

BIOLIFE SOLUTIONS INC  
Form S-3  
January 08, 2016

As filed with the Securities and Exchange Commission on January 8, 2016

Registration No. 333-

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

FORM S-3  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

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

|   |   |  |
|---|---|--|
| Delaware<br>(State or other<br>jurisdiction of<br>incorporation or<br>organization) | 3845<br>(Primary Standard Industrial<br>Classification Code Number) | 94-3076866<br>(I.R.S. Employer<br>Identification Number) |
|---|---|--|

3303 Monte Villa Parkway, Suite 310, Bothell, Washington, 98021  
(425) 402-1400  
(Address, including zip code and telephone number, 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)

Copies to:

Christopher L. Doerksen  
Kimberley R. Anderson  
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.

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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.

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.

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.

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.

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.

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. (Check one):

|                         |                          |                   |                          |   |                          |                           |                          |
|-------------------------|--------------------------|-------------------|--------------------------|---|--------------------------|---------------------------|--------------------------|
| Large accelerated filer | <input type="checkbox"/> | Accelerated filer | <input type="checkbox"/> | Non-accelerated filer                         | <input type="checkbox"/> | Smaller Reporting Company | <input type="checkbox"/> |
|                         |                          |                   |                          | (Do not check if a smaller reporting company) |                          |                           |                          |

## CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered(1) | Amount to be registered(1)(2) | Proposed maximum price per unit(2) | Proposed maximum aggregate offering price(2)(3) | Amount of registration fee(6) |
|---|-------------------------------|------------------------------------|---|-------------------------------|
| Common Stock, \$0.001 par value per share             |                               |                                    |   |                               |
| Preferred Stock, \$0.001 par value per share          |                               |                                    |   |                               |
| Debt Securities(4)                                    |                               |                                    |   |                               |
| Warrants(5)   |                               |                                    |   |                               |
| Units   |                               |                                    |   |                               |
| Total   |                               |                                    | \$ 20,000,000                                   | \$ 2,014                      |

1. There are being registered hereunder such indeterminate number of shares of common stock, such indeterminate number of shares of preferred stock, such indeterminate principal amount of debt securities, and such indeterminate number of warrants to purchase common stock, preferred stock or debt securities as will have an aggregate initial offering price not to exceed \$20,000,000. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder. The securities registered also include such indeterminate amounts and numbers of shares of common stock and preferred stock and such indeterminate principal amounts of debt securities as may be issued upon exercise of warrants, upon conversion of or exchange for debt securities that provide for conversion or exchange, or pursuant to anti-dilution provisions of any such securities. No separate consideration will be received for any shares of common stock, preferred stock, or principal amounts of debt securities so issued upon conversion or exchange.
2. Pursuant to General Instruction II.D of Form S-3, the amount of securities to be registered for each class of securities, the proposed maximum offering price per unit for each class of securities and the proposed aggregate offering price of each class of securities are not specified.
3. The Registrant is hereby registering an indeterminate amount and number of each identified class of the identified securities up to a proposed maximum aggregate offering price of \$20,000,000, which may be offered from time to time at indeterminate prices, including securities that may be purchased by underwriters. The Registrant has estimated the proposed maximum aggregate offering price solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
4. If any debt securities are issued at an original issue discount, then the offering price of such debt securities shall be in such greater principal amount as shall result in an aggregate initial offering price not to exceed \$20,000,000, less the aggregate dollar amount of all securities previously issued hereunder.
5. Includes warrants to purchase common stock, warrants to purchase preferred stock and warrants to purchase debt securities.
6. The registration fee has been calculated in accordance with Rule 457(o) under the Securities Act.

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 that specifically states that this registration statement shall thereafter 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 Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.



The information in this prospectus is not complete and may be changed. We may not sell these securities or accept an offer to buy 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 it is not soliciting offers to buy these securities in any state where such offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 8, 2016

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Prospectus

BioLife Solutions, Inc.

