc." to "Adynxx, Inc." At the Effective Time, the Adynxx Merger Agreement contemplates that the Board of Directors of the Company will consist of such directors selected by Adynxx, with the Company having the right to designate one member. The executive officers of the Company immediately after the Effective Time will be designated by Adynxx; the merger will be a change of control and accounted for as a reverse business combination whereby Adynxx will be deemed the accounting acquiror.

The Adynxx Merger Agreement contains customary representations, warranties and covenants made by the Company and Adynxx, including covenants relating to obtaining the requisite approvals of the stockholders of the Company and Adynxx, indemnification of directors and officers, and the Company's and Adynxx's conduct of their respective businesses between the date of signing the Adynxx Merger Agreement and the closing of the Adynxx Merger.

Consummation of the Adynxx Merger is subject to certain closing conditions, including, among other things, approval by the stockholders of the Company and Adynxx. The Adynxx Merger Agreement contains certain termination rights for both the Company and Adynxx, and further provides that, upon termination of the Adynxx Merger Agreement under specified circumstances, the Company or Adynxx, as applicable, may be required to pay the other party a termination fee of $0.249 million.

The Adynxx Merger Agreement contemplates that the Company will also seek approval from its stockholders to effect a reverse stock split, if applicable, with the split ratio to be mutually agreed to by the Company and Adynxx within the range approved by the Company's stockholders immediately prior to the Effective Time. In addition, the Adynxx Merger Agreement requires the Company to use commercially reasonable efforts to consummate a spin-off of its hydrogel contract manufacturing business prior to the closing of the Adynxx Merger.

The Company's operations contemplated under the Adynxx Merger Agreement are classified as Held for Use.

Asset Sale Transaction with Celularity

On May 7, 2018, the Company completed the Asset Sale Transaction (the "AST") with Celularity, Inc. ("Celularity"), pursuant to which the Company sold substantially all of its assets to Celularity, including certain assets comprising its MIST, Biovance and Interfyl Product Lines (the "Purchased Assets"). As consideration for the Purchased Assets, Celularity paid $29.0 million to the Company in cash. No debt or significant liabilities were assumed by Celularity in the AST. Under the terms of the Asset Purchase Agreement (the "APA"), the Company retained certain specified assets, including, among other things, cash, accounts receivable, and its hydrogel contract manufacturing business, including its SilverSeal and Hydress product lines. Approximately $14.8 million of the consideration received from Celularity was used to pay down in full all outstanding debt and related costs owed to Perceptive Credit Holdings LP ("Perceptive").

The transactions contemplated by the APA were approved by the affirmative vote of a majority of the voting power of issued and outstanding shares of the Company's common stock on April 27, 2018.

The Company's operations sold under the APA have been reclassified to discontinued operations in the second quarter of 2018, when the shareholders of the Company approved the sale. The AST was completed on May 7, 2018.

Principles of Consolidation

The accompanying consolidated financial statements include the financial statements of the Company and its wholly-owned subsidiary, AquaMed Technologies, Inc. All significant inter-company transactions and accounts have been eliminated in consolidation.

Reclassifications

Certain amounts in prior periods have been reclassified to conform to the current year presentation. Such reclassifications did not have a material effect on the Company's financial condition or results of operations as previously reported.

Reverse Stock Split

The Company effected a 1-for-10 reverse stock split of its outstanding common stock on October 5, 2017. The accompanying consolidated financial statements and accompanying notes to the consolidated financial statements give retroactive effect to the reverse stock split for all periods presented. The shares of common stock retained a par value of $0.001 per share. Accordingly, stockholders' equity reflects the reverse stock split by reclassifying from common stock to additional paid-in capital an amount equal to the par value of the decreased shares resulting from the reverse stock split.

2. Summary of Significant Accounting Policies

Use of Estimates in the Financial Statements

The preparation of the consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. These estimates and assumptions include valuing equity securities and derivative financial instruments issued in financing transactions, allowance for doubtful accounts, inventory reserves, deferred taxes and related valuation allowances, and the fair values of long lived assets, intangibles, goodwill and contingent consideration. Actual results could differ from the estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments with maturities of three months or less when purchased to be cash equivalents. The Company's balance of cash and cash equivalents at December 31, 2018 and 2017 consisted principally of bank deposits. From time to time, the Company's cash account balances may be uninsured or in deposit accounts that exceed Federal Deposit Insurance Corporation guarantee limit. The Company reduces its exposure to

credit risk by maintaining its cash deposits with major financial institutions and monitoring their credit ratings.

Trade Accounts Receivable

Trade accounts receivable are stated at the amount the Company expects to collect and do not bear interest. The Company evaluates the collectability of accounts receivable based on a combination of factors. In circumstances where a specific customer is unable to meet its financial obligations to the Company, a provision to the allowances for doubtful accounts is recorded against amounts due to reduce the net recognized receivable to the amount that is reasonably expected to be collected. For all other customers, a provision to the allowances for doubtful accounts is recorded based on factors including the length of time the receivables are past due, the current business environment and the Company's historical experience. Provisions to the allowances for doubtful accounts are recorded to selling, general and administrative expenses. Account balances are charged off against the allowance when it is probable that the receivable will not be recovered. The allowance for doubtful accounts was nominal for December 31, 2018 and 2017.

Inventory

Inventory is stated at the lower of cost, the value determined by the first-in, first-out method, or net realizable value. At each balance sheet date, the Company evaluates inventories for excess quantities, obsolescence or shelf life expiration. This evaluation includes analysis of historical sales levels by product, projections of future demand, the risk of technological or competitive obsolescence for products, general market conditions, and a review of the shelf life expiration dates for products. To the extent that management determines there are excess or obsolete inventory or quantities with a shelf life that is too near its expiration for the Company to reasonably expect that it can sell those products prior to their expiration, the Company adjusts the carrying value to estimated net realizable value.

Improvements and Equipment

Improvements and equipment are recorded at cost. Depreciation of equipment is computed utilizing the straight-line method over the estimated useful lives of the assets. Amortization of leasehold improvements is computed utilizing the straight-line method over the lesser of the lease term or the estimated useful life. Repairs and maintenance costs are expensed as incurred. The cost of major additions and improvements is capitalized, while maintenance and repair costs that do not improve or extend the lives of the respective assets are charged to operations as incurred.

Goodwill and Other Indefinite-Lived Intangible Assets

The Company records goodwill and other indefinite-lived assets in connection with business combinations. Goodwill, which represents the excess of acquisition cost over the fair value of the net tangible and intangible assets of acquired companies, is not amortized. Indefinite-lived assets are stated at fair value as of the date acquired in a business combination.

The Company assesses the recoverability of goodwill and certain indefinite-lived intangible assets annually in the fourth quarter and between annual tests if an event occurs or circumstances change that would indicate the carrying amount may be impaired. Impairment testing for goodwill is done at a reporting unit level. Under Financial Accounting Standards Board (“FASB”) guidance for goodwill and intangible assets, a reporting unit is defined as an operating segment or one level below the operating segment, called a component. However, two or more components of an operating segment will be aggregated and deemed a single reporting unit if the components have similar economic characteristics. The Company operates as one reporting unit.

Authoritative accounting guidance allows the Company to first assess qualitative factors to determine whether it is necessary to perform the more detailed two-step quantitative goodwill impairment test. The Company performs the quantitative test if its qualitative assessment determined it is more likely than not that a reporting unit's fair value is less than its carrying amount. The Company may elect to bypass the qualitative assessment and proceed directly to the quantitative test for any reporting unit or asset. The quantitative goodwill impairment test, if necessary, is a two-step process. The first step is to identify the existence of a potential impairment by comparing the fair value of a reporting unit (the estimated fair value of a reporting unit is usually calculated using a discounted cash flow model) with its carrying amount, including goodwill. If the fair value of a reporting unit exceeds its carrying amount, the reporting unit's goodwill is considered not to be impaired and performance of the second step of the quantitative goodwill impairment test is unnecessary. However, if the carrying amount of a reporting unit exceeds its fair value, the second step of the quantitative goodwill impairment test is performed to measure the amount of impairment loss to be recorded, if any. The second step of the quantitative goodwill impairment test compares the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. If the carrying amount of the reporting unit's goodwill exceeds its implied fair value, an impairment loss is recognized in an amount equal to that excess. The implied fair value of goodwill is determined using the same approach as employed when determining the amount of goodwill that would be recognized in a business combination. That is, the fair value of the reporting unit is allocated to all of its assets and liabilities as if the reporting unit had been acquired in a business combination and the fair value was the purchase price paid to acquire the reporting unit.

