BIOLIFE SOLUTIONS INC
Form POS AM
December 24, 2014

As filed with the Securities and Exchange Commission on December 24, 2014
Registration No. 333-194697

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

Post-Effective Amendment No. 1
to
FORM S-1
on
FORM S-3

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

BioLife Solutions, Inc.
(Exact name of Registrant as specified in its charter)

Delaware	94-3076866
(State or other jurisdiction of incorporation)	(I.R.S. Employer Identification Number)

3303 Monte Villa Parkway
Bothell, Washington 98021
(425) 402-1400
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Daphne Taylor
Chief Financial Officer
3303 Monte Villa Parkway
Bothell, Washington 98021
(425) 402-1400
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:
Christopher
L. Doerksen
Dorsey &
Whitney
LLP
701 Fifth
Avenue,
Suite 6100

Seattle,
Washington
98104

Approximate date of commencement of proposed sale to the public:
from time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o
If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. þ
If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o
If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o
If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. o
If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. o
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

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

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall hereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

BioLife Solutions, Inc. (the "Company") filed: (i) a registration statement with the Securities and Exchange Commission (the "SEC") on Form S-1 (Registration No. 333-192880), as subsequently amended by amendments one through seven thereto, which was declared effective by the SEC on March 19, 2014; and (ii) a registration statement with the SEC on Form S-1/MEF (Registration No. 333-194697) which was filed on March 20, 2014 and became effective upon filing in accordance with Rule 462(b) under the Securities Act of 1933, as amended (the "Securities Act"). Pursuant to Rule 429 under the Securities Act, the prospectuses contained in those previous registration statements (collectively, the "Registration Statement" or the "Form S-1") have been combined into the prospectus contained in this Post-Effective Amendment to Form S-1 on Form S-3.

The Form S-1 registered the offer and sale by the Company of up to 3,604,651 units (the "Units"), with the Units consisting in the aggregate of (1) 3,604,651 shares of the Company's common stock (the "Common Shares") and (2) 3,604,651 warrants (the "Warrants") exercisable for an aggregate of 3,604,651 Common Shares (the "Warrant Shares"). The Company sold 3,588,878 of the Units pursuant to the Registration Statement on March 25, 2014. None of the Warrants have been exercised, and all of the Warrants remain outstanding and exercisable for the Warrant Shares. This Post-Effective Amendment No. 1 to Form S-1 on Form S-3 is being filed by the Company to convert the Form S-1 into a registration statement on Form S-3 and contains an updated prospectus relating solely to the offering and sale of the Warrant Shares that were registered for sale by the Company on the Form S-1.

No additional securities are being registered under this Post-Effective Amendment No. 1. All filing fees payable in connection with the registration of the Units, the Common Shares, the Warrants and the Warrant Shares covered by the Registration Statement were paid by the Company at the time of the initial filings of the Registration Statement.

The information contained in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject To Completion, Dated December 24, 2014

PRELIMINARY PROSPECTUS

BioLife Solutions, Inc.

3,588,878 Shares of Common Stock
Issuable Upon Exercise of Warrants

This prospectus relates to 3,588,878 shares of our common stock issuable upon the exercise of our outstanding warrants. The warrants were offered and sold by us pursuant to a prospectus dated March 20, 2014, which prospectus also covered the offer and sale by us of the shares of our common stock underlying the warrants. The ongoing offer and sale by us of the shares of our common stock issuable upon exercise of the warrants is being made pursuant to this prospectus. The warrants are exercisable until March 25, 2021 at an exercise price of $4.75 per share of our common stock, subject to adjustment upon events specified in the warrants. If all of the warrants are exercised in full at the exercise price of $4.75 per share, we expect to receive net proceeds to be approximately $17.0 million.

For a more detailed description of our common stock, see the section entitled “Description of Securities—Common Stock” beginning on page 14 of this prospectus. For a more detailed description of our warrants, see the section entitled "Description of Securities—Warrants" beginning on page 14 of this prospectus. We refer to the warrants offered and sold by us pursuant to a prospectus dated March 20, 2014 as the “Warrants.” We refer to the shares of common stock issuable upon exercise of the Warrants as the “Warrant Shares.”

Our common stock is listed on The NASDAQ Capital Market under the symbol “BLFS”. On December 23, 2014, our common stock closed at $1.81 per share.

Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 5 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2014.

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ABOUT THIS PROSPECTUS

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized any person to provide you with different or inconsistent information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell or seeking an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and the documents incorporated by reference is accurate only as of their respective dates. BioLife Solutions, Inc.'s business, financial condition, results of operations and prospects may have changed since such dates.

We further note that the representations, warranties and covenants made by us in any document that is filed as an exhibit to the registration statement of which this prospectus is a part and in any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless the context otherwise requires, the terms "BioLife," the "Company," "we," "us," "our" and similar terms used in t prospectus refer to BioLife Solutions, Inc. Unless otherwise noted, all share and per share data in this prospectus gives effect to the one-for-fourteen reverse stock split effected on January 29, 2014.

FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. These forward-looking statements involve a number of risks and uncertainties. We caution readers that any forward-looking statement is not a guarantee of future performance and that actual results could differ materially from those contained in the forward-looking statement. These statements are based on current expectations of future events. Such statements include, but are not limited to, statements about future financial and operating results, plans, objectives, expectations and intentions, costs and expenses, interest rates, outcome of contingencies, financial condition, results of operations, liquidity, business strategies, cost savings, objectives of management and other statements that are not historical facts. You can find many of these statements by looking for words like "believes," "expects," "anticipates," "estimates," "may," "should," "will," "could," "plan," "intend," or expressions in this prospectus. We intend that such forward-looking statements be subject to the safe harbors created thereby. Examples of these forward-looking statements include, but are not limited to:

- anticipated regulatory filings and requirements;
- timing and amount of future contractual payments, product revenue and operating expenses;
- market acceptance of our products and the estimated potential size of these markets; and
- our anticipated future capital requirements and the terms of any capital financing agreements.

These forward-looking statements are based on the current beliefs and expectations of our management and are subject to significant risks and uncertainties. If underlying assumptions prove inaccurate or unknown risks or uncertainties materialize, actual results may differ materially from current expectations and projections. Factors that might cause such a difference include those discussed under "Risk Factors," as well as those discussed elsewhere in the prospectus.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus.

All subsequent written or oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We do not undertake any obligation to release publicly any revisions to these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events, except as may be required under applicable U.S. securities law. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

PROSPECTUS SUMMARY

This summary highlights certain information described in greater detail elsewhere or incorporated by reference in this prospectus. Before deciding to invest in our securities you should read the entire prospectus carefully, including the "Risk Factors" section contained in this prospectus, the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," each contained in our most recent Annual Report on Form 10-K for the year ended December 31, 2013, and our Quarterly Reports for the periods ended March 31, 2014, June 30, 2014 and September 30, 2014, which have been filed with the Securities and Exchange Commission and are incorporated herein by reference in its entirety, as well as all other information in this prospectus or in any other documents incorporated by reference.

About Our Company

We develop, manufacture and market patented hypothermic storage and cryopreservation solutions for cells and tissue. Our product offerings include:

- Patented biopreservation media products for cells, tissues, and organs
- Generic formulations of blood stem cell freezing media products
- Custom product formulation and custom packaging services
- Precision thermal packaging products
- Contract aseptic manufacturing formulation, fill, and finish services of liquid media products

We market our proprietary HypoThermosol® FRS and CryoStor®, generic BloodStor®, and SAVSU®'s biopreservation media products and develops and markets precision thermal packaging products to the biobanking, drug discovery, and regenerative medicine markets, including hospital-based stem cell transplant centers, pharmaceutical companies, cord blood and adult stem cell banks, hair transplant centers, and suppliers of cells to the drug discovery, toxicology testing and diagnostic markets. All of our products are serum-free and protein-free, fully defined, and are manufactured under current Good Manufacturing Practices (cGMP) using United States Pharmacopeia (USP)/Multicompendial or the highest available grade components.