\$20,000,000

Common Stock  
Preferred Stock  
Debt Securities  
Warrants  
Units

From time to time, we may offer and sell up to \$20,000,000 of any combination of the securities described in this prospectus, either individually or in combination. We may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants.

This prospectus provides a general description of the securities we may offer. Each time we sell securities, we will provide specific terms of the securities offered in a supplement to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference in this prospectus before you invest in any securities.

Our common stock is traded on The NASDAQ Capital Market under the ticker symbol "BLFS." As of January 5, 2016, the aggregate market value of our outstanding shares of common stock held by non-affiliates is approximately \$13.1 million, based on 12,448,391 outstanding shares of common stock, of which 6,120,698 shares are held by non-affiliates, and a per share price of \$2.14, based on the closing sale price of our common stock on January 5, 2016. As of the date hereof we have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the prior 12 calendar month period that ends on and includes the date hereof.

Investing in our securities involves risks. You should review carefully the risks and uncertainties described in the section entitled "Risk Factors" on page 5 of this prospectus and any risk factors described in any applicable prospectus supplement and in our Securities and Exchange Commission filings that are incorporated by reference into this prospectus.

The securities may be sold directly to investors, through agents designated from time to time or to or through underwriters or dealers. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus. If any underwriters or agents are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such underwriters or agents and any applicable

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commissions or discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

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 \_\_\_\_\_, 2016

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TABLE OF CONTENTS

|  |    |
|--|----|
| ABOUT THIS PROSPECTUS                              | 1  |
| SUMMARY  | 2  |
| RISK FACTORS                                       | 5  |
| FORWARD-LOOKING STATEMENTS                         | 5  |
| USE OF PROCEEDS                                    | 6  |
| DESCRIPTION OF CAPITAL STOCK                       | 6  |
| DESCRIPTION OF DEBT SECURITIES                     | 9  |
| DESCRIPTION OF WARRANTS                            | 17 |
| DESCRIPTION OF UNITS                               | 18 |
| PLAN OF DISTRIBUTION                               | 19 |
| LEGAL MATTERS                                      | 22 |
| EXPERTS  | 22 |
| WHERE YOU CAN FIND MORE<br>INFORMATION             | 22 |
| INCORPORATION OF CERTAIN<br>DOCUMENTS BY REFERENCE | 23 |

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## ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of \$20,000,000.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in any documents that we have incorporated by reference into this prospectus. Therefore, if there is any inconsistency between the information in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement. You should read this prospectus, any applicable prospectus supplement and any related free writing prospectus. You should also read the documents we have referred you to under “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” below for information about us. The shelf registration statement, including the exhibits thereto, can be read at the SEC's website or at the SEC's Public Reference Room as described under “Where You Can Find More Information.”

This prospectus and the accompanying supplement to this prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and the accompanying supplement to this prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

### **THIS PROSPECTUS MAY NOT BE USED TO OFFER AND SELL SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.**

You should not assume that the information contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus, any applicable prospectus supplement or any related free writing prospectus is delivered or securities sold on a later date.

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or the accompanying prospectus supplement.

In this prospectus, unless otherwise specified or the context requires otherwise, we use the terms the “Company,” “we,” “us,” and “our” to refer to BioLife Solutions, Inc.



## SUMMARY

### About Our Company

We develop, manufacture and market a portfolio of biopreservation tools and services for cells, tissues, and organs. 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 and related web applications;

cell thawing media products; and

contract aseptic manufacturing formulation, fill, and finish services of liquid media products

Our proprietary, clinical grade HypoThermosol® FRS and CryoStor® biopreservation media products are marketed to the regenerative medicine, biobanking and drug discovery 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 biopreservation media products are serum-free and protein-free, fully defined, and are manufactured under current Good Manufacturing Practices using United States Pharmacopodia/Multicompensial 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.

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 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 notable 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 developer and marketer of biopreservation media products for cells and tissues. 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 website at [www.biolifesolutions.com](http://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.