The Company proceeded directly to the quantitative analysis considering the consideration to be received and the assets to be sold under the APA. As a result of this test, the Company's goodwill was determined to be impaired and an impairment charge of $10.3 million was recorded for the year ended December 31, 2017.

As of May 7, 2018, as a result of completing the Celularity AST, the Goodwill and Intangible Assets have been disposed of. At December 31, 2017 the remaining recorded goodwill was $1,659,000, included in assets of discontinued operations – noncurrent on the consolidated balance sheet. The changes in the carrying amount of goodwill for the years ended December 31, 2018 and 2017, are as follows (in thousands):

	Goodwill
Balance as of January 1, 2017	$11,959
Impairment loss	(10,300)
Balance as of December 31, 2017	1,659
Disposal of Intangible Assets, Asset Sale	(1,659)
Balance as of December 31, 2018	$0

Long-Lived Assets

Long-lived assets, such as property and equipment, and intangibles subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The Company's long-lived intangible assets primarily consist of developed technology, customer lists/relationships, non-compete agreements, trade names and trademarks and are amortized ratably over a range of one to ten years which approximates customer attrition rate and technology obsolescence. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized of the amount by which the carrying amount of the asset exceeds the fair value of the asset.

The Company continually evaluates whether events or changes in circumstances might indicate that the remaining estimated useful life of long-lived assets may warrant revision, or that the remaining balance may not be recoverable. When factors indicate that long-lived assets should be evaluated for possible impairment, the Company uses an estimate of the related undiscounted cash flows in measuring whether the long-lived asset should be written down to fair value. Measurement of the amount of impairment is based on generally accepted valuation methodologies, as deemed appropriate. The factors used to determine fair value are subject to management's judgement and expertise and include, but are not limited to, the present value of future cash flows, net of estimated operating costs, anticipated capital expenditures and various discount rates commensurate with the risk and current market conditions associated with realizing the expected cash flows projected.

Due to the APA, the long-lived asset group related to the Purchased Assets were sold and otherwise disposed of significantly before the end of its previously estimated useful life. The Company, therefore, tested its long-lived assets for recoverability as of December 31, 2017. These long-lived assets consist of property, plant and equipment and intangible assets subject to amortization.

The consideration under the APA for the sale of the long-lived assets approximate the net book value of these assets at December 31, 2017, therefore, no impairment charge was recorded for long-lived assets during the year ended December 31, 2017.

There were no long-lived assets as of December 31, 2018, due to the Celularity AST.

Fair Value of Financial Instruments

The carrying amounts reported in the consolidated balance sheets for cash and cash equivalents, accounts receivable and accounts payable and accrued expenses approximate fair value based on the short-term maturity of these instruments.

Fair value is defined as the price that would be received upon selling an asset or the price paid to transfer a liability on the measurement date. It focuses on the exit price in the principal or most advantageous market for the asset or liability in an orderly transaction between willing market participants. A three-tier fair value hierarchy is established as a basis for considering such assumptions and for inputs used in the valuation methodologies in measuring fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair values are as follows:

Level 1: Observable prices in active markets for identical assets and liabilities.

Level 2: Observable inputs other than quoted prices in active markets for identical assets and liabilities.

Level 3: Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

Cost of Goods Sold and Selling, General and Administrative Expenses

Costs associated with the production and procurement of product are included in cost of goods sold, including shipping and handling costs such as inbound freight costs, purchasing and receiving costs, inspection costs and other product procurement related charges. All other expenses are included in selling, general and administrative expenses, as the predominant expenses associated therewith are general and administrative in nature.

Shipping and Handling

Amounts billed to customers for shipping and handling are included in revenues. The related shipping and freight charges incurred by the Company are included in cost of goods sold and were not material for either the years ended December 31, 2018 or 2017.

Business Development

The Company accounts for costs due to professional fees, including accounting, legal and consulting fees related to business developments; in the past these were in other expenses and professional fees as part of general and administrative expenses, however because they are not of a normal course of business, these have been reclassified and presented separately within the Company's statement of operations. During the year ended December 31, 2018, we incurred business development costs of $1.0 million and during the year ended December 31, 2017, we received a benefit of $0.366 million in development due, in part, to the repayment of a portion of the bridge loan to Soluble Systems, LLC that had been previously written off at the time the proposed transaction was terminated.

Income Taxes

The Company accounts for income taxes pursuant to the asset and liability method which requires us to recognize current tax liabilities or receivables for the amount of taxes the Company estimate are payable or refundable for the current year and deferred tax assets and liabilities for the expected future tax consequences attributable to temporary differences between the financial statement carrying amounts and their respective tax bases of assets and liabilities and the expected benefits of net operating loss and credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in operations in the period enacted. A valuation allowance is provided when it is more likely than not that a portion or all of a deferred tax asset will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income and the reversal of deferred tax liabilities during the period in which related temporary differences become deductible.

F-11

The Company adopted the provisions of Accounting Standards Codification Topic 740 (“ASC 740”) related to the accounting for uncertainty in income taxes recognized in an enterprise's consolidated financial statements. ASC 740 prescribes a comprehensive model for the financial statement recognition, measurement, presentation and disclosure of uncertain tax positions taken or expected to be taken in income tax returns.

The benefit of tax positions taken or expected to be taken in the Company's income tax returns are recognized in the financial statements if such positions are more likely than not of being sustained upon examination by taxing authorities. Differences between tax positions taken or expected to be taken in a tax return and the benefit recognized and measured pursuant to the interpretation are referred to as “unrecognized benefits”. A liability is recognized (or amount of net operating loss carryover or amount of tax refundable is reduced) for an unrecognized tax benefit because it represents an enterprise’s potential future obligation to the taxing authority for a tax position that was not recognized as a result of applying the provisions of ASC 740. Interest costs and related penalties related to unrecognized tax benefits are required to be calculated, if applicable. The Company’s policy is to classify assessments, if any, for tax related interest as interest expense and penalties as selling, general and administrative expenses. No interest or penalties were recorded during the years ended December 31, 2018 and 2017. As of December 31, 2018 and December 31, 2017, no liability for unrecognized tax benefits was required to be reported. The Company does not expect any significant changes in its unrecognized tax benefits in the next year.

Common Stock Purchase Warrants

The Company assesses classification of common stock purchase warrants at each reporting date to determine whether a change in classification between assets and liabilities or equity is required. The Company’s free-standing derivatives consist of warrants to purchase common stock that were issued pursuant to a Securities Purchase Agreement on November 8, 2012 (which expired in November 2017) and pursuant to a Credit Agreement on May 29, 2015. The Company evaluated the common stock purchase warrants to assess their proper classification in the consolidated balance sheet and determined that the common stock purchase warrants contain exercise reset provisions. Accordingly, the outstanding portions of these instruments have been classified as warrant liabilities in the accompanying consolidated balance sheets as of December 31, 2018 and 2017. The Company re-measures warrant liabilities at each reporting and exercise date, with changes in fair value recognized in earnings for each reporting period.

Stock-Based Compensation

The Company measures the cost of services received in exchange for an award of equity instruments based on the fair value of the award. For employees and directors, the fair value of the award is measured on the grant date and for

non-employees, the fair value of the award is generally re-measured on interim financial reporting dates and vesting dates until the service period is complete. The fair value amount is then recognized over the period services are required to be provided in exchange for the award, usually the vesting period. The Company recognizes stock-based compensation expense on a graded-vesting basis over the requisite service period for each separately vesting tranche of each award. Stock-based compensation expense is reflected within cost of revenues and operating expenses in the consolidated statements of operations. The Company recognizes stock-based compensation expense for awards with performance conditions if and when the Company concludes that it is probable that the performance condition will be achieved. The Company reassesses the probability of vesting at each reporting period for awards with performance conditions and adjusts stock-based compensation expense based on its probability assessment.

Recent Accounting Standards

In February 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2016-02, "Leases (Topic 842)." ASU 2016-02 requires that a lessee recognize the assets and liabilities that arise from operating leases. A lessee should recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election by class of underlying asset not to recognize lease assets and lease liabilities. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. This amendment will be effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The FASB issued ASU No. 2018-10 “Codification Improvements to Topic 842, Leases” and ASU No. 2018-11 “Leases (Topic 842) Targeted Improvements" in July 2018, and ASU No. 2018-20 "Leases (Topic 842) - Narrow Scope Improvements for Lessors" in December 2018. ASU 2018-10 and ASU 2018-20 provide certain amendments that affect narrow aspects of the guidance issued in ASU 2016-02. ASU 2018-11 allows all entities adopting ASU 2016-02 to choose an additional (and optional) transition method of adoption, under which an entity initially applies the new leases standard at the adoption date and recognizes a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. The Company expects to adopt ASU 2016-02 effective January 1, 2019, upon adoption of Topic 842, the Company expects recognition of additional assets and corresponding liabilities pertaining to its operating leases on its consolidated balance sheets. The Company does not expect the adoption of the new standard to have a significant impact on its consolidated statements of operations and cash flows.