Our patented biopreservation media products are formulated to reduce preservation-induced, delayed-onset cell damage and death. Our platform enabling technology provides our customers significant shelf life extension of biologic source material and final cell products, and also greatly improved post-preservation cell, tissue, and organ viability and function. We believe that our products have been incorporated into the manufacturing, storage, shipping, freezing, and clinical delivery processes of over 130 hospital approved or clinical trial stage regenerative medicine applications.

The discoveries made by our scientists and consultants relate to how cells, tissues, and organs respond to the stress of hypothermic storage, cryopreservation, and the thawing process. These discoveries enabled the formulation of truly innovative biopreservation media products that protect biologic material from preservation-related cellular injury, much of which is not apparent immediately after return to normothermic body temperature. Our product formulations have demonstrated remarkable reduction in apoptotic (programmed) and necrotic (pathologic) cell death mechanisms and are enabling the clinical and commercial development of dozens of innovative regenerative medicine products.

We were incorporated in Delaware in 1987 under the name Trans Time Medical Products, Inc. In 2002, the Company, then known as Cryomedical Sciences, Inc., and engaged in manufacturing and marketing cryosurgical products, completed a merger with our wholly-owned subsidiary, BioLife Solutions, Inc., which was engaged as a life sciences

tools provider. Following the merger, we changed our name to BioLife Solutions, Inc. We have one majority-owned subsidiary, biologistex CCM, LLC, a Delaware limited liability company.

Our principal executive offices are located at 3303 Monte Villa Parkway, Suite 310, Bothell, Washington 98021 and the telephone number is (425) 402-1400. Information about us is available on our internet website www.biolifesolutions.com. The information contained on our website or that can be accessed through our website does not constitute part of this prospectus and is not incorporated in any manner into this prospectus.

Recent Developments

Public Offering of Units

On March 25, 2014, we closed a registered public offering of 3,588,878 units for gross proceeds of $15,432,175. Each unit consisted of one share of the Company's common stock and one Warrant, each Warrant exercisable for seven years to purchase one share of the Company's common stock at an exercise price of $4.75. Net of placement agent fees of $1,211,734 and offering costs of $624,211, we received net proceeds of $13,596,230. Of the gross proceeds, $9.1 million was allocated to common stock and $6.3 million was allocated to warrants, based on relative fair values.

Listing of Common Stock on NASDAQ Capital Market

On March 26, 2014, our common stock was listed on The NASDAQ Capital Market under the symbol "BLFS."

Conversion of Promissory Notes in Exchange for Units

On December 16, 2013, we entered into a note conversion agreement with each of Thomas Girschweiler, an affiliate and former director of ours, and Walter Villiger, an affiliate of ours, and on February 11, 2014, Mr. Girschweiler and Mr. Villiger assigned their respective rights and obligations under these note conversion agreements and certain related agreements to entities wholly-owned and controlled by the noteholders, namely WAVI Holding AG in the case of Mr. Villiger and Taurus4757 GmbH in the case of Mr. Girschweiler. Pursuant to those note conversion agreements, concurrently with the closing of our public offering of units, we converted approximately $14.3 million of indebtedness, including accrued interest, to the noteholders into equity, issuing to the noteholders an aggregate of 3,321,405 units having terms substantially similar to the public offering units. In connection with the note conversion, our $14.3 million indebtedness to the noteholders under the terms of our previously disclosed facility agreements was extinguished, all remaining unamortized deferred finance costs were recorded to additional paid in capital, and the noteholders agreed to release all security interests. Of the total conversion amount, $8.4 million was allocated to common stock and $5.8 million was allocated to warrants, based on relative fair values.

Launch of biologistex

On September 29, 2014, we entered into a limited liability company agreement with SAVSU Technologies, LLC, a Delaware limited liability company to create a 20-year joint venture for the purpose of acquiring, developing, maintaining, owning, operating, marketing and selling an integrated platform of a cloud-based information service and precision thermal shipping products based on SAVSU's next generation EVO smart container shipment platform, which we refer to as the Smart Containers.

The joint venture vehicle, biologistex CCM, LLC, is structured as a Delaware limited liability company ("biologistex"). We will make an initial capital contribution of $2.4 million, and SAVSU will contribute exclusive distribution rights to the Smart Containers under a separate supply and distribution agreement. We will also pay SAVSU $1 million in consideration of SAVSU's participation in biologistex. These payments to SAVSU will be made on a monthly basis for twelve months and recorded as consulting expense in general and administrative expenses on our consolidated statement of operations, the first of which was made during the third quarter of 2014.

We and SAVSU are the only initial members of biologistex, holding 52% and 48%, respectively, of the outstanding units of membership interests. Distributions of net cash flow, if any, are to be made in proportion to the members' ownership of units. Approval of both members is generally required for any matter subject to a member vote. Units may not be transferred without, among other things, the consent of all members and the admission of the transferee as

a member. biologistex and the biologistex members have rights of first refusal with respect to certain proposed transfers of units.

biologistex is managed by a board of managers. Each of us and SAVSU are entitled to appoint two members to the biologistex board of managers. The approval of at least three of the four managers is generally required for any matter subject to a board of manager's vote.

On September 29, 2014, biologistex and SAVSU also entered into a supply and distribution agreement whereby biologistex became the exclusive, worldwide distributor of Smart Containers. Pursuant to the supply and distribution agreement, biologistex agrees to purchase a minimum number of Smart Containers over a 24 month period for an aggregate purchase price of approximately $2.6 million. Under the terms of the agreement, SAVSU must fulfill all obligations required of it to permit biologistex to make the products available for marketing, sales and acceptance of customer orders. The supply and distribution agreement has an initial term of 20 years unless terminated early by its terms.

On September 29, 2014, we and biologistex also entered into a services agreement whereby we will provide services to biologistex related to operations, sales, marketing, administration and development of a cloud-based software system for tracking and managing the products. The services agreement has an initial term of 20 years unless terminated early by its terms.

Pursuant to the services agreement, we agreed to manage biologistex to achieve certain minimum sales targets within 12 and 24 months of the date of the agreement. biologistex will pay us monthly for expenses incurred and certain overhead expenses. Until biologistex has achieved sufficient revenue to pay such expenses, it may be necessary for us to fund such reimbursements via inter-company loans to biologistex.

Reverse Stock Split

On January 29, 2014, we effected a 1-for-14 reverse stock split of our common stock. No fractional shares of our common stock will be issued as a result of the reverse stock split. In the event the reverse stock split leaves a stockholder with a fraction of a share, the number of shares due to the stockholder will be rounded up to the nearest whole share. Unless otherwise indicated, all share and per share numbers set forth in this prospectus have been adjusted to give effect to the reverse stock split and are subject to the foregoing adjustments for fractional shares.

The Offering

The following summary contains basic information about the offering and the securities we are offering and is not intended to be complete. It does not contain all the information that is important to you. For a more complete understanding of the securities we are offering, please refer to the sections of this prospectus titled “Description of Securities.”

Securities offered by us	3,588,878 shares of our common stock issuable upon exercise of outstanding Warrants.
Exercise Price of Warrants	$4.75 per share.
Exercise Period	Until 11:59 p.m. (New York time) on March 25, 2021
Common stock outstanding before this offering	12,084,859 shares
Common stock to be outstanding after this offering	15,673,737 shares(1)
Use of proceeds	We intend to use the net proceeds from any exercises of the Warrants for general corporate purposes, including working capital. See “Use of Proceeds” below.
Market for our common stock	Our common stock is quoted and traded on The NASDAQ Capital Market under the symbol “BLFS.”
Risk Factors	You should read the “Risk Factors” section of this prospectus for a discussion of factors to consider before deciding to purchase our securities.
Limitation on benefical ownership	A holder of Warrants will not have the right to exercise any portion of its Warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to such exercise.