## The Securities We May Offer

We may offer shares of our common stock and preferred stock, various series of debt securities and warrants to purchase any of such securities, either individually or in units, with a total value of up to \$20,000,000 from time to time under this prospectus, together with any applicable prospectus supplement and related free writing prospectus, at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

designation or classification;

aggregate principal amount or aggregate offering price;

maturity, if applicable;

original issue discount, if any;

rates and times of payment of interest or dividends, if any;

redemption, conversion, exchange or sinking fund terms, if any;

conversion or exchange prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange;

ranking;

restrictive covenants, if any;

voting or other rights, if any; and

important United States federal income tax considerations.

A prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

We may sell the securities directly to or through underwriters, dealers or agents. We, and our underwriters or agents, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters or agents, we will include in the applicable prospectus supplement:

the names of those underwriters or agents;

applicable fees, discounts and commissions to be paid to them;

details regarding over-allotment options, if any; and

the net proceeds to us.

Common Stock. We may offer shares of our common stock from time to time. Our common stock is described in greater detail in this prospectus under “Description of Capital Stock — Common Stock.”

3

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Preferred Stock. Our board of directors has the authority under our amended and restated certificate of incorporation, without further action by our stockholders, to issue up to 1,000,000 shares of preferred stock in one or more series, and to fix, determine and vary the voting rights, designations, preferences, restrictions, qualifications, privileges, limitation, options, conversion rights and other special rights of each series or class of preferred stock, including, but not limited to, dividend rates and manner of payment, preferential amounts payable upon voluntary or involuntary liquidation, voting rights, conversion rights, redemption prices, terms and conditions, and sinking fund and stock purchase prices, terms and conditions. Our Preferred Stock is described in greater detail in this prospectus under “Description of Capital Stock — Preferred Stock.”

Debt Securities. We may offer debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. In this prospectus, we have summarized certain general features of the debt securities under “Description of Debt Securities.”

Warrants. We may offer warrants for the purchase of our common stock, preferred stock and/or debt securities in one or more series, from time to time. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from those securities. In this prospectus, we have summarized certain general features of the warrants under “Description of Warrants.”

Units. We may offer units consisting of common stock, preferred stock, debt securities and/or warrants to purchase any of such securities in one or more series. In this prospectus, we have summarized certain general features of the units under “Description of Units.”

#### NASDAQ Capital Market Listing

Our common stock is traded on The NASDAQ Capital Market under the ticker symbol “BLFS.” The applicable prospectus supplement will contain information, where applicable, as to any other listing on The NASDAQ Capital Market or any securities market or other exchange of the securities covered by the prospectus supplement.

## RISK FACTORS

An investment in our securities involves a high degree of risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading “Risk Factors” in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under Item 1A, “Risk Factors,” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2014 and in our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2015, June 30, 2015 and September 30, 2015, each of which is incorporated herein by reference, and may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations.

## FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference contain 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 similar 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 in the section entitled “Risk Factors” of this prospectus, as well as those discussed elsewhere in the prospectus and the documents incorporated by reference in this 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.

## USE OF PROCEEDS

Except as described in any applicable prospectus supplement and in any free writing prospectuses in connection with a specific offering, we currently intend to use the net proceeds from the sale of the securities offered hereby for investment in new products, operating costs, capital expenditures and for general corporate purposes, including working capital. We may also use a portion of the net proceeds to acquire businesses, or assets that we believe are complementary to our own, although we have no current plans, commitments or agreements with respect to any acquisitions as of the date of this prospectus.

## DESCRIPTION OF CAPITAL STOCK

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.

The following is a summary of the rights of our common and preferred stock and some of the provisions of our amended and restated certificate of incorporation and amended and restated bylaws. Because it is only a summary, it does not contain all the information that may be important to you and is subject to and qualified in its entirety by our amended and restated certificate of incorporation and our amended and restated bylaws, a copy of each of which has been incorporated as an exhibit to the registration statement of which this prospectus forms a part.