In August 2018, the FASB issued ASU 2018-13, “Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement”. The amendments in this update is to improve the effectiveness of disclosures in the notes to the financial statements by facilitating clear communication of the information required by GAAP that is most important to users of each entity’s financial statements. The amendments in this Update apply to all entities that are required, under existing GAAP, to make disclosures about recurring or nonrecurring fair value measurements. The amendments in this update are effective for all entities for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. The Company does not expect that this guidance will have a material impact on its consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, “Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting”. The amendments in this update is to maintain or improve the usefulness of the information provided to the users of financial statements while reducing cost and complexity in financial reporting. The areas for simplification in this Update involve several aspects of the accounting for nonemployee share-based payment transactions resulting from expanding the scope of Topic 718, to include share-based payment transactions for acquiring goods and services from nonemployees. Some of the areas for simplification apply only to nonpublic entities. The amendments in this update are effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. The Company does not expect that this guidance will have a material impact on its consolidated financial statements.

In February 2018, the FASB issued ASU 2018-02, “Income Statement—Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income”. The amendments in this Update allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. Consequently, the amendments eliminate the stranded tax effects resulting from the Tax Cuts and Jobs Act and will improve the usefulness of information reported to financial statement users. However, because the amendments only relate to the reclassification of the income tax effects of the Tax Cuts and Jobs Act, the underlying guidance that requires that the effect of a change in tax laws or rates be included in income from continuing operations is not affected. The amendments in this Update also require certain disclosures about stranded tax effects. The amendments in this update are effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. The Company does not expect that this guidance will have a material impact on its consolidated financial statements.

On December 22, 2017 the U.S. government enacted significant changes to federal tax law following the passage of the Tax Cuts and Jobs Act (“the Act”). Following the enactment of the Act, the SEC staff issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act (“SAB 118”). The Company follows the guidance in SAB 118, which provides additional clarification regarding the application of US GAAP in situations where the Company does not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Act for the reporting period in which the Act was enacted. SAB 118 provides for a measurement period beginning in the reporting period that includes the Act’s enactment date and ending when the Company has obtained, prepared, and analyzed the information needed in order to complete the accounting requirements but in no circumstances should the measurement period extend beyond one year from the enactment date. During the quarter ended December 31, 2018, the Company completed the accounting for the income tax effects of the Act, which resulted in an immaterial change in the net deferred tax asset, before valuation allowance, as of the enactment date. These impacts are disclosed in “Note 15 – Income Taxes” in the Notes accompanying the audited Consolidated Financial Statements.

In May 2017, the FASB issued ASU 2017-09, Compensation-Stock Compensation (Topic 718) Scope of Modification Accounting (“ASU 2017-09”). This ASU clarifies which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. The standard is effective for the Company on January 1, 2018, with early adoption permitted. The Company adopted ASU 2017-09 during the year ended December 31, 2018, and the adoption did not have a material impact on its financial statements.

In January 2017, the FASB issued ASU 2017-01 “Business Combinations (Topic 805): Clarifying the Definition of a Business”, which clarifies the definition of a business to assist entities with evaluating whether transactions should be accounted for as acquisitions or disposals of assets or businesses. The standard introduces a screen for determining when assets acquired are not a business and clarifies that a business must include, at a minimum, an input and a substantive process that contribute to an output to be considered a business. This standard is effective for fiscal years beginning after December 15, 2017, including interim periods within that reporting period. The Company adopted ASU 2017-01 during the year ended December 31, 2018, and the adoption did not have a material impact on its financial statements.

In December 2016, the FASB issued ASU 2016-18 “Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force,” which clarifies the presentation requirements of restricted cash within the statement of cash flows. The changes in restricted cash and restricted cash equivalents during the period should be included in the beginning and ending cash and cash equivalents balance reconciliation on the statement of cash flows. When cash, cash equivalents, restricted cash or restricted cash equivalents are presented in more than one line item within the statement of financial position, an entity shall calculate a total cash amount in a narrative or tabular format that agrees to the amount shown on the statement of cash flows. Details on the nature and amounts of restricted cash should also be disclosed. This standard is effective for fiscal years beginning after December 15, 2017, including interim periods within that reporting period. The Company adopted ASU 2016-18 during the year ended December 31, 2018and the adoption did not have a material impact on its financial statements.

In August 2016, the FASB issued ASU No. 2016-15, “Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments.” ASU No. 2016-15 clarifies and provides specific guidance on eight cash flow classification issues that are not currently addressed by current GAAP and thereby reduce the current diversity in practice. ASU No. 2016-15 is effective for public business entities for annual periods, including interim periods within those annual periods, beginning after December 15, 2017, with early application permitted. This guidance is applicable to the Company’s fiscal year beginning January 1, 2018. The Company has adopted ASU 2016-15 during the year ended December 31, 2018, and the adoption did not have a material impact on its financial statements.

In March 2016, the FASB issued ASU No. 2016-09, “Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting” (“ASU 2016-09”). The standard is intended to simplify several areas of accounting for share-based compensation arrangements, including the income tax impact, classification on the statement of cash flows and forfeitures. ASU 2016-09 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016, which for the Company will commence with the year beginning January 1, 2018, with early adoption permitted commencing January 1, 2017. The Company has adopted ASU 2016-09 during the year ended December 31, 2018, and the adoption did not have a material impact on its financial statements.

In May 2014 the FASB issued Accounting Standards Update (“ASU”) No. 2014-09, Revenue from Contracts with Customers (Topic 606), in August 2015 the FASB issued ASU No. 2015-14, Deferral of the Effective Date, in March 2016 the FASB issued ASU No. 2016-08, Principal Versus Agent Considerations (Reporting Revenue Gross Versus Net), in April 2016, the FASB issued ASU No. 2016-10, Identifying Performance Obligations and Licensing, in May 2016, the FASB issued ASU No. 2016-12, Revenue from Contracts with Customers (Topic 606)—Narrow Scope Improvements and Practical Expedients, in December 2016 the FASB issued ASU No. 2016-20, Technical Corrections and Improvements to Update 2014-09, Revenue from Contracts with Customers, in September 2017 the FASB issued ASU No. 2017-13 Amendments to SEC Paragraphs Pursuant to the Staff Announcement at the July 20, 2017 EITF Meeting and Rescission of Prior SEC Staff Announcements and Observer Comments, and in November 2017 the FASB issued and made effective ASU 2017-14, Income Statement—Reporting Comprehensive Income (Topic 220), Revenue Recognition (Topic 605), and Revenue from Contracts with Customers (Topic 606). These standards and their effect on the Company’s consolidated financial statements and related disclosures are discussed below under Note 4, Revenue Recognition.

3. Liquidity

The Company’s financial statements are prepared using accounting principles generally accepted in the United States of America applicable to a going concern that contemplates the realization of assets and liquidation of liabilities in the normal course of business.

The Company has experienced recurring losses since its inception. For the year ended December 31, 2018, the Company incurred a net loss of $8.4 million, utilized $9.8 million in cash from operations and had an accumulated deficit of $158.4 million. Prior to closing of the APA on May 7, 2018, these factors raised substantial doubt as to the Company’s ability to continue as a going concern. However, upon closing the APA, the Company received gross proceeds of $29.0 million and part of the proceeds, $14.8 million, were utilized to satisfy, in full, its obligations under the Credit Agreement and Guaranty (the “CAG”) with Perceptive. As of December 31, 2018, the Company had a cash balance of approximately $8.9 million.

Given the Company’s current cash position and reduced cash burn, the Company believes substantial doubt has been mitigated and it has sufficient resources to support its planned operations for a year from the date these financial

statements are issued.

4. Revenue Recognition

On January 1, 2018, the Company adopted Accounting Standards Codification ("ASC") Topic 606, "Revenue from Contracts with Customers" ("ASC 606"). The core principle of ASC 606 requires that an entity recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. ASC 606 defines a five-step process to achieve this core principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than required under existing accounting principles generally accepted in the United States of America ("U.S. GAAP") including identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation.

The Company adopted ASC 606 for all applicable contracts using the modified retrospective method, which would have required a cumulative-effect adjustment, if any, as of the date of adoption. The adoption of ASC 606 did not have a material impact on the Company's consolidated financial statements as of the date of adoption. As a result, a cumulative-effect adjustment was not required.