(1) The number of shares of common stock to be outstanding after this offering as reflected in the table above is based on the actual total number of shares outstanding as of December 24, 2014, which was 12,084,859, and does not include, as of that date:

1,391,663 shares of common stock issuable upon the exercise of outstanding stock options under our 2013 Performance Incentive Plan, 1998 Stock Option Plan and non-plan stock option agreements, having a weighted average exercise price of $1.50; and

3,839,263 shares of common stock issuable upon the exercise of outstanding warrants, having a weighted average exercise price of $4.25 per share, other than the shares of common stock that may be issued upon exercise of the Warrants.

RISK FACTORS

Investment in our securities involves a high degree of risk. You should carefully consider the risks described below, as well as those risks described in the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," each contained in our most recent Annual Report on Form 10-K for the year ended December 31, 2013 and our Quarterly Reports for the periods ended March 31, 2014, June 30, 2014 and September 30, 2014, which have been filed with the Securities and Exchange Commission and are incorporated herein by reference in its entirety, as well as all other information in this prospectus or in any other documents incorporated by reference. Each of the risks described in these sections and documents could adversely affect our business, financial condition, results of operations and prospects, and could result in a complete loss of your investment. This prospectus and the incorporated documents also contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks mentioned above.

Risks Related to Our Business

The majority of our net sales come from a relatively small number of customers and a limited number of market sectors; if we lose any of these customers or if there are problems in those market sectors, our net sales and operating results could decline significantly.

We derived approximately 49% and 46% of our revenue in the fiscal year ended December 31, 2013 and 2012, respectively, from our relationship with one contract manufacturing customer. The contract with this customer was terminated in May 2014. In the three and nine months ended September 30, 2014, we received 34% and 22%, respectively, of our revenue from two other customers. Our principal customers may vary from period to period, and our principal customers may not continue to purchase products from us at current levels, or at all. Significant reductions in net sales to any of these customers, the loss of our major contract manufacturing customer, or our failure to make appropriate choices as to the customers we serve could seriously harm our business. In addition, we focus our net sales to customers in only a few market sectors. Each of these sectors is subject to macroeconomic conditions as well as trends and conditions that are sector specific. Shifts in the performance of a sector served by us, as well as the economic, business and/or regulatory conditions that affect the sector, or our failure to choose appropriate sectors can particularly impact us. Any weakness in the market sectors in which our customers are concentrated could affect our business and results of operations.

We have a history of losses and may never achieve or maintain profitability.

We have incurred annual operating losses since inception, and may continue to incur operating losses. For the fiscal years ended December 31, 2013 and December 31, 2012, we had net losses of $1,084,160 and $1,659,586, respectively. For the nine months ended September 30, 2014, we had a net loss of $2,305,182. As of September 30, 2014, our accumulated deficit was approximately $59.2 million. Of this amount, approximately $21 million has accumulated since our merger in 2002. We may not be able to successfully achieve or sustain profitability. Successful transition to profitable operations is dependent upon achieving a level of revenues adequate to support our cost structure.

We may need additional capital to reach and maintain a sustainable level of positive cash flow and if we raise such additional capital through the issuance of equity or convertible debt securities, your ownership will be diluted, and equity securities issued may have rights, preferences and privileges superior to the shares.

If we are unable to achieve profitability sufficient to permit us to fund our operations and other planned actions, we may be required to raise additional capital. There can be no assurance that such capital would be available on favorable terms, or at all. If we raise additional capital through the issuance of equity or convertible debt securities, the percentage ownership held by existing stockholders may be reduced, and the market price of our common stock could fall as a result of resales of any shares due to an increased number of shares available for sale in the market. Further, our board has the authority to establish the designation of additional shares of preferred stock that may be convertible into common stock without any action by our stockholders, and to fix the rights, preferences, privileges and restrictions, including voting rights, of such shares. Any such additional shares of preferred stock may have rights, preferences and privileges senior to those of outstanding common stock, and the issuance and conversion of any such preferred stock would further dilute the percentage ownership of our stockholders. Debt financing, if available, may involve restrictive covenants, which may limit our operating flexibility with respect to certain business matters. If we are unable to secure additional capital as circumstances require, we may not be able to fund our planned activities or continue our operations.

There is uncertainty surrounding our ability to successfully commercialize our HypoThermosol® FRS, CryoStor® and BloodStor® biopreservation media products, biopreservation thermal packaging products and contract manufacturing services.

Our growth depends, in part, on our continued ability to successfully develop, commercialize and market our HypoThermosol® FRS, CryoStor®, and BloodStor® biopreservation media products, precision thermal packaging products and contract and manufacturing services. Even in markets that do not require us to obtain regulatory approvals, our products will not be used unless they present an attractive alternative to competitive products and the benefits and cost savings achieved through their use outweigh the cost of our products. If we are unable to develop and sustain a market for our products, this will have a material adverse effect on our results of operations and our ability to continue and grow our business.

The success of our HypoThermosol® FRS and CryoStor® biopreservation media products is dependent, in part, on the commercial success of new regenerative medicine technologies.

Our HypoThermosol® FRS and CryoStor® biopreservation media products are marketed to biotechnology companies and research institutions engaged in research and development of cell, gene and tissue engineering therapies. The end-products or therapies developed by these biotechnology companies and research institutions are subject to substantial regulatory oversight by the United States Food and Drug Administration (“FDA”) and other regulatory bodies, and many of these therapies are years away from commercialization. Thus demand, if any, for HypoThermosol® FRS and CryoStor® is expected to be limited for several years. Failure of the end-products that use our biopreservation media products to receive regulatory approvals and be successfully commercialized will have an adverse effect in the demand for our products.

We face significant competition.

The life sciences industry is highly competitive. We anticipate that we will continue to face increased competition as existing companies develop new or improved products and as new companies enter the market with new technologies. Many of our competitors are significantly larger than us and have greater financial, technical, research, marketing, sales, distribution and other resources than us. There can be no assurance that our competitors will not succeed in developing or marketing technologies and products that are more effective or commercially attractive than any that are being developed or marketed by us, or that such competitors will not succeed in obtaining regulatory approval, or introducing or commercializing any such products, prior to us. Such developments could have a material adverse effect on our business, financial condition and results of operations. Also, even if we are able to compete successfully, there can be no assurance that we could do so in a profitable manner.

We are dependent on outside suppliers for all of our manufacturing supplies.

We rely on outside suppliers for all of our manufacturing supplies, parts and components. Although we believe we could develop alternative sources of supply for most of these components within a reasonable period of time, there can be no assurance that, in the future, our current or alternative sources will be able to meet all of our demands on a timely basis. Unavailability of necessary components could require us to re-engineer our products to accommodate available substitutions which could increase costs to us and/or have a material adverse effect on manufacturing schedules, products performance and market acceptance. In addition, an uncorrected defect or supplier’s variation in a component or raw material, either unknown to us or incompatible with our manufacturing process, could harm our ability to manufacture products. We might not be able to find a sufficient alternative supplier in a reasonable time period, or on commercially reasonable terms, if at all. If we fail to obtain a supplier for the components of our products, our operations could be disrupted.

Our joint venture investment in biologistex may be adversely affected by our lack of sole decision-making authority and disputes between us and our joint venture partner.