### Common Stock

As of December 31, 2015 there were 12,448,391 shares of common stock outstanding. In addition, as of December 31, 2015 there were:

2,555,263 shares of common stock subject to outstanding options;

1,696,011 shares of common stock reserved for future issuance under our Amended and Restated 2013 Performance Incentive Plan; and

7,195,997 shares of common stock subject to outstanding warrants at a weighted average exercise price of \$4.60 per share.

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.

Transfer Agent and Registrar. The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company LLC.

Listing. Our common stock is listed on The NASDAQ Capital Market under the symbol "BLFS".



Preferred Stock

Our board of directors has the authority under our amended and restated certificate of incorporation, without further action by our stockholders, to issue up to 1,000,000 shares of preferred stock in one or more series, and to fix, determine and vary the voting rights, designations, preferences, restrictions, qualifications, privileges, limitation, options, conversion rights and other special rights of each series or class of preferred stock, including, but not limited to, dividend rates and manner of payment, preferential amounts payable upon voluntary or involuntary liquidation, voting rights, conversion rights, redemption prices, terms and conditions, and sinking fund and stock purchase prices, terms and conditions.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock or otherwise adversely affecting the rights of holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change of control and may adversely affect the market price of our common stock. As of December 31, 2015, no shares of preferred stock were outstanding, and we have no current plans to issue any shares of preferred stock.

Our board of directors will fix the voting rights, designations, preferences, restrictions, qualifications, privileges, limitation, options, conversion rights and other special rights of the preferred stock of each series that we sell under this prospectus and applicable prospectus supplements in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or incorporate by reference into the registration statement of which this prospectus is a part the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. This description will include:

the title and stated value;

the number of shares we are offering;

the liquidation preference per share;

the purchase price per share;

the dividend rate per share, dividend period and payment dates and method of calculation for dividends;

whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;

our right, if any, to defer payment of dividends and the maximum length of any such deferral period;

the procedures for any auction and remarketing, if any;

the provisions for a sinking fund, if any;

the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;

any listing of the preferred stock on any securities exchange or market;

whether the preferred stock will be convertible into our common stock or other securities of ours, including warrants, and, if applicable, the conversion period, the conversion price, or how it will be calculated, and under what circumstances it may be adjusted;

whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange period, the exchange price, or how it will be calculated, and under what circumstances it may be adjusted;

voting rights, if any, of the preferred stock;

restrictions on transfer, sale or other assignment, if any;

a discussion of any material or special United States federal income tax considerations applicable to the preferred stock;

the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;

any limitations on issuances of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock being issued as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and

any other specific terms, rights, preferences, privileges, qualifications or restrictions of the preferred stock.

When we issue shares of preferred stock under this prospectus, the shares will be fully paid and nonassessable and will not have, or be subject to, any preemptive or similar rights.

The General Corporation Law of the State of Delaware, the state of our incorporation, provides that the holders of preferred stock will have the right to vote separately as a class on any proposal involving fundamental changes in the rights of holders of that preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

#### Anti-Takeover Effects of Our Certificate of Incorporation and Bylaws

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.

### DESCRIPTION OF DEBT SECURITIES

This section describes the general terms and provisions of the debt securities that we may offer using this prospectus and the related indentures. This section is only a summary and does not purport to be complete. You must look to the relevant form of debt security and the related indenture for a full understanding of all terms of any series of debt securities. The form of debt security and the related indenture have been filed as exhibits to the registration statement of which this prospectus is a part. See “Where You Can Find More Information” for information on how to obtain copies. The following description of the terms of the debt securities summarizes some general terms that will apply to the debt securities. The description is not complete, and we refer you to the indentures which we filed with the SEC as exhibits to the registration statement of which this prospectus is a part.

#### General

The debt securities will be either our senior debt securities or our subordinated debt securities. We will issue our debt securities under one or more separate indentures between us and a trustee. Senior debt securities will be issued under a senior indenture and subordinated securities will be issued under a subordinated indenture. A copy of the form of each type of indenture has been filed as an exhibit to the registration statement of which this prospectus is a part. The indentures may be supplemented by one or more supplemental indentures. We refer to the senior indenture and the subordinated indenture, together with any supplemental indentures, as the “indentures” throughout the remainder of this prospectus.