The Company recognizes revenue predominately from one type of revenue, contract manufacturing and recognizes an immaterial amount from the sale of products. Revenue from both contract manufacturing and products is recognized at the point where the customer obtains control of the goods and the Company satisfies its performance obligation, which generally is at the time it ships the product to the customer. To achieve this core principle, the Company applies the following five steps:

Step 1 – Identify the Contract with the Customer – A contract exists when (a) the parties to the contract have approved the contract and are committed to perform their respective obligations, (b) the entity can identify each party's rights regarding the goods or services to be transferred, (c) the entity can identify the payment terms for the goods or services to be transferred, (d) the contract has commercial substance and it is probable that the entity will collect substantially all of the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer.

Step 2 – Identify Performance Obligations in the Contract – Upon execution of a contract, the Company identifies as performance obligations each promise to transfer to the customer either (a) goods or services that are distinct or (b) a series of distinct goods or services that are substantially the same and have the same pattern of transfer to the customer. To the extent a contract includes multiple promised goods or services, the Company must apply judgement to determine whether the goods or services are capable of being distinct within the context of the contract. If these criteria are not met, the goods or services are accounted for as a combined performance obligation.

Step 3 – Determine the Transaction Price – The transaction price is determined based on the consideration to which the Company will be entitled in exchange for transferring products or services to the customer. Generally, all contracts include fixed consideration. If a contract did include variable consideration, the Company would determine the amount of variable consideration that should be included in the transaction price based on expected value method. Variable consideration would be included in the transaction price, if in the Company's judgement, it is probable that a significant future reversal of cumulative revenue under the contract would not occur.

Step 4 – Allocate the Transaction Price – After the transaction price has been determined, the next step is to allocate the transaction price to each performance obligation in the contract. If the contract only has one performance obligation, the entire transaction price will be applied to that obligation. If the contract has multiple performance obligations, the transaction price is allocated to the performance obligations based on the relative standalone selling price (SSP) at contract inception.

Step 5 – Satisfaction of the Performance Obligations (and Recognize Revenue) – When the customer obtains control of the asset (or the services are rendered), the Company recognizes revenue. At contract inception, the Company determines if each performance obligation is satisfied at a point in time or over time. Revenue from both product sales and contract manufacturing is recognized at the point where the customer obtains control of the goods and the Company satisfies its performance obligation, which generally is at the time it ships the product to the customer.

Disaggregation of Revenue

The Company recognizes revenue predominately from contract manufacturing and recognizes an immaterial amount from products. Revenue from both products and contract manufacturing is recognized at the point where the customer obtains control of the goods and the Company satisfies its performance obligation, which generally is at the time it ships the product to the customer.

As of December 31, 2018, or December 31, 2017, the Company did not have any contract assets or contract liabilities from contracts with customers. During the year ended December 31, 2018 and 2017, there was no revenue recognized

from performance obligations satisfied (or partially satisfied) in previous periods. As of December 31, 2018, there were no remaining performance obligations that the Company had not satisfied.

5. Net Loss Per Common Share

Basic loss per share data for each period presented is computed using the weighted-average number of shares of common stock outstanding during each such period. Diluted loss per share data is computed using the weighted-average number of common and dilutive common-equivalent shares outstanding during each period. Dilutive common-equivalent shares consist of: (a) shares that would be issued upon the exercise of stock options and warrants, computed using the treasury stock method; and (b) shares of non-vested restricted stock.

The following securities are excluded from the calculation of weighted average dilutive common shares because their inclusion would have been anti-dilutive:

	As of December 31,	
	2018	2017
Stock options	375,591	809,586
Warrants	276,478	478,330
Non-vested restricted stock	20,000	189,674
Total	672,069	1,477,590

6. Discontinued Operations

Asset Sales

In addition to the aforementioned AST with Celularity, in order to add capital and to focus on future investments on commercializing its own regenerative technologies on August 31, 2017, the Company entered into an Asset Purchase Agreement (“the Argentum Purchase Agreement”) with Argentum Medical, LLC. (“Argentum”) whereby the Company agreed to sell to Argentum all of the Company’s rights, including (i) all distribution rights, exclusivity rights, intellectual property rights and marketing rights to the TheraBond product line and (ii) the unsold inventory of TheraBond products and work in process previously purchased by the Company in existence as of the closing, which occurred upon execution and delivery of the Argentum Purchase Agreement. In consideration for the sale of the TheraBond product line and the unsold TheraBond inventory to Argentum by the Company, Argentum agreed to pay (i) $3.6 million for the TheraBond product line and certain other agreements between the parties and (ii) up to $112,000 for the unsold TheraBond inventory upon the Company’s completion of its obligations to deliver all remaining and qualifying unsold TheraBond inventory, as specified in the Argentum Purchase Agreement. Of the $3.6 million of consideration, $300,000 was deposited in an indemnity escrow account under standard terms and conditions. This amount is classified under current assets of discontinued operations on the Company’s balance sheet as of December 31, 2017. As of December 31, 2018, the indemnity escrow has been repaid.

F-15

Summarized operating results of discontinued operations for the years ended December 31, 2018 and 2017 are presented in the following table (in thousands):

	Year Ended December 31,	
	2018	2017
Revenue, net of returns, allowances and discounts	$6,681	$18,790
Cost of revenues	1,791	5,319
Gross profit	4,890	13,471
Selling, general and administrative	11,179	34,488
Other income	-	(200)
Interest expense	612	2,282
Warrant modification expense	-	803
Deferred income tax benefit	-	(743)
Loss from discontinued operations, net of tax	(6,901)	(23,159)

Non-cash amortization expense of $1.4 million and $4.4 million is included in selling, general and administrative expense for the years ended December 31, 2018 and 2017, respectively.

During the year ended December 31, 2018, the Company recorded a net gain of approximately $5.5 million (net of state income tax of $0.546 million) on the sale of the assets related to the purchase agreement with Celularity, as shown in the following table (in thousands):

Proceeds from sale		
Total Consideration		29,000
Less: Net book value of assets sold to Celularity		
Inventory, net	(1,578)	
Intangibles, net	(20,557)	
Goodwill	(1,659)	
Fixed Assets, net	(904)	
Other current assets	15	
Total net book value of assets		(24,683)
Add: Net book value of liabilities extinguished due to sale		
Milestone payment	1,000	
Other liabilities	717	
Total net book value of liabilities		1,717
Less: State tax expense		(546)
Net gain on sale of assets		$5,488

F-16

Summarized assets and liabilities of discontinued operations are presented in the following table (in thousands):

	December 31, 2018	December 31, 2017
Accounts receivable, net	$ 60	$ 3,161
Inventory, net	-	1,458
Prepaid expenses and other current assets	-	443
Total current assets	60	5,062
Fixed assets, net	-	1,041
Intangible assets, net	-	22,069
Goodwill, net	-	1,659
Total assets of discontinued operations	60	29,831
Accounts payable	271	957
Accrued expenses and other current liabilities	-	3,557
Senior secured term loan, net	-	10,929
Total current liabilities	$ 271	$ 15,443
Other long-term liabilities	-	245
Total liabilities of discontinued operations	$ 271	$ 15,688

During the year ended December 31, 2017, the Company recorded a gain of approximately $1.7 million (net of tax of $0) on the sale of the assets related to the Argentum Purchase Agreement, pursuant to the following (in thousands):

Proceeds from sale		
Consideration for inventory	$112	
Consideration for intangible assets	3,600	
Total Consideration		3,712
Less: Net book value of assets sold to Argentum		
Inventory, net	(307)	
Intangibles, net	(1,709)	
Total net book value of assets		(2,016)
Gain on sale of assets		$1,696

On August 31, 2017, the Company entered into a ninety-day transition services agreement with Argentum (“Transition Agreement”). Under the Transition Agreement, the Company is required to perform certain services related to the communication with distributors, wholesalers and customers in respect of transition of the TheraBond product line to Argentum, as specified in the Transition Agreement. As compensation, Argentum paid the Company $200,000 for the services completed during the period from the closing of the purchase for three months ended November 30, 2017. This compensation was recognized over the service period and is included in discontinued operations for the year

ended December 31, 2017. On September 12, 2018, the obligation was paid in full and as of December 31, 2018, no obligation is owed by Argentum.

7. Termination of Merger Agreement

On October 5, 2016, the Company entered into a merger agreement to acquire the business of Soluble Systems, LLC ("Soluble") through a series of transactions. On February 27, 2017, the Company terminated this agreement.

In connection with the merger agreement to acquire the business of Soluble, the Company provided Soluble with bridge loans in the form of subordinated promissory notes totaling approximately $1.4 million. The Company advanced Soluble $1.0 million during the year ended December 31, 2016 and $0.4 million on January 30, 2017. Pursuant to the terms of the merger agreement, the amount was to be repaid in full upon termination of the agreement. As of December 31, 2016, the Company had provided for a full reserve for the amount that had been advanced to Soluble as of that date.