We are a party to the biologistex LLC Agreement with SAVSU. Under the LLC Agreement, each of the Company and SAVSU are entitled to appoint two members to the biologistex board of managers. The approval of at least three of the four managers is generally required for any matter subject to a board of manager's vote. Accordingly, we are not in a position to exercise sole decision-making authority regarding the joint venture. Our joint venture partner SAVSU may have different economic or other business interests or goals which are inconsistent with our business interests and goals, and may take actions contrary to our policies or objectives, which may result in poor or delayed business decisions. Further, our biologistex investment has the potential risk of an impasse on decisions, such as a sale, because neither we nor SAVSU has full control over the joint venture. The LLC Agreement includes a mechanism whereby, in the event of certain impasses between the members, or within the board of managers, the joint venture may be dissolved or the members may agree that one member will sell its units of biologistex to the other member. Accordingly, in the event of an impasse, we may need to buy SAVSU's interest in biologistex or sell our own interest to SAVSU.

We may be adversely impacted by the failure of the biologistex joint venture or by our failure, or the failure of our joint venture partner, to fulfill our obligations to the joint venture.

We participate in the biologistex joint venture with SAVSU. The biologistex joint venture faces all of the inherent risks associated with the development, marketing and operation of a new product line. In addition, we face the risk that either we or SAVSU will not meet our obligations under the LLC Agreement, the Supply and Distribution Agreement or the Services Agreement. We depend on SAVSU, among other things, for its intellectual property with respect to the Smart Containers and for its manufacturing of the Smart Containers. If SAVSU fails to fulfill its obligations due to strategic business interests, financial condition or otherwise, we may be required to spend additional resources, or biologistex may not be able to continue its operations, in which case we may suffer losses. Such expenses or losses may be significant and may have an adverse effect on our financial position or results of operations. In addition, we have committed to certain financial and operational milestones with respect to biologistex. For example, under the Services Agreement, we have agreed to manage biologistex to achieve certain minimum sales targets within 12 and 24 months of the date of the agreement. If we are not able fulfill these obligations due to market conditions, our financial position or otherwise, we may be required to spend additional resources, or we may suffer losses.

Our success will depend on our ability to attract and retain key personnel.

In order to execute our business plan, we must attract, retain and motivate highly qualified managerial, scientific, manufacturing, and sales personnel. If we fail to attract and retain skilled scientific and sales personnel, our sales efforts will be hindered. Our future success depends to a significant degree upon the continued services of key scientific and technical personnel. If we do not attract and retain qualified personnel we will not be able to achieve our growth objectives.

If we were to be successfully sued related to our products or operations, we could face substantial liabilities that may exceed our resources.

We may be held liable if any of our products or operations cause injury or death. These risks are inherent in the development of life sciences industry products. We currently maintain commercial general and umbrella liability policies with combined limits of $7 million per occurrence and in the aggregate, in addition to a $5 million per claim and annual aggregate product liability insurance policy consistent with industry standards. When necessary for our products, we intend to obtain additional product liability insurance. Insurance coverage may be prohibitively expensive, may not fully cover potential liabilities or may not be available in the future. Inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the commercialization of our products. If we were to be sued for any injury caused by or associated with our products or operations, or if our existing litigation proceeds, the litigation could consume substantial time and attention of our management, and the resulting liability could have a material adverse effect on us.

Regulatory or other difficulties in manufacturing could have an adverse effect upon our expenses and our product revenues.

We currently manufacture the majority of our products ourselves. The manufacture of our products is difficult, complex and highly regulated. To support our current and prospective clinical customers, we intend to comply with cGMP in the manufacture of our products. Our ability to adequately and in a timely manner manufacture and supply our products is dependent on the uninterrupted and efficient operation of our facilities and those of third-parties producing supplies upon which we rely in our manufacturing. The manufacture of our products may be impacted by:

availability or contamination of raw materials and components used in the manufacturing process, particularly those for which we have no other source or supplier;
the ongoing capacity of our facilities;
our ability to comply with regulatory requirements, including our ability to comply with cGMP;
inclement weather and natural disasters;
changes in forecasts of future demand for product components;
potential facility contamination by microorganisms or viruses;
updating of manufacturing specifications; and
product quality success rates and yields.

If the efficient manufacture and supply of our products is interrupted, we may experience delayed shipments or supply constraints. If we are at any time unable to provide an uninterrupted supply of our products to customers, our customers may be unable to supply their end-products incorporating our products to their patients and other customers, which could materially and adversely affect our product sales and results of operations.

We are registered with FDA as a contract manufacturer. Our contract manufacturing customers may require us to comply with cGMP requirements and may audit our compliance with cGMP standards. If a customer finds us to be out of compliance with cGMP standards, this could have a material adverse effect on our ability to retain and attract contract manufacturing customers.

If we become subject to additional regulatory requirements, the manufacture and sale of our products may be delayed or prevented, or we may become subject to increased expenses.

As an ancillary or excipient reagent used in the production, transportation, and infusion of our customers' regulated clinical products, HypoThermosol® FRS, CryoStor®, and BloodStor® are not currently subject to specific FDA or other non-US pre-market approval for drugs, devices, or biologics. In particular, we are not required to sponsor formal prospective, controlled clinical-trials in order to establish safety and efficacy. However, there can be no assurance that we will not be required to obtain approval from the FDA, or foreign regulatory authorities, as applicable, prior to marketing any of our products in the future. Any such requirements could delay or prevent the sale of our products, or may subject us to additional expenses.

We may be adversely affected if our controls over external financial reporting fail or are circumvented.

We regularly review and update our internal controls, disclosure controls and procedures, and corporate governance policies. We are required under the Sarbanes-Oxley Act of 2002 to report annually on our internal control over financial reporting, but as a smaller reporting company we are exempt from the requirement to have our independent accountants attest to our internal control over financial reporting. If it were to be determined that our internal control over financial reporting is not effective, such shortcoming could have an adverse effect on our business and financial results and the price of our common stock could be negatively affected. This reporting requirement could also make it more difficult or more costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. Any system of internal controls, however well designed and operated, is based in part on certain assumptions and can provide only reasonable, not absolute, assurances that the objectives of the system are met. Any failure or circumvention of the controls and procedures or failure to comply with regulation concerning control and procedures could have a material effect on our business, results of operation and financial condition. Any of these events could result in an adverse reaction in the financial marketplace due to a loss of investor confidence in the reliability of our financial statements, which ultimately could negatively affect the market price of our shares, increase the volatility of our stock price and adversely affect our ability to raise additional funding. The effect of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board and our board committees and as executive officers.

Risks Related to Our Intellectual Property

Our proprietary rights may not adequately protect our technologies and products.

Our commercial success will depend on our ability to obtain patents and/or regulatory exclusivity and maintain adequate protection for our technologies and products in the United States and other countries. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies and products are covered by valid and enforceable patents or are effectively maintained as trade secrets.

We intend to apply for additional patents covering both our technologies and products, as we deem appropriate. We may, however, fail to apply for patents on important technologies or products in a timely fashion, if at all. Our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products and technologies. In addition, the patent positions of life science industry companies are highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. As a result, the validity and enforceability of our patents cannot be predicted with certainty. In addition, we cannot guarantee that:

we were the first to make the inventions covered by each of our issued patents and pending patent applications;

we were the first to file patent applications for these inventions;

others will not independently develop similar or alternative technologies or duplicate any of our technologies;

any of our pending patent applications will result in issued patents;

any of our patents will be valid or enforceable;

any patents issued to us will provide us with any competitive advantages, or will not be challenged by third parties; and

we will develop additional proprietary technologies that are patentable, or the patents of others will not have an adverse effect on our business.