The indentures do not limit the amount of debt securities that we may issue. The indentures provide that debt securities may be issued up to the principal amount that we authorize from time to time. The senior debt securities will be secured or unsecured and will have the same rank as all of our other indebtedness that is not subordinated. The subordinated debt securities will be secured or unsecured and will be subordinated and junior to all senior indebtedness. The terms of the indentures do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations, financial condition or transactions involving us, but those provisions may be included in the documents that include the specific terms of the debt securities.

We may issue the debt securities in one or more separate series of senior debt securities and subordinated debt securities. The prospectus supplement relating to the particular series of debt securities being offered will specify the particular amounts, prices and terms of those debt securities. These terms may include:

the title of the debt securities;

any limit upon the aggregate principal amount of the debt securities;

if other than United States dollars, the currency or currencies, including the euro and other composite currencies, in which payments on the debt securities will be payable and whether the holder may elect payment to be made in a different currency;

the date or dates when payments on the principal must be made or the method of determining that date or dates;

interest rates, and the dates from which interest, if any, will accrue, and the dates when interest is payable and the maturity;

the right, if any, to extend the interest payment periods and the duration of the extensions;

the places where payments may be made and the manner of payments;

any mandatory or optional redemption provisions;

any subordination provisions;

the denominations in which debt securities will be issued;

the terms applicable to any debt securities issued at a discount from their stated principal amount;

the currency or currencies of payment of principal or interest and the period, if any, during which a holder may elect to pay in a currency other than the currency in which the debt securities are denominated;

if the amount of payments of principal or interest is to be determined by reference to an index or formula, or based on a coin or currency other than that in which the debt securities are stated to be payable, the manner in which these amounts are determined and the calculation agent, if any;

whether the debt securities will be secured or unsecured;

whether the debt securities will be issued in the form of one or more global securities in temporary or definitive form;

whether and on what terms we will pay additional amounts to holders of the debt securities that are not United States persons in respect of any tax, assessment or governmental charge withheld or deducted and, if so, whether and on what terms we will have the option to redeem the debt securities rather than pay the additional amounts;

the certificates or forms required for the issuance of debt securities in definitive form;

the trustees, depositaries, authenticating or paying agents, transfer agents or registrars of the debt securities;

any deletions of, or changes or additions to, the events of default or covenants;

conversion or exchange provisions, if any, including conversion or exchange prices or rates and adjustments to those prices and rates; and

any other specific terms of the debt securities.

If any debt securities are sold for any foreign currency or currency unit or if any payments on the debt securities are payable in any foreign currency or currency unit, the prospectus supplement will contain any restrictions, elections, tax consequences, specific terms and other information with respect to the debt securities and the foreign currency or currency unit.

Some of the debt securities may be issued as original issue discount debt securities. Original issue discount securities may bear no interest or bear interest at below-market rates and will be sold at a discount below their stated principal



amount and may bear no or below market interest. The applicable prospectus supplement will also contain any special tax, accounting or other information relating to original issue discount securities other kinds of debt securities that may be offered, including debt securities linked to an index or payable in currencies other than United States dollars.

### Senior Debt Securities

Payment of the principal of, premium, if any, and interest on senior debt securities will rank on a parity with all of our other indebtedness that is not subordinated.

### Subordinated Debt Securities

Payment of the principal of, premium, if any, and interest on subordinated debt securities will be junior in right of payment to the prior payment in full of all of our unsubordinated debt, including senior debt securities. We will state in the applicable prospectus supplement relating to any subordinated debt securities the subordination terms of the securities as well as the aggregate amount of outstanding debt, as of the most recent practicable date, that by its terms would be senior to the subordinated debt securities. We will also state in such prospectus supplement limitations, if any, on issuance of additional senior debt.