On October 27, 2017, the Company received $1 million under an agreement with Soluble in connection with amounts advanced to Soluble by the Company. With the receipt of this $1 million, the Company acknowledged that all amounts due to the Company from Soluble are paid in full. During the year ended December 31, 2017, the Company recorded a reduction in acquisition-related expenses of $365,000 which consisted of the recovery of bad debt expense of $650,000, offset by approximately $285,000 of other acquisition-related expenses.

8. Inventory

Inventory consists of the following (dollars in thousands):

	December 31, 2018	December 31, 2017
Raw materials	$ 101	$ 98
Less: Inventory reserve for excess and slow moving inventory	-	(5)
Total	$ 101	$ 93

9. Improvements and Equipment, net

Improvements and equipment consist of the following (in thousands):

	Useful Life (Years)	December 31, 2018	2017
Machinery and equipment	3-10	$2,893	$2,893
Office furniture and equipment	3-10	49	56
Leasehold improvements	(A)	228	228
		3,170	3,177
Less: Accumulated depreciation and amortization		(2,970)	(2,655)
Improvements and equipment, net		$200	$522

(A) Leasehold improvements are amortized over the shorter of the remaining lease term or estimated useful life.

Depreciation and amortization expense was $0.315 million and $0.315 million for the years ended December 31, 2018 and 2017, respectively.

10. Accrued Expenses

Accrued expenses and other current liabilities consist of the following (in thousands):

	December 31, 2018	December 31, 2017
Salaries, benefits and incentive compensation	$ 108	$ 509
Professional fees	230	176
Other	47	27
Total accrued expenses and other current liabilities	$ 385	$ 712

11. Operating Leases

The Company leases one commercial manufacturing facility through an operating lease agreement. The Company has an obligation for its commercial manufacturing facility located in Langhorne, Pennsylvania, through 2026. The Company leases one corporate office through an operating lease agreement, located in Yardley, Pennsylvania which, effective February 1, 2019, this property has been subleased to The Pinnacle Health Group, Inc. through April 20, 2023 and the Company receives monthly lease payments.

Future minimum lease payments, excluding expense reimbursements, under noncancelable operating leases at December 31, 2018 are as follows (in thousands):

	Gross Lease Payments	Sublet Lease Payments	Net Lease Payments
2019	$ 430	$ 223	$ 207
2020	434	227	207
2021	439	232	207
2022	443	236	207
2023	287	80	207
Thereafter	434	-	434
Total	$ 2,467	$ 998	$ 1,469

Total rent expense for the Langhorne facility was $0.207 million and $0.207 million for the years ended December 31, 2018 and 2017, respectively. The Company received $0.154 million in sublet lease income in 2018.

Total rent payments for the Yardley facility was $0.230 million and $0.218 million for the years ended December 31, 2018 and 2017, respectively.

The Company leased an additional corporate office through May 7, 2018, located in Eden Prairie, Minnesota, through the completion of the AST to Celularity, this lease has been fully reassigned to Celularity and is no longer an obligation to the Company.

12. Debt

Senior Secured Term Loan Facility

On May 29, 2015, the Company entered into a Credit Agreement and Guaranty (the “CAG”) with Perceptive. The CAG provided a senior secured term loan in a single borrowing to the Company in the principal amount of $15.5 million.

In connection with the entry into the Credit Agreement, a five-year warrant (the "Warrant") to purchase 75,000 shares of common stock, par value of $0.001 per share at an exercise price of $55.138 per share (the "Exercise Price") was issued to Perceptive. The Company granted Perceptive customary demand and piggy-back registration rights with respect to the shares of common stock issuable upon exercise of the Warrant. The warrant contains a weighted average anti-dilution feature whereby the Exercise Price is subject to reduction if the Company issues shares of common stock (or securities convertible into common stock) in the future at a price below the current Exercise Price. As a result, the warrant was determined to be a derivative liability. The warrant had an issuance date fair value of approximately $2.7 million which was recorded as a debt discount. During the years ended December 31, 2018 and 2017, the Company recorded amortization of debt discount of $0.178 million and $0.577 million, respectively, which is included in discontinued operations for the periods presented. See Note 18 – Fair Value Measurement for additional details.

On March 13, 2018, the Company AquaMed Technologies, Inc., a wholly owned subsidiary of the Company and Perceptive entered into an Amendment Agreement, pursuant to which the parties agreed to certain amendments and modifications to the terms of the CAG. The Amendment Agreement provided for, an additional bridge term loan to the Company in the aggregate principal amount of $2.0 million pursuant to a Bridge Loan Note ("BLN"). Under the Amendment Agreement, the Company agreed to pay an upfront fee of $0.25 million and all fees, costs and expenses payable pursuant to the CAG (including reasonable attorney's fees of Perceptive). The BLN bore interest at a rate per annum equal to the sum of (i) the greater of (x) LIBOR and (y) 1%, plus (ii) an applicable margin of 9.75%. The BLN matured on the earlier of (i) May 7, 2018 and (ii) the closing date in connection with the APA.

On May 7, 2018, the Company paid approximately $14.8 million, which included $0.2 million charged by Perceptive as an early termination fee, in full satisfaction of all debt obligations due Perceptive.

Consent and Forbearance Agreement

On August 31, 2017, in connection with the Argentum Purchase Agreement, the Company and Perceptive entered into a Consent, Forbearance and Amendment Agreement (the "Consent and Forbearance Agreement"), pursuant to which the Company agreed to pay $1,650,000 of the proceeds from the Argentum Purchase Agreement to Perceptive, of which approximately $1,618,000 was applied towards the outstanding principal amount of the term loan under the credit agreement and approximately $32,000 was used to pay an early prepayment fee. This payment was made on August 31, 2017. During the year ended December 31, 2017, the Company recorded a loss on early extinguishment of debt of $214,000 related to the Consent and Forbearance Agreement. This amount consisted of the $32,000 prepayment penalty, the write-off of $129,000 of unamortized discount, and the write-off of $53,000 of unamortized debt issuance costs.

13. Commitments and Contingencies

Agreements for Human Placental Based Products with Celularity, Inc.

In November 2013, the Company entered into a License, Marketing and Development Agreement (the "License Agreement") and Supply Agreement (the "Biovance Supply Agreement") with Celgene Cellular Therapeutics ("CCT"), an affiliate of Celgene Corporation ("Celgene"). The Company is required to pay Celularity annual license fees, designated amounts when certain milestone events occur and royalties on all sales of licensed products, with such amounts being variable and contingent on various factors. During the years ended December 31, 2018 and 2017, the Company incurred royalties of approximately $381,000 and $818,000, respectively, in connection with this agreement. Approximately $0 and $227,000 is included in discontinued operations as of December 31, 2018 and December 31, 2017, respectively, in connection with this agreement.

In April 2016, the Company entered into a Supply Agreement with HLI (now Celularity), pursuant to which Celularity supplies the Company with the Company's entire requirement of Interfyl™ Human Connective Tissue Matrix.

On May 7, 2018, the License Agreement and the Supply Agreements were transferred to Celularity in connection with the completion of the AST.

License Agreement with Noble Fiber Technologies, LLC

On July 15, 2011, the Company entered into a license agreement with Noble Fiber Technologies, LLC, whereby the Company has the exclusive right and license to manufacture and distribute "SilverSeal Hydrogel Wound Dressings" and "SilverSeal Hydrocolloid Wound Dressings". The license is granted for ten years with an option to be extended for consecutive renewal periods of two years after the initial term. Royalties are to be paid equal to 9.75% of net sales of licensed products. There are no minimum royalties subsequent to 2016. Total royalties, for the years ended December 31, 2018 and 2017 were nominal, in connection with this agreement. There was no outstanding payable as of December 31, 2018 and 2017, respectively, in connection with this agreement.

Contingent Consideration

Celleration, Inc.

On May 29, 2015, the Company acquired all outstanding equity interest of Celleration, Inc. (“Celleration”), a medical device company focused on developing and commercializing the MIST Therapy® therapeutic ultrasound platform for the treatment of acute and chronic wounds. The Company agreed to pay contingent consideration of 3.5 times revenue from acquired MIST Therapy products in excess of certain revenue targets for the years ending December 31, 2015 and 2016, payable in equal amounts of cash and the Company’s common stock. This contingent consideration was payable in two installments in March 2016 and March 2017.