The actual protection afforded by a patent varies on a product-by-product basis, from country to country and depends on many factors, including the type of patent, the scope of its coverage, the availability of regulatory related extensions, the availability of legal remedies in a particular country and the validity and enforceability of the patents. Our ability to maintain and solidify our proprietary position for our products will depend on our success in obtaining effective claims and enforcing those claims once granted. Our issued patents and those that may be issued in the future, or those licensed to us, may be challenged, invalidated, unenforceable or circumvented, and the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages against competitors with similar products. We also rely on trade secrets to protect some of our technology, especially where it is believed that patent protection is appropriate or obtainable. However, trade secrets are difficult to maintain. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors or scientific and other advisors may unintentionally or willfully disclose our proprietary information to competitors. Enforcement of claims that a third party has illegally obtained and is using trade secrets is expensive, time consuming and uncertain. In addition, non-U.S. courts are sometimes less willing than U.S. courts to protect trade secrets. If our competitors independently develop equivalent knowledge, methods and know-how, we would not be able to assert our trade secrets against them and our business could be harmed.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on all of our products in every jurisdiction would be prohibitively expensive. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products. These products may compete with our products, and may not be covered by any patent claims or other intellectual property rights.

The laws of some non-U.S. countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patents. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

If we fail to protect our intellectual property rights, our competitors may take advantage of our ideas and compete directly against us.

Our success will depend to a significant degree on our ability to secure and protect intellectual property rights and enforce patent and trademark protections relating to our technology. While we believe that the protection of patents and trademarks is important to our business, we also rely on a combination of copyright, trade secret, nondisclosure and confidentiality agreements, know-how and continuing technological innovation to maintain our competitive position. From time to time, litigation may be advisable to protect our intellectual property position. However, these legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. Any litigation in this regard could be costly, and it is possible that we will not have sufficient resources to fully pursue litigation or to protect our intellectual property rights. This could result in the rejection or invalidation of our existing and future patents. Any adverse outcome in litigation relating to the validity of our patents, or any failure to pursue litigation or otherwise to protect our patent position, could materially harm our business and financial condition. In addition, confidentiality agreements with our employees, consultants, customers, and key vendors may not prevent the unauthorized disclosure or use of our technology. It is possible that these agreements will be breached or that they will not be enforceable in every instance, and that we will not have adequate remedies for any such breach. Enforcement of these agreements may be costly and time consuming. Furthermore, the laws of foreign countries may not protect our intellectual property rights to the same extent as the laws of the United States.

The patent protection for our products may expire before we are able to maximize their commercial value, which may subject us to increased competition and reduce or eliminate our opportunity to generate product revenue.

The patents for our products have varying expiration dates and, when these patents expire, we may be subject to increased competition and we may not be able to recover our development costs. In some of the larger economic territories, such as the United States and Europe, patent term extension/restoration may be available. We cannot, however, be certain that an extension will be granted or, if granted, what the applicable time period or the scope of patent protection afforded during any extended period will be.

If we are unable to obtain patent term extension/restoration or some other exclusivity, we could be subject to increased competition and our opportunity to establish or maintain product revenue could be substantially reduced or eliminated. Furthermore, we may not have sufficient time to recover our development costs prior to the expiration of our U.S. and non-U.S. patents.

We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights and we may be unable to protect our rights to, or use of, our technology.

If we choose to go to court to stop someone else from using the inventions claimed in our patents or our licensed patents, that individual or company has the right to ask the court to rule that these patents are invalid and/or should not be enforced against that third party. These lawsuits are expensive and would consume time and other resources even if we were successful in stopping the infringement of these patents. In addition, there is a risk that the court will decide that these patents are invalid or unenforceable and that we do not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity or unenforceability of these patents is upheld, the court will refuse to stop the other party on the grounds that such other party's activities do not infringe our rights.

If we wish to use the technology claimed in issued and unexpired patents owned by others, we will need to obtain a license from the owner, enter into litigation to challenge the validity or enforceability of the patents or incur the risk of litigation in the event that the owner asserts that we infringed its patents. The failure to obtain a license to technology or the failure to challenge an issued patent that we may require to discover, develop or commercialize our products may have a material adverse effect on us.

If a third party asserts that we infringed its patents or other proprietary rights, we could face a number of risks that could seriously harm our results of operations, financial condition and competitive position, including:

- patent infringement and other intellectual property claims, which would be costly and time consuming to defend, whether or not the claims have merit, and which could delay a product and divert management's attention from our business;
- substantial damages for past infringement, which we may have to pay if a court determines that our product or technologies infringe a competitor's patent or other proprietary rights;
- a court prohibiting us from selling or licensing our technologies unless the third party licenses its patents or other proprietary rights to us on commercially reasonable terms, which it is not required to do; and
- if a license is available from a third party, we may have to pay substantial royalties or lump-sum payments or grant cross licenses to our patents or other proprietary rights to obtain that license.

The biotechnology industry has produced a proliferation of patents, and it is not always clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. If we are sued for patent infringement, we would need to demonstrate that our products or methods of use either do not infringe the patent claims of the relevant patent, and/or that the patent claims are invalid, and/or that the patent is unenforceable and we may not be able to do this. Proving invalidity, in particular, is difficult since it requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents.

U.S. patent laws as well as the laws of some foreign jurisdictions provide for provisional rights in published patent applications beginning on the date of publication, including the right to obtain reasonable royalties, if a patent subsequently issues and certain other conditions are met.

Because some patent applications in the United States may be maintained in secrecy until the patents are issued, because patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing, and because publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patent applications for technology covered by our issued patents or our pending applications, or that we were the first to invent the technology.

Patent applications filed by third parties that cover technology similar to ours may have priority over our patent applications and could further require us to obtain rights to issued patents covering such technologies. If another party files a U.S. patent application on an invention similar to ours, we may elect to participate in or be drawn into an interference proceeding declared by the U.S. Patent and Trademark Office to determine priority of invention in the United States. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful, resulting in a loss of our U.S. patent position with respect to such inventions. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations.

We cannot predict whether third parties will assert these claims against us, or whether those claims will harm our business. If we are forced to defend against these claims, whether they are with or without any merit and whether they are resolved in favor of or against us, we may face costly litigation and diversion of management's attention and resources. As a result of these disputes, we may have to develop costly non-infringing technology, or enter into licensing agreements. These agreements, if necessary, may be unavailable on terms acceptable to us, if at all, which could seriously harm our business or financial condition.

Risks Related to our Securities and the Offering

The market for our common stock is limited and our stock price is volatile.

Our common stock, traded on the NASDAQ Capital Market, has historically traded at low average daily volumes, resulting in a limited market for the purchase and sale of our common stock.

The market prices of many publicly traded companies, including emerging companies in the life sciences industry, have been, and can be expected to be, highly volatile. The future market price of our common stock could be significantly impacted by numerous factors, including, but not limited to:

- Future sales of our common stock or other fundraising events;
- Sales of our common stock by existing shareholders;
- Changes in our capital structure, including stock splits or reverse stock splits;
- Announcements of technological innovations for new commercial products by our present or potential competitors;
- Developments concerning proprietary rights;
- Adverse results in our field or with clinical tests of our products in customer applications;
- Adverse litigation;
- Unfavorable legislation or regulatory decisions;
- Public concerns regarding our products;
- Variations in quarterly operating results;
- General trends in the health care industry; and
- Other factors outside of our control.

A significant percentage of our outstanding common stock is held by two stockholders, and these stockholders therefore have significant influence on us and our corporate actions.

As of December 24, 2014, two of our existing stockholders, Thomas Girschweiler and Walter Villiger, beneficially owned, collectively, approximately 50.5% of our outstanding shares. Messrs. Girschweiler and Villiger were previously secured lenders to our Company, and Mr. Girschweiler is a former member of our board. Accordingly, these stockholders have had, and will continue to have, significant influence in determining the outcome of any corporate transaction or other matter submitted to the stockholders for approval, including mergers, consolidations and the sale of all or substantially all of our assets, election of directors and other significant corporate actions. In addition, without the consent of these stockholders, we could be prevented from entering into transactions that could be beneficial to us.

We are at risk of securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because our stock price and those of other biotechnology and life sciences companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management’s attention and resources, which could harm our business. We do maintain insurance, but the coverage may not be sufficient and may not be available in all instances.