### Registrar and Paying Agent

The debt securities may be presented for registration of transfer or for exchange at the corporate trust office of the security registrar or at any other office or agency that we maintain for those purposes. In addition, the debt securities may be presented for payment of principal, interest and any premium at the office of the paying agent or at any office or agency that we maintain for those purposes.

### Global Securities

We may issue the debt securities of a series in whole or in part in the form of one or more global certificates that will be deposited with a depository we will identify in a prospectus supplement. We may issue global debt securities in either temporary or definitive form. We will describe the specific terms of the depository arrangement with respect to any series of debt securities in the prospectus supplement.

### Conversion or Exchange Rights

Debt securities may be convertible into or exchangeable for shares of our common stock. The terms and conditions of conversion or exchange will be stated in the applicable prospectus supplement. The terms will include, among others, the following:

the conversion or exchange price;

the conversion or exchange period;

provisions regarding the convertibility or exchangeability of the debt securities, including who may convert or exchange;

events requiring adjustment to the conversion or exchange price;

provisions affecting conversion or exchange in the event of our redemption of the debt securities; and

any anti-dilution provisions, if applicable.

### Registered Global Securities

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Unless and until it is exchanged in whole or in part for debt securities in definitive registered form, a registered global security may not be transferred except as a whole:

by the depositary for that registered global security to its nominee;

by a nominee of the depositary to the depositary or another nominee of the depositary; or

by the depositary or its nominee to a successor of the depositary or a nominee of the successor.

The prospectus supplement relating to a series of debt securities will describe the specific terms of the depositary arrangement involving any portion of the series represented by a registered global security.

We anticipate that the following provisions will apply to all depositary arrangements for debt securities:

ownership of beneficial interests in a registered global security will be limited to persons that have accounts with the depositary for that registered global security, these persons being referred to as “participants,” or persons that may hold interests through participants;

upon the issuance of a registered global security, the depositary for the registered global security will credit, on its book-entry registration and transfer system, the participants’ accounts with the respective principal amounts of the debt securities represented by the registered global security beneficially owned by the participants;

any dealers, underwriters or agents participating in the distribution of the debt securities will designate the accounts to be credited; and

ownership of beneficial interest in that registered global security will be shown on, and the transfer of that ownership interest will be effected only through, records maintained by the depositary for that registered global security for interests of participants and on the records of participants for interests of persons holding through participants.

The laws of some states may require that specified purchasers of securities take physical delivery of the securities in definitive form. These laws may limit the ability of those persons to own, transfer or pledge beneficial interests in registered global securities.

So long as the depositary for a registered global security, or its nominee, is the registered owner of that registered global security, the depositary or that nominee will be considered the sole owner or holder of the debt securities represented by the registered global security for all purposes under the indenture. Except as stated below, owners of beneficial interests in a registered global security:

will not be entitled to have the debt securities represented by a registered global security registered in their names;

will not receive or be entitled to receive physical delivery of the debt securities in definitive form; and

will not be considered the owners or holders of the debt securities under the indenture.

Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depositary for the registered global security and, if the person is not a participant, on the procedures of a participant through which the person owns its interest, to exercise any rights of a holder under the indenture.

We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take any action that a holder is entitled to give or take under the indenture, the depositary for the registered global security would authorize the participants holding the relevant beneficial interests to give or take the action, and the participants would authorize beneficial owners owning through the participants to give or take the action or would otherwise act upon the instructions of beneficial owners holding through them.

We will make payments of principal and premium, if any, and interest, if any, on debt securities represented by a registered global security registered in the name of a depositary or its nominee to the depositary or its nominee as the registered owners of the registered global security. None of us, the trustee or any other of our agents or agents of the

trustee will be responsible or liable for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to the beneficial ownership interests.

We expect that the depository for any debt securities represented by a registered global security, upon receipt of any payments of principal and premium, if any, and interest, if any, in respect of the registered global security, will immediately credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the registered global security as shown on the records of the depository. We also expect that standing customer instructions and customary practices will govern payments by participants to owners of beneficial interests in the registered global security held through the participants, as is now the case with the securities held for the accounts of customers in bearer form or registered in "street name." We also expect that any of these payments will be the responsibility of the participants.