The second installment consisted of $675,000 of cash and approximately 101,000 shares of the Company’s common stock valued at approximately $675,000 and was paid in March 2017. This payment was based on 3.5 times of the excess of 2016 MIST Therapy revenue of approximately $10.5 million over 2015 MIST Therapy revenue of approximately $10.2 million. There are no further contingent payments due in connection with the Celleration acquisition.

Choice Therapeutics, Inc.

On May 5, 2014, the Company acquired all outstanding equity interest of Choice Therapeutics, Inc., a provider of innovative wound care products using proprietary TheraBond 3D® Antimicrobial Barrier Systems. The Company agreed to pay contingent consideration based upon the Company achieving specific performance metrics over the three twelve-month periods, ended April 30, 2017. The Company issued approximately 132,000 shares of its common stock valued at approximately $500,000 in June 2017. There are no further contingent payments due in connection with the Choice acquisition.

Litigation, Claims and Assessments

The Company is subject to periodic lawsuits, investigations and claims that arise in the ordinary course of business. The company is not party to any material litigation as of December 31, 2018.

The class action complaint filed on February 22, 2018 was settled in April 2018 for an immaterial amount, $0.125 million.

14. Stockholders' Equity

Preferred Stock

The Company has authorized 1,000,000 shares of preferred stock, $0.001 par value per share, which may be divided into series and with preferences, limitations and relative rights determined by the Board of Directors.

Common Stock

The Company effected a 1-for-10 reverse stock split of its outstanding common stock on October 6, 2017. The accompanying consolidated financial statements and accompanying notes to the consolidated financial statements give retroactive effect to the reverse stock split for all periods presented. The shares of common stock retained a par value of $0.001 per share. Accordingly, stockholders' equity reflects the reverse stock split by reclassifying from common stock to additional paid-in capital an amount equal to the par value of the decreased shares resulting from the reverse stock split.

2011 Plan

The Company maintains the 2011 Long-Term Incentive Plan (the "2011 Plan") that provides for the granting of stock options, restricted stock units ("RSUs"), restricted stock and other awards to employees, directors and others. A total of 182,857 shares of common stock have been authorized for issuance under the 2011 Plan, of which, as of December 31, 2018, 54,131 shares were available for future issuances.

2014 Plan

The Company maintains the 2014 Long-Term Incentive Plan (the "2014 Plan") that provides for the granting of stock options, RSUs, restricted stock and other awards to employees, directors and others. On February 26, 2015 and May 6,

2015, the Company's Board of Directors and the Company's shareholders, respectively, approved an amendment to the 2014 Plan to increase the total number of shares of common stock authorized for issuance under the 2014 Plan by an additional 350,000 shares. On April 26, 2017 and June 23, 2017, the Company's Board of Directors and the Company's shareholders, respectively, approved an amendment to the 2014 Plan to increase the total number of shares of common stock authorized for issuance under the 2014 Plan by an additional 400,000 shares. A total of 950,000 shares of common stock are reserved for award under the 2014 Plan, of which, as of December 31, 2018, 434,616 shares were available for future issuances.

Private Placement

On February 27, 2017, the Company entered into a securities purchase agreement (the "Securities Purchase Agreement") with certain accredited investors, pursuant to which the Company agreed to issue and sell to the investors in a private placement (the "Private Placement") an aggregate of 554,000 shares of the Company's common stock at a purchase price of $5.00 per share. The Company closed the Private Placement on the same day as it entered into the Securities Purchase Agreement and received aggregate gross proceeds of approximately $2.8 million. In connection with the Private Placement, the Company paid an aggregate of $196,000 of financial advisory fees and $40,000 of administrative fees, which were recorded as a reduction of additional paid-in capital.

The Securities Purchase Agreement contains a "most-favored nation" provision that provides that if the Company, during 120 days from February 27, 2017, issues or sells any common stock or common stock equivalents reasonably believed to be more favorable in terms or conditions than those in the Private Placement, then the Company must amend the terms of the Securities Purchase Agreement to give the private investors the benefit of such favorable terms or conditions. In connection with the common stock sold in the Public Offering (as defined below) and in accordance with this provision, on April 11, 2017, the Company issued an aggregate of 38,072 shares of its common stock to these investors. On June 23, 2017, the Company held its 2017 annual meeting of stockholders during which the stockholders approved the issuance of the remaining 100,428 additional shares of common stock to be issued to the investors, and, following the meeting, on June 23, 2017, the Company issued the remaining shares.

Underwritten Public Offering

On April 3, 2017, the Company closed an underwritten public offering (the "Public Offering") of 947,325 shares of its common stock at a price to the public of $4.00 per share. The Company received aggregate gross proceeds of approximately $3.8 million. In connection with the Public Offering, the Company paid an aggregate of $365,000 of financial advisory fees and $92,000 of administrative fees, which were recorded as a reduction of additional paid-in capital. The shares of common stock were issued pursuant to the Company's shelf registration statement on Form S-3 previously filed with the Securities and Exchange Commission and declared effective on September 25, 2014.

On April 3, 2017, the Company issued warrants to purchase an aggregate of 23,686 of the Company's common stock to the underwriter of this offering. These warrants are immediately exercisable, have an exercise price of $4.40, and

expire on March 29, 2022. The warrants had an aggregate issuance date fair value of $78,000 which was recorded as both a debit and credit to additional paid in capital.

Pursuant to an anti-dilution provision provided in the warrants dated November 8, 2012 to purchase common stock at an initial exercise price of $21.90, the exercise price of these warrants was adjusted to the public offering price of $4.00. As of April 3, 2017, November 2012 warrants to purchase 36,231 shares of the Company’s common stock were outstanding. These warrants expired in November 2017.

Stock-Based Compensation

On May 7, 2018, in connection with the closing of the sale under the APA of substantially all of the Company's assets to Cellularity, which triggered certain change in control provisions of the Company's equity plans, all unvested and outstanding options and restricted stock awards under the 2011 Plan and 2014 Plan became vested and exercisable.

For the year ended December 31, 2018, the Company recognized $1.0 million of stock-based compensation expense, of which, $0.03 million is included in cost of revenues and $0.97 million is included in selling, general and administrative expenses in the consolidated statements of operations. For the year ended December 31, 2017, the Company recognized $2.0 million of stock-based compensation expense, of which, $0.045 is included in cost of revenues and $2.0 million is included in selling, general and administrative expenses in the consolidated statements of operation. As of December 31, 2018, there was no unrecognized stock-based compensation expense remaining.

Restricted Stock

During the year ended December 31, 2017, the Company granted an aggregate of 181,936 shares of restricted stock to employees with an aggregate grant date value of $621,000, which will be recognized proportionate to the vesting period. The shares vest as follows: (i) 66,936 shares vest on September 21, 2017, (ii) 5,000 shares vest on December 31, 2017, (iii) 50,000 shares vest on June 23, 2018, and (iv) 60,000 shares vest pursuant to the satisfaction of certain performance conditions.

During the year ended December 31, 2018, the Company granted an aggregate of 20,000 shares of restricted stock to consultants with an aggregate grant date value of $39,200, which will be recognized proportionate to the vesting period. The shares vest pursuant to the satisfaction of certain performance conditions.

A summary of restricted stock award activity during the years ended December 31, 2018 and 2017 is presented below (in thousands, except per share data):

	Number of Shares	Weighted Average Grant Date Fair Value Per Share	Total Grant Date Fair Value

Non-vested, December 31, 2016	147	$ 26.26	$ 3,862
Granted	182	3.41	621
Vested	(137)	17.35	(2,373)
Forfeited	(2)	3.87	(10)
Non-vested, December 31, 2017	190	$ 11.07	$ 2,100
Granted	20	1.96	39
Vested	(185)	11.07	(2,045)
Forfeited	(5)	11.07	(55)
Non-vested, December 31, 2018	20	$ 1.96	$ 39

Warrants

There were no compensatory warrants issued during the years ended December 31, 2018 and 2017.

A summary of the warrant activity during the years ended December 31, 2018 and 2017 is presented below (in thousands, except years and per warrant data):

	Number of Warrants	Weighted Average Exercise Price per Warrant	Weighted Average Remaining Life in Years	Intrinsic Value
Outstanding, December 31, 2016	337	$ 56.90		
Issued	159	4.66		
Adjustment for price reset	29			
Exercised	-	-		
Forfeited	(47)	9.35		
Outstanding, December 31, 2017	478	$ 32.79		$ -
Issued	-	-		
Exercised	-	-		
Cancelled	(202)	50.03		
Outstanding, December 31, 2018	276	$ 20.20	2.7	$ -
Exercisable, December 31, 2018	276	$ 20.20	2.7	$ -

The following table presents information related to warrants at December 31, 2018 (in thousands, except years and per warrant data):

Warrants Outstanding			Warrants Exercisable	
Exercise Price	Outstanding Number of Warrants	Weighted Average Remaining Life in Years	Exercisable Number of Warrants	
$4.40 - $39.99	233	3.1	233	
$40.00 - $105.00	43	0.3	43	
	276	2.4	276	

Stock Options

During 2017, the Company granted ten-year options to purchase an aggregate of 258,105 shares of common stock at exercise prices ranging from $2.09 to $5.70 per share with an aggregate grant date value of $642,000 to non-executive employees and directors pursuant to the 2014 Plan. The options vest as follows: (i) 45,045 shares vest one-twelfth monthly over one year, and (ii) 213,060 shares vest in one-fourth increments every six months over a period of two years. The grant date value is being amortized over the vesting term.