Anti-takeover provisions in our charter documents and under Delaware law could make a third-party acquisition of us difficult.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may discourage unsolicited takeover proposals that stockholders may consider to be in their best interests. These provisions include the ability of our board to designate the terms of and issue new series of preferred stock without stockholder approval and to amend our bylaws without stockholder approval. Further, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date

that the stockholder became an interested stockholder, unless certain specific requirements are met as set forth in Section 203. Collectively, these provisions could make a third-party acquisition of us difficult or could discourage transactions that otherwise could involve payment of a premium over prevailing market prices for our common stock.

We will have broad discretion as to the use of the net proceeds from this offering, and we may not use the proceeds effectively.

Our management will have broad discretion as to the application of the net proceeds. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use some of the net proceeds for corporate purposes that may not increase our market value or profitability.

Our use of the offering proceeds may not yield a favorable return on your investment.

We currently intend to use the net proceeds received from the sale of the securities for general corporate purposes, including working capital. Our management has broad discretion over how these proceeds are used and could spend the proceeds in ways with which you may not agree. Pending the use of the proceeds in this offering, we will invest them. However, the proceeds may not be invested in a manner that yields a favorable or any return.

You may experience immediate dilution in the book value per share of common stock as a result of this offering upon the exercise of the Warrants.

An investor that acquires additional shares of common stock upon exercise of the Warrants may experience additional dilution depending on our net tangible book value at the time of exercise. Our net tangible book value as of September 30, 2014 was approximately $12.7 million, or $1.05 per share of our common stock. Assuming that we issue all 3,588,878 shares of common stock upon exercise of the Warrants at a per share exercise price of $4.75 per share, and after deducting the estimated offering expenses payable by us, our net tangible book value as of September 30, 2014 would have been approximately $29.7 million, or approximately $1.89 per share of our common stock. This amount represents an immediate increase in net tangible book value of approximately $0.84 per share to our existing stockholders and an immediate dilution in net tangible book value of approximately $2.86 per share to new investors in this offering. See the section entitled “Dilution” below.

Future sales or the potential for future sales of our securities in the public markets may cause the trading price of our common stock to decline and could impair our ability to raise capital through subsequent equity offerings.

Sales of a substantial number of shares of our common stock or other securities in the public markets, or the perception that these sales may occur, could cause the market price of our common stock or other securities to decline and could materially impair our ability to raise capital through the sale of additional securities. The shares of common stock issuable upon exercise of the Warrants are freely tradable. We have agreed to use our best efforts to keep a registration statement registering the issuance and resale of the Warrant Shares effective during the term of the Warrants. In addition, we have a significant number of shares of our common stock reserved for issuance pursuant to other outstanding options, warrants and other rights. If such shares are issued upon exercise of options, warrants or other rights, or if we issue additional securities in a public offering or a private placement, such sales or any resales of such securities could further adversely affect the market price of our common stock. The sale of a large number of shares of our common stock or other securities also might make it more difficult for us to sell equity or equity-related securities in the future at a time and at the prices that we deem appropriate.

We do not anticipate declaring any cash dividends on our common stock.

We have never declared or paid cash dividends on our common stock and do not plan to pay any cash dividends in the near future. Our current policy is to retain all funds and earnings for use in the operation and expansion of our business.

USE OF PROCEEDS

We expect to receive net proceeds from the sale of the common stock upon exercise of the Warrants to be approximately $17.0 million, which assumes all of the Warrants are exercised in full, for cash, at the exercise price of $4.75 per share. We cannot predict when or if the Warrants will be exercised, however, and it is possible that the Warrants may expire and never be exercised. In certain circumstances, Warrants may be exercised pursuant to the cashless exercise features of the Warrants. The principal reasons for this offering are to permit the exercise of the Warrants issued in our public offering which closed on March 25, 2014, the purposes of which were to raise capital for general corporate purposes, including working capital and to facilitate the listing of our common shares on The NASDAQ Capital Market.

We do not have a specific plan for the use of proceeds of this offering; rather, we intend to use the net proceeds from this public offering for general corporate purposes, including working capital. We will have broad discretion over the manner in which the net proceeds of this offering will be applied, and we may not use the proceeds in a manner desired by our stockholders. Although we have no present intention of doing so, future events may require us to

reallocate the offering proceeds.

Pending use of the net proceeds from this offering, we may invest the net proceeds in short-term, interest-bearing, investment-grade securities. We cannot predict whether the proceeds invested will yield a favorable return.

DILUTION

An investor that acquires additional shares of common stock upon the exercise of the Warrants may experience additional dilution depending on our net tangible book value at the time of exercise. Our net tangible book value as of September 30, 2014 was approximately $12.7 million, or approximately $1.05 per share of our common stock. Net tangible book value per share as of September 30, 2014 is equal to our total tangible assets minus total liabilities, all divided by the number of shares of common stock outstanding as of September 30, 2014.

Assuming that we issue all 3,588,878 shares of common stock upon exercise of the Warrants at a per share cash exercise price of $4.75 per share, and after deducting the estimated offering expenses payable by us, our net tangible book value as of September 30, 2014 would have been approximately $29.7 million, or approximately $1.89 per share of our common stock. This amount represents an immediate increase in net tangible book value of approximately $0.84 per share to our existing stockholders and an immediate dilution in net tangible book value of approximately $2.86 per share to new investors acquiring common stock upon the exercise of the Warrants.

We determine dilution by subtracting the adjusted net tangible book value per share after this offering from the exercise price per share of our common stock. The following table illustrates the dilution in net tangible book value per share to new investors.

Exercise price per share	$	4.75
Net tangible book value per share of common stock as of September 30, 2014	$	1.05
Increase in net tangible book value per share attributable to new investors	$	0.84
Adjusted net tangible book value per share as of September 30, 2014 after giving effect to this offering	$	1.89
Dilution in net tangible book value per share to new investors	$	2.86
Dilution as a percentage of exercise price		60%

The amounts above are based on 12,053,609 shares of common stock outstanding as of September 30, 2014, and include 3,588,878 shares of common stock issued in our March 2014 public offering as well as 3,321,405 shares of common stock issued from the conversion of certain promissory notes with WAVI Holding AG and Taurus4757 GmbH. The amounts also assume no exercise of outstanding options or Warrants or other warrants or rights to acquire common stock since that date.

To the extent that any of our outstanding options, warrants or other rights to acquire common stock (other than the Warrants) are exercised, we grant additional options or awards under our stock incentive plans or issue additional warrants or preferred stock, or we issue additional shares of common stock in the future, there may be further dilution to new investors.

PLAN OF DISTRIBUTION

This prospectus relates to 3,588,878 shares of our common stock issuable upon the exercise of our outstanding Warrants. The Warrants were offered and sold by us in a public offering pursuant to a prospectus dated March 20, 2014, as supplemented, which prospectus also covered the offer and sale by us of the shares of our common stock underlying the Warrants. The ongoing offer and sale by us of the shares of our common stock issuable upon exercise of the Warrants is being made pursuant to this prospectus. The Warrants are exercisable until 11:59 p.m. (New York time) on March 25, 2021 at an exercise price of $4.75 per share of our common stock, or in certain circumstances on a cashless exercise basis, subject to adjustment upon events specified in the Warrants.

The exercise price per share of the Warrants was negotiated between us and the placement agent in our March 2014 public offering after considering a number of factors including, but not limited to the then-current market price of our common stock, trading prices of our common stock over a period of time, the illiquidity and volatility of our common stock prevailing market conditions, our historical performance, our future prospects and the future prospects of our industry in general, our capital structure, estimates of our business potential and earnings prospects, the present state of our development and an assessment of our management and the consideration of the above factors in relation to market valuation of companies engaged in businesses and activities similar to ours.