If the depository for any debt securities represented by a registered global security is at any time unwilling or unable to continue as depository or stops being a clearing agency registered under the Exchange Act, we will appoint an eligible successor depository. If we fail to appoint an eligible successor depository within 90 days, we will issue the debt securities in definitive form in exchange for the registered global security. In addition, we may at any time and in our sole discretion decide not to have any of the debt securities of a series represented by one or more registered global securities. In that event, we will issue debt securities of the series in a definitive form in exchange for all of the registered global securities representing the debt securities. The trustee will register any debt securities issued in definitive form in exchange for a registered global security in the name or names as the depository, based upon instructions from its participants, will instruct the trustee.

#### Merger, Consolidation or Sale of Assets

Under the terms of the indentures, we may consolidate or merge with another company, or sell, lease or convey all or substantially all our assets to another company, if:

we are the continuing entity; or

(i) we are not the continuing entity, (ii) the successor entity is organized under the laws of the United States of America and expressly assumes all payments on all of the debt securities and the performance and observance of all the covenants and conditions of the applicable indenture, and (iii) the merger, sale of assets or other transaction must not cause a default on the debt securities and we must not already be in default.

#### Events of Default

Unless otherwise provided for in the prospectus supplement, the term "event of default," when used in the indentures means any of the following:

failure to pay interest for 30 days after the date payment is due and payable; however, if we extend an interest payment period under the terms of the debt securities, the extension will not be a failure to pay interest;

failure to pay principal or premium, if any, on any debt security when due, either at maturity, upon any redemption, by declaration or otherwise;

failure to perform other covenants for 60 days after notice that performance was required;

certain events in bankruptcy, insolvency or reorganization of our company; or

any other event of default provided in the applicable resolution of our board of directors or the supplemental indenture under which we issue a series of debt securities.

An event of default for a particular series of debt securities does not necessarily constitute an event of default for any other series of debt securities issued under an indenture. If an event of default relating to the payment of interest, principal or any sinking fund installment involving any series of debt securities has occurred and is continuing, the trustee or the holders of not less than 25% in aggregate principal amount of the debt securities of each affected series may declare the entire principal of all the debt securities of that series to be due and payable immediately.

If an event of default relating to the performance of other covenants occurs and is continuing for a period of 60 days after notice of that event of default, or if any other event of default occurs and is continuing involving all of the series of senior debt securities, then the trustee or the holders of not less than 25% in aggregate principal amount of all of the series of senior debt securities may declare the entire principal amount of all of the series of senior debt securities due and payable immediately.

Similarly, if an event of default relating to the performance of other covenants occurs and is continuing for a period of 60 days after notice, or if any other event of default occurs and is continuing involving all of the series of subordinated debt securities, then the trustee or the holders of not less than 25% in aggregate principal amount of all of the series of subordinated debt securities may declare the entire principal amount of all of the series of subordinated debt securities due and payable immediately.

If, however, the event of default relating to the performance of other covenants or any other event of default that has occurred and is continuing is for less than all of the series of senior debt securities or subordinated debt securities, then, the trustee or the holders of not less than 25% in aggregate principal amount of each affected series of the senior debt securities or the subordinated debt securities, as the case may be, may declare the entire principal amount of all debt securities of that affected series due and payable immediately. The holders of not less than a majority, or any applicable supermajority, in aggregate principal amount of the debt securities of a series may, after satisfying conditions, rescind and annul any of the above-described declarations and consequences involving the series.

If an event of default relating to events in bankruptcy, insolvency or reorganization occurs and is continuing, then the principal amount of all of the debt securities outstanding, and any accrued interest, will automatically become due and payable immediately, without any declaration or other act by the trustee or any holder.

Each indenture imposes limitations on suits brought by holders of debt securities against us. Except for actions for payment of overdue principal or interest, no holder of debt securities of any series may institute any action against us under each indenture unless:

the holder has previously given to the trustee written notice of default and continuance of that default;

the holders of at least 25% in principal amount of the outstanding debt securities of the affected series have requested that the trustee institute the action;

the requesting holders have offered the trustee reasonable indemnity for expenses and liabilities that may be incurred by bringing the action;

the trustee has not instituted the action within 60 days of the request; and

the trustee has not received inconsistent direction by the holders of a majority in principal amount of the outstanding debt securities of the series.

We will be required to file annually with the trustee a certificate, signed by an officer of our company, stating whether or not the officer knows of any default by us in the performance, observance or fulfillment of any condition or covenant of an indenture.

#### Discharge, Defeasance and Covenant Defeasance

We can discharge or defease our obligations under the indentures as stated below or as provided in the prospectus supplement.



Unless otherwise provided in the applicable prospectus supplement, we may discharge obligations to holders of any series of debt securities that have not already been delivered to the trustee for cancellation and that have either become due and payable or are by their terms to become due and payable, or are scheduled for redemption, within one year. We may effect a discharge by irrevocably depositing with the trustee cash or United States government obligations, as trust funds, in an amount certified to be enough to pay when due, whether at maturity, upon redemption or otherwise, the principal of, premium, if any, and interest on the debt securities and any mandatory sinking fund payments.

Unless otherwise provided in the applicable prospectus supplement, we may also discharge any and all of our obligations to holders of any series of debt securities at any time, which we refer to as “defeasance.” We may also be released from the obligations imposed by any covenants of any outstanding series of debt securities and provisions of the indentures, and we may omit to comply with those covenants without creating an event of default under the trust declaration, which we refer to as “covenant defeasance.” We may effect defeasance and covenant defeasance only if, among other things:

we irrevocably deposit with the trustee cash or United States government obligations, as trust funds, in an amount certified to be enough to pay at maturity, or upon redemption, the principal, premium, if any, and interest on all outstanding debt securities of the series;

we deliver to the trustee an opinion of counsel from a nationally recognized law firm to the effect that (i) in the case of covenant defeasance, the holders of the series of debt securities will not recognize income, gain or loss for United States federal income tax purposes as a result of the defeasance, and will be subject to tax in the same manner and at the same times as if no covenant defeasance had occurred and (ii) in the case of defeasance, either we have received from, or there has been published by, the Internal Revenue Service a ruling or there has been a change in applicable United States federal income tax law, and based on that ruling or change, the holders of the series of debt securities will not recognize income, gain or loss for United States federal income tax purposes as a result of the defeasance and will be subject to tax in the same manner as if no defeasance had occurred; and

in the case of subordinated debt securities, no event or condition will exist that, based on the subordination provisions applicable to the series, would prevent us from making payments of principal of, premium, if any, and interest on any of the applicable subordinated debt securities at the date of the irrevocable deposit referred to above or at any time during the period ending on the 91st day after the deposit date.

Although we may discharge or decrease our obligations under the indentures as described in the two preceding paragraphs, we may not avoid, among other things, our duty to register the transfer or exchange of any series of debt securities, to replace any temporary, mutilated, destroyed, lost or stolen series of debt securities or to maintain an office or agency in respect of any series of debt securities.

#### Modification of the Indenture

Except as provided in the prospectus supplement, each indenture provides that we and the trustee may enter into supplemental indentures without the consent of the holders of debt securities to:

secure any debt securities;

evidence the assumption by a successor corporation of our obligations and the conversion of any debt securities into the capital stock of that successor corporation, if the terms of those debt securities so provide;

add covenants for the protection of the holders of debt securities;

cure any ambiguity or correct any inconsistency in the indenture;

establish the forms or terms of debt securities of any series; and

evidence and provide for the acceptance of appointment by a successor trustee.

Each indenture also provides that we and the trustee may, with the consent of the holders of not less than a majority in aggregate principal amount of debt securities of all series of senior debt securities or