In applying the Black-Scholes option pricing model to stock options granted, the Company used the following assumptions:

	Year Ended December 31,		
	2018	2017	
Risk free interest rate	N/A	1.81%-2.43	%
Expected term (years)	N/A	5.04-6.50	
Expected volatility	N/A	81.94% - 87.00	%
Expected dividends	N/A	0.00	%

The risk-free interest rate is based on rates of treasury securities with the same expected term as the options. The Company uses the “simplified method” to calculate the expected term of employee and director stock-based options. The expected term used for consultants is the contractual life. The Company is utilizing an expected volatility figure based on a review of the Company’s historical volatility, over a period of time, equivalent to the expected life of the instrument being valued. The expected dividend yield is based upon the fact that the Company has not historically paid dividends, and does not expect to pay dividends in the near future.

Option forfeitures are estimated at the time of valuation and reduce expense ratably over the vesting period. This estimate will be adjusted periodically based on the extent to which actual option forfeitures differ, or are expected to differ, from the previous estimate, when it is material. The Company estimated forfeitures related to options at annual rates ranging from 0% to 5% for options outstanding at December 31, 2018 and 2017.

There were no options granted during the year ended December 31, 2018. The weighted average estimated grant date fair value of the options granted during the year ended December 31, 2017 was $2.49 per share.

A summary of the stock option activity during the years ended December 31, 2018 and 2017 is presented below (in thousands, except years and per option data):

	Number of Options	Weighted Average Exercise Price per Option	Weighted Average Remaining Life in Years	Intrinsic Value
Outstanding, December 31, 2016	720	$ 52.90		
Granted	258	3.53		
Exercised	-	-		
Forfeited	(168)	40.60		
Outstanding, December 31, 2017	810	$ 39.67		
Granted	-	-		
Exercised	-	-		
Forfeited	(434)	31.42		
Outstanding, December 31, 2018	376	$ 49.29	4.3	$ -
Exerciseable, December 31, 2018	376	$ 49.29	4.3	$ -

As a result, a summary of the Company’s outstanding and exercisable options as of December 31, 2018 was as follows (in thousands, except years and per option data):

	Options Outstanding		Options Exercisable		
Range of Exercise Price	Weighted Average Exercise Price	Outstanding Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Life in Years	Exercisable Number of Options
$2.00 - $4.00	$ 3.64	52	3.64	8.5	52
$4.10 - $9.90	8.72	23	8.72	7.4	23
$10.00 - $19.90	10.50	8	10.50	7.2	8
$20.00 - $39.90	33.47	40	33.47	4.4	40
$40.00 - $49.90	44.54	33	44.54	3.3	33
$50.00 - $59.90	53.87	26	53.87	1.2	26
$60.00 - $69.90	65.91	152	65.91	3.6	152
$70.00 - $79.90	79.40	1	79.40	5.3	1
$80.00 - $89.90	87.50	18	87.50	2.2	18
$90.00 - $99.90	90.00	18	90.00	2.1	18
$100.00 - $266.90	109.40	5	109.40	1.4	5
	49.29	376	49.29	4.3	376

15. Income Taxes

The Company files corporate income tax returns in U.S. federal, state and local jurisdictions, including Pennsylvania, and has tax returns subject to examination by tax authorities generally beginning in the year ended December 31, 2015 and through December 31, 2018. However, to the extent we utilize our net operating loss ("NOL") carryforwards in the future, the tax years in which the attribute was generated may still be adjusted upon examination by the Internal Revenue Service or state tax authorities of the future period tax return in which the attribute is utilized.

The income tax (benefit) provision consists of the following (in thousands):

	For The Years Ended December 31,	
	2018	2017
Federal:		
Current	$ -	$ -
Deferred	-	-
State and local:		
Current	-	-
Deferred	-	-
Income tax provision	$ -	$ -

For the years ended December 31, 2018 and 2017, the expected tax expense based on the federal statutory rate reconciled with the actual tax expense is as follows:

	For The Years Ended December 31,	
	2018	2017
U.S. federal statutory rate	21.00 %	34.00 %
State tax rate, net of federal benefit	4.33 %	4.45 %
Permanent differences		
- Change in fair value of warrant liability	(0.08)%	5.80 %
- Other	(0.05)%	(0.14)%
Adjustments to deferred taxes	(27.61)%	(41.01)%
Tax Reform - Federal Rate Change	0.00 %	(321.36)%
Tax Reform - Change in valuation allowance	0.00 %	321.36 %
Change in valuation allowance	2.41 %	(3.10)%

Income tax provision	(0.00)%	0.00 %

The United States enacted the Tax Cuts and Jobs Act ("Act") on December 22, 2017, most provisions of which took effect in years beginning after December 31, 2017. The Act made substantial changes to U.S. taxation of corporations, including a reduction in the U.S. federal corporate income tax rate from 34% to 21% and changes to limitations on the deductibility of executive compensation. The effect on deferred tax assets and liabilities of a change in law or tax rates is recognized in income in the period that includes the enactment date.

After the enactment of the Act, the SEC issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Act. In our financial statements for the period ended December 31, 2017, we calculated an estimate of the impact of the Act related to the remeasurement of our net U.S. deferred tax asset due to the change in U.S. federal corporate income tax rate. The provisional amount recorded was deferred tax expense of $14.6 million, but which was fully and equally offset by a deferred tax benefit related to a corresponding reduction in our valuation allowance. In addition, due to changes in executive compensation rules pursuant to the Act, the Company determined that approximately $1.3 million of deferred tax asset for stock compensation may not be realizable. The Company had previously recorded a valuation allowance against the deferred tax asset so this adjustment had no impact on the financial statements for the period ended December 31, 2017. During the quarter ended December 31, 2018, the completed the accounting for the income tax effects of the Act, which resulted in an immaterial change in the net deferred tax asset, before valuation allowance, as of the enactment date.

As of December 31, 2018 and 2017, the Company's deferred tax assets consisted of the effects of temporary differences attributable to the following (in thousands):

	As of December 31,	
	2018	2017
Deferred tax assets:		
Net operating loss carryforwards	$26,498	$29,580
Stock-based compensation	3,673	5,598
Goodwill and Tradename	29	32
Accruals	135	694
Transaction costs	214	39
Other	171	364
Total deferred tax assets	30,720	36,307
Valuation allowance	(30,695)	(30,864)
Deferred tax assets, net of valuation allowance	$25	$5,443
Deferred tax liabilities:		
Property and equipment	(25)	(65)
Intangible assets	-	(5,378)
Total deferred tax liabilities	(25)	(5,443)
Net deferred tax liabilities	$-	$-

For the years ended December 31, 2018 and 2017, the Company had approximately $102.6 million and $114.6 million of federal NOL carryovers, respectively, which substantially begin to expire in 2021 and through 2037. The Company also has state NOL carryovers in multiple jurisdictions, including most materially in Pennsylvania, $23.5 million and $26.4 million, and in Florida, $11.1 million and $11.3 million, as of December 31, 2018 and December 31, 2017, respectively. During 2016 the Company performed a 382 study, and as a result of the study, reduced its NOL carryforwards by $4.8 million, which is the amount of the NOL carryforwards that are expected to expire unutilized pursuant to the Section 382 study. On May 29, 2015 the Company acquired Celleration, Inc. and the Company has performed a Section 382 study for Celleration, Inc. The amount of federal NOL carryforwards as of December 31, 2017 and December 31, 2016 disclosed above do not include $47.9 million of Celleration, Inc. NOL carryforwards that are expected to expire unutilized pursuant to the Section 382 study. The Celleration, Inc. state NOL carryforwards have also been reduced accordingly. On May 5, 2014 the Company acquired the equity interests of Choice and the Company believes the Choice NOL carryforwards as of that date are subject to Section 382 limitations. The amount of federal NOL carryforwards as of December 31, 2018 and December 31, 2017 disclosed above do not include $2.5 million of Choice NOL carryforwards that the Company has estimated will expire unutilized pursuant to this limitation. Additionally, an ownership change pursuant to Section 382 may have occurred since 2016, or could occur in the future, such that the NOLs available for utilization could be further limited.

In assessing the realization of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of the deferred tax assets is dependent

upon the future generation of taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. After consideration of all the evidence, both positive and negative, management has recorded a full valuation allowance against net deferred tax assets at December 31, 2018 and December 31, 2017 because management has determined that it is more likely than not that these deferred tax assets will not be realized. The valuation allowance decreased by $0.2 million and decreased by $10.6 million during the years ended December 31, 2018 and December 31, 2017, respectively. Included in the current year decrease to the valuation allowance is a $0.1 million increase related to discontinued operations. Included in the prior year decrease to the valuation allowance is a $2.3 million decrease related to discontinued operations. The decrease in tax year ended December 31, 2018 is primarily related to impacts of the sale of assets to Celularity, offset by a reduction to stock compensation deferred tax asset associated with cancelled awards and utilization of net operating losses. The decrease in tax year ended December 31, 2017 is primarily related to the decrease in the corporate tax rate from 34% to 21% due to the enactment of the Act, offset by increases in net operating loss carryforwards.

16. Related Party

In November 2015, the Company entered into a manufacturing supply agreement with a company where a Company director is a member of the Board of Directors. During the years ended December 31, 2018 and 2017, the Company incurred costs of approximately $0.26 million and $0.43 million, respectively, from this vendor. Approximately $0 and $0.123 million are included in accounts payable related to this related party as of December 31, 2018 and December 31, 2017, respectively.

17. Concentration of Risk

During the year ended December 31, 2018, two customers accounted for 77% of the Company's total net revenue from continuing operations, with Customer A accounting for 63% and Customer B accounting for 14%, respectively. During the year ended December 31, 2017, two customers accounted for 81% of the Company's total net revenue from continuing operations with Customer A accounting for 65% and Customer B accounting for 16%, respectively. There were no customers exceeding 10% of its outstanding accounts receivable balance from continuing operations as of December 31, 2018. One customer accounted for 100% of its outstanding accounts receivable balance from continuing operations as of December 31, 2017.

18. Fair Value Measurement

Fair value is defined as the price that would be received upon selling an asset or the price paid to transfer a liability on the measurement date. It focuses on the exit price in the principal or most advantageous market for the asset or liability in an orderly transaction between willing market participants. A three-tier fair value hierarchy is established as a basis for considering such assumptions and for inputs used in the valuation methodologies in measuring fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair values are as follows:

Level 1: Observable prices in active markets for identical assets and liabilities.

Level 2: Observable inputs other than quoted prices in active markets for identical assets and liabilities.

Level 3: Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

Impairment

Goodwill and other indefinite-lived intangible assets are tested for impairment annually, at the end of the fourth quarter of each fiscal year, and between annual tests if an event occurs or circumstances change that would indicate it is more likely than not that the carrying amount may be impaired. Additionally, the Company continually evaluates whether events or changes in circumstances might indicate that the remaining estimated useful life of long-lived assets may warrant revision, or that the remaining balance may not be recoverable. The factors used to determine fair value

are subject to management's judgement and expertise and include, but are not limited to, the present value of future cash flows, net of estimated operating costs, internal forecasts, anticipated capital expenditures and various discount rates commensurate with the risk and current market conditions associated with realizing the expected cash flows projected. These assumptions represent Level 3 inputs. Impairment of the Company's goodwill for the year ended December 31, 2017 was $10.3 million. As a result of the AST with Celularity, all goodwill was written off as of May 7, 2018.

Warrant Liabilities

On December 31, 2017, the Company recomputed the fair value of its warrant liability of outstanding warrants to purchase an aggregate of 210,000 shares of common stock as $130,000 using the Binomial option pricing model (Level 3 inputs) using the following assumptions: expected volatility of 73.37% risk-free rate of 2.09%, expected term of 4.07 years, and expected dividends of 0.00%. The Company recorded a gain on the change in fair value of these warrant liabilities of $693,000 during the year ended December 31, 2017.

The Company amended and restated the Warrant on each of October 25, 2016, January 26, 2017, March 7, 2017 and April 6, 2017. In addition, on June 1, 2017, the Company further amended the amended and restated Warrant. The amended and restated Warrant, as amended, is exercisable for 210,000 shares of the Company's common stock at an exercise price of $4.70 per share. In connection with the amendments of January, March, April and June 2017, the Company recomputed the fair value of the original warrant and amended warrant using the Binomial option pricing model (Level 3 inputs) using the following assumptions: expected volatility of 65.33%-78.98%, risk-free rate of 1.49%-1.95%, expected term of 3.34-5.00 years, and expected dividends of 0.00%. As a result, the Company recorded warrant modification expense of $803,000 during the year ended December 31, 2017, which represents the incremental value of the amended warrant as compared to the original warrant, both valued as of the respective amendment dates.

The issuance of common stock in connection with the Private Placement and Public Offering triggered an adjustment to the exercise price of certain warrants originally issued in November 2012 from $55.10 per share to $5.00 per share to $4.00 per share with a corresponding adjustment to the number of shares underlying such warrants from 6,629 shares to 29,034 shares to 36,231 shares. The impact of such adjustment is included in the change in fair value of the warrant liabilities during the year ended December 31, 2017.

On December 31, 2018, the Company recomputed the fair value of its warrant liability of outstanding warrants to purchase an aggregate of 210,000 shares of common stock as $156,000 using the Binomial option pricing model (Level 3 inputs) using the following assumptions: expected volatility of 91.94% risk-free rate of 2.46%, expected term of 3.08 years, and expected dividends of 0.00%. During the year ended December 31, 2018, the Company recorded a loss on the change in fair value of these warrant liabilities of $26,000.

Warrants that contain exercise reset provisions and contingent consideration liabilities are Level 3 derivative liabilities measured at fair value on a recurring basis using pricing models for which at least one significant assumption is unobservable as defined in ASC 820. The fair value of contingent consideration liabilities that are classified as Level 3 were estimated using a discounted cash flow technique with significant inputs that are not observable in the market and thus represents a Level 3 fair value measurement as defined in ASC 820. The significant inputs in the Level 3 measurement not supported by market activity include the probability assessments of expected future cash flows related to the acquisitions, appropriately discounted considering the uncertainties associated with the obligation, and as calculated in accordance with the terms of the acquisition agreements. The development and determination of the unobservable inputs for Level 3 fair value measurements and the fair value calculations are the responsibility of the Company’s Chief Financial Officer and are approved by the Chief Executive Officer.

The following table sets forth a summary of the changes in the fair value of Level 3 warrant liabilities that are measured at fair value on a recurring basis (in thousands):

	Year Ended December 31,	
	2018	2017
Warrant Liabilities		
Beginning balance as of January 1,	$ 130	$ 20
Change in fair value of warrant liability	26	(693)
Warrant modification expense	-	803
Ending balance as of December 31,	$ 156	$ 130

	Year Ended December 31,	
	2018	2017
Contingent Consideration		
Beginning balance as of January 1,	$ -	$ 1,816
Payments of contingent consideration	-	(1,851)
Change in fair value of contingent consideration	-	35
Ending balance as of December 31,	$ -	$ -

Assets and liabilities measured at fair value on a recurring basis are as follows (in thousands):

	December 31, 2018		
	Level 1	Level 2	Level 3
Liabilities:			
Warrant liabilities	$ -	$ -	$ 156
Total liabilities	$-	$-	$ 156

	December 31, 2017		
	Level 1	Level 2	Level 3
Liabilities:			
Warrant liabilities	$ -	$ -	$ 130
Total liabilities	$-	$-	$ 130

19. Defined Contribution Plan

The Company maintains the Alliqua, Inc. 401(k) Profit Sharing Plan and Trust (“Plan”) in accordance with the provisions of Section 401(k) of the Code. The Plan covers substantially all full-time employees of the

Company. Participants may contribute up to 100% of their total compensation to the Plan, not to exceed the limit as defined in the Code. Under this plan, the Company matches 50% of the employee's contributions up to 6% of the employee's annual compensation, as defined by the plan. Employees are eligible for the match after a six-month waiting period and the Company match vests immediately. The Company's contribution to the plan was $0.033 million and $0.097 million for the years ended December 31, 2018 and 2017, respectively.

20. Subsequent Events

On January 9, 2019, AquaMed filed a registration statement on Form S-1 with the Securities and Exchange Commission.

On January 24, 2019, the Company filed the definitive proxy statement for the special shareholders meeting regarding the reverse merger with Adynxx.