All of the Warrants are outstanding, and no additional Warrants will be issued. We will deliver shares of our common stock upon exercise of a Warrant, in whole or in part. We will not issue fractional shares. Each Warrant contains

instructions for exercise. In order to exercise a Warrant, the holder must deliver to us, or our transfer agent, the information required by the Warrants, along with payment of the exercise price for the shares to be purchased. We will then deliver shares of our common stock in the manner described below in the section titled “Description of Securities – Warrants”.

DESCRIPTION OF SECURITIES

General

As of the date of this prospectus, our authorized capital stock consisted of 150,000,000 shares of common stock, $0.001 par value per share, and 1,000,000 shares of preferred stock, $0.001 par value per share. Our board of directors may establish the rights and preferences of the preferred stock from time to time. As of December 24, 2014, there were 12,084,859 shares of our common stock outstanding, and there were no shares of preferred stock issued and outstanding.

Common Stock

Holders of our common stock are entitled to one vote per share. Our certificate of incorporation does not provide for cumulative voting. Holders of our common stock are entitled to receive dividends declared by our board of directors out of funds legally available for the payment of dividends, subject to the rights, if any, of preferred stockholders. In the event of our liquidation, dissolution, or winding up, holders of common stock are entitled to share ratably in all of our assets remaining after we pay our liabilities and distribute the liquidation preference of any then outstanding preferred stock. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of holders of any series of preferred stock that we may designate and issue in the future. Holders of common stock have no preemptive or other subscription or conversion rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of our common stock are fully paid and nonassessable, and any shares of our common stock to be issued upon an offering pursuant to this prospectus and the related prospectus supplement will be fully paid and nonassessable upon issuance.

Warrants

The material terms and provisions of the Warrants being offered pursuant to this prospectus are summarized below. This summary of some provisions of the Warrants is not complete. For the complete terms of the Warrants, you should refer to the form Warrant filed as an exhibit to the registration statement of which this prospectus is a part.

The Warrants were issued on March 25, 2014, pursuant to a prospectus dated March 20, 2014. The Warrants are governed by the terms of a physical Warrant certificate. Each whole Warrant entitles the purchaser to purchase one share of our common stock at a price equal to $4.75 per share at any time for up to seven years after the date of issuance. The holder of a Warrant will not be deemed a holder of our underlying common stock until the Warrant is exercised.

Subject to certain limitations as described below the Warrants are immediately exercisable and expire on the seventh anniversary of the date of issuance. Subject to limited exceptions, a holder of Warrants will not have the right to exercise any portion of its Warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to such exercise.

The exercise price and the number of shares issuable upon exercise of the Warrants is subject to appropriate adjustment in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our common stock, and also upon any distributions of assets, including cash, stock or other property to our stockholders. The Warrant holders must pay the exercise price in cash upon exercise of the Warrants, unless such Warrant holders are utilizing the cashless exercise provision of the Warrants. After the close of business on the expiration date, unexercised Warrants will become void.

In addition, in the event we consummate a merger or consolidation with or into another person or other reorganization event in which our common shares are converted or exchange for securities, cash or other property, or we sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets or we or another person acquire 50% or more of our outstanding common shares, then following such event, the holders of the Warrants will be entitled to receive upon exercise of the Warrants the same kind and amount of securities, cash or property which the holders would have received had they exercised the Warrants immediately prior to such fundamental transaction. Any successor to us or surviving entity shall assume the obligations under the Warrants. In addition, as further described in the form of Warrant filed as an exhibit to the registration statement of which this prospectus forms a part, in the event of any fundamental transaction completed for cash, or a going private transaction under Rule 13e-3 of the Exchange Act, or involving a person not trading on a national securities exchange, the holders of the Warrants will have the right to require us to purchase the Warrants for an amount in cash that is determined in accordance with a formula set forth in the Warrants.

Upon the holder’s exercise of a Warrant, we will issue the shares of common stock issuable upon exercise of the Warrant within three business days following our receipt of notice of exercise.

Prior to the exercise of any Warrants to purchase common stock, holders of the Warrants will not have any of the rights of holders of the common stock purchasable upon exercise, including the right to vote or to receive any payments of dividends on the common stock purchasable upon exercise.

Warrant holders may exercise Warrants only if the issuance of the common shares upon exercise of the Warrants is covered by an effective registration statement, or an exemption from registration is available under the Securities Act and the securities laws of the state in which the holder resides. We intend to use commercially reasonable efforts to have the registration statement, of which this prospectus forms a part, effective when the Warrants are exercised. The Warrant holders must pay the exercise price in cash upon exercise of the Warrants unless there is not an effective registration statement or, if required, there is not an effective state law registration or exemption covering the issuance of the shares underlying the Warrants (in which case, the Warrants may only be exercised via a "cashless" exercise provision).

Anti-Takeover Provisions

Our certificate of incorporation and bylaws include a number of provisions that could deter hostile takeovers or delay or prevent changes in control of our company, including the following:

- the chairman of the board and the president may call a special meeting of the stockholders at any time, and upon written request of the holders of 35% of the outstanding shares entitled to vote at the meeting, the secretary and president are required to call special meetings of stockholders, and the business transacted at such special meetings of stockholders is limited to the business stated in the notice of such meetings;
- advance notice procedures for stockholders seeking to nominate candidates for election as directors at our annual meeting of stockholders, including certain requirements regarding the form and content of a stockholder's notice;
- our board of directors may designate the terms of and issue new series of preferred stock;
- unless otherwise required by our bylaws, our certificate of incorporation or by law, our board may amend our bylaws without stockholder approval; and
- our board may fill vacancies on our board of directors.

In addition, we are subject to Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any "business combination" with an "interested stockholder," for a period of three years after the date of the transaction in which a person became an "interested stockholder," unless:

- prior to such date the board of directors of the corporation approved either the "business combination" or the transaction that resulted in the stockholder becoming an "interested stockholder";
- upon consummation of the transaction which resulted in the stockholder becoming an "interested stockholder," the "interested stockholder" owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of voting shares outstanding (but not the voting shares owned by the "interested stockholder") those shares owned (1) by persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

at or subsequent to such time the "business combination" is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of a least 66 2/3% of the outstanding voting stock that is not owned by the "interested stockholder."

A "business combination" includes mergers, stock or asset sales and other transactions resulting in a financial benefit to the "interested stockholders." An "interested stockholder" is a person who, together with affiliates and associates, owns (or within three years, did own) 15% or more of the corporation's voting stock. Although Section 203 permits us to elect not to be governed by its provisions, we have not made this election. As a result of the application of Section 203, our potential acquirers may be discouraged from attempting to effect an acquisition transaction with us, thereby possibly depriving holders of our securities of certain opportunities to sell or otherwise dispose of such securities at above-market prices pursuant to such transactions.

INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Section 145 of the Delaware General Corporation Law, or Delaware law, inter alia, empowers a Delaware corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. Similar indemnity is authorized for such persons against expenses (including attorneys' fees) actually and reasonably incurred in connection with the defense or settlement of any such threatened, pending or completed action or suit if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and provided further that (unless a court of competent jurisdiction otherwise provides) such person shall not have been adjudged liable to the corporation. Any such indemnification may be made only as authorized in each specific case upon a determination by the stockholders or disinterested directors or by independent legal counsel in a written opinion that indemnification is proper because the indemnitee has met the applicable standard of conduct.

Section 145 further authorizes a corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or enterprise, against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the corporation would otherwise have the power to indemnify him under Section 145. We maintain policies insuring our officers and directors against certain liabilities for actions taken in such capacities, including liabilities under the Securities Act.

Our certificate of incorporation and bylaws require us to indemnify our directors to the fullest extent permitted under Delaware law or any other applicable law in effect, but if such statute or law is amended, we may change the standard of indemnification only to the extent that such amended statute or law permits us to provide broader indemnification rights to our directors. We must indemnify such officers and employees in the same manner and to the same extent that we are required to indemnify our directors under our certificate of incorporation and bylaws. Our certificate of incorporation limits the personal liability of a director to us or our stockholders to damages for breach of the director's fiduciary duty. Pursuant to indemnification agreements we entered into with each of our directors, we are further required to indemnify our directors to the fullest extent permitted under Delaware law and our bylaws; provided that each such director shall enjoy the greater of (i) the advancement and indemnification rights permitted under our certificate of incorporation and bylaws for directors and officers as of the date of such indemnification agreement or (ii) the benefits so afforded by amendments thereto.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference information we file with it, which means that we can disclose important information to you by referring you to other documents. The information incorporated by reference is considered to be a part of this prospectus. Information contained in this prospectus supersedes information incorporated by reference that we have filed with the SEC prior to the date of this prospectus.

We incorporate by reference the following documents under SEC file number 001-36362 listed below (excluding any document or portion thereof to the extent such disclosure is furnished and not filed):

- Our Annual Report on Form 10-K for the year ended December 31, 2013 filed with the SEC on February 12, 2014, as amended by Amendment No. 1 thereto filed with the SEC on April 30, 2014;

- Our Quarterly Reports on Form 10-Q for the three months ended March 31, 2014, June 30, 2014 and September 30, 2014;

- Our Current Reports on Form 8-K as filed with the SEC on January 30, 2014, February 12, 2014, March 5, 2014, March 20, 2014 (other than information furnished pursuant to Item 7.01 thereof and related Exhibit 99.1), March 25, 2014, April 16, 2014, April 23, 2014, August 8, 2014, August 20, 2014, September 30, 2014, October 14, 2014 and December 24, 2014; and

- The description of our common stock contained in our Registration Statement on Form 8-A, filed with the SEC on March 19, 2014 pursuant to Section 12(b) of the Securities Exchange Act, including any amendment or report filed for the purpose of updating such description.

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In addition, we incorporate by reference all reports and other documents that we file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, (a) after the initial filing date of the registration statement of which this prospectus is a part and prior to the effectiveness of the registration statement and (b) after the effectiveness of the registration statement and prior to the termination of this offering, and all such reports and documents will be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such reports and documents (except for information and exhibits furnished under Items 2.02 or 7.01 of our current reports on Form 8-K). Any document or statement incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such document or statement. Any document or statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

These documents contain important information about us, our business and our financial condition. We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request of such person, a copy of any or all of the foregoing documents incorporated herein by reference. Requests for documents should be submitted to the Chief Financial Officer, at BioLife Solutions, Inc., 3303 Monte Villa Parkway, Suite 310, Bothell, Washington 98021, or by telephone at (425) 402-1400. The foregoing documents also may be accessed on our website at www.biolifesolutions.com.

We file annual, quarterly, and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's web site at www.sec.gov and on the investor relations page of our website at www.biolifesolutions.com. Information on our web site is not part of this prospectus. You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street N.E., Washington, D.C. 20549. You can also obtain copies of the documents upon the payment of a duplicating fee to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

BioLife Solutions, Inc.

3,588,878 Shares of Common Stock
Issuable Upon Exercise of Warrants

PROSPECTUS

, 2014

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the costs and expenses payable by us relating to the sale of our securities being registered hereby. All amounts are estimates except the SEC registration fee.

SEC registration fees (previously paid)*	$ 2,207
Legal fees and expenses	20,000
Accounting fees and expenses	1,500
Miscellaneous	1,293
Total	25,000

* Previously paid. See Explanatory Note.

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the Delaware General Corporation Law, or Delaware law, inter alia, empowers a Delaware corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. Similar indemnity is authorized for such persons against expenses (including attorneys' fees) actually and reasonably incurred in connection with the defense or settlement of any such threatened, pending or completed action or suit if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and provided further that (unless a court of competent jurisdiction otherwise provides) such person shall not have been adjudged liable to the corporation. Any such indemnification may be made only as authorized in each specific case upon a determination by the stockholders or disinterested directors or by independent legal counsel in a written opinion that indemnification is proper because the indemnitee has met the applicable standard of conduct.

Section 145 further authorizes a corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or enterprise, against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the corporation would otherwise have the power to indemnify him under Section 145. We maintain policies insuring our officers and directors against certain liabilities for actions taken in such capacities, including liabilities under the Securities Act.

Our certificate of incorporation and bylaws require us to indemnify our directors to the fullest extent permitted under Delaware law or any other applicable law in effect, but if such statute or law is amended, we may change the standard of indemnification only to the extent that such amended statute or law permits us to provide broader indemnification rights to our directors. We must indemnify such officers and employees in the same manner and to the same extent

that we are required to indemnify our directors under our certificate of incorporation and bylaws. Our certificate of incorporation limits the personal liability of a director to us or our stockholders to damages for breach of the director's fiduciary duty. Pursuant to indemnification agreements we entered into with each of our directors, we are further required to indemnify our directors to the fullest extent permitted under Delaware law and our bylaws; provided that each such director shall enjoy the greater of (i) the advancement and indemnification rights permitted under our certificate of incorporation and bylaws for directors and officers as of the date of such indemnification agreement or (ii) the benefits so afforded by amendments thereto.

ITEM 16. EXHIBITS

The following exhibits are included as part of this Form S-3.

Exhibit Number	Document
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 5.1 to the Annual Report on Form 10-K filed on February 12, 2014)
4.2	Form of Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed on March 20, 2014)
5.1	Legal Opinion of Dorsey & Whitney LLP (incorporated by reference to Exhibit 5.1 to the Registration Statement on Form S-1 filed on March 19, 2014)
5.2	Legal Opinion of Dorsey & Whitney LLP (incorporated by reference to Exhibit 5.1 to the Registration Statement on Form S-1 filed on March 20, 2014)
21.1	Subsidiaries of the Company
23.1	Consent of Peterson Sullivan LLP
23.2	Consent of Dorsey & Whitney LLP (contained in Exhibit 5.1 hereto)
23.3	Consent of Dorsey & Whitney LLP (contained in Exhibit 5.2 hereto)
24.1	Power of Attorney (contained in signature page to this registration statement)

ITEM 17. UNDERTAKINGS

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment hereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the

offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered that remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) If the Registrant is relying on Rule 430B:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(ii) If the Registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the Registrant under the Securities Act to any purchaser in the initial distribution of the securities:

The undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act each filing of the Registrant's Annual Report under Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference into this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

In accordance with the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements of filing this Post-Effective Amendment No. 1 to Form S-1 on Form S-3, File No. 333-192880, and authorizes this Post-Effective Amendment No. 1 to Form S-1 on Form S-3 to be signed on its behalf by the undersigned, in the City of Bothell, State of Washington, on December 24, 2014.

BIOLIFE SOLUTIONS, INC.

By: /s/ Michael Rice
Michael Rice
Chief Executive Officer and Director

POWERS OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Michael Rice and Daphne Taylor, or either of them as the undersigned's true and lawful attorney-in-fact and agents, with full power of substitution and resubstitution for such person and in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments), exhibits thereto, and other documents in connection therewith to this registration statement and any related registration statements necessary to register additional securities and to file the same with exhibits thereto and other documents in connection therewith with the SEC, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that each of said attorney-in-fact and agent, or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Michael Rice	Chief Executive Officer (Principal Executive Officer) and Director	December 24, 2014
/s/ Daphne Taylor	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	December 24, 2014
/s/ Raymond Cohen	Chairman of the Board	December 24, 2014
/s/ Andrew Hinson	Director	December 24, 2014
/s/ Joseph Schick	Director	December 24, 2014
/s/ Rick Stewart	Director	December 24, 2014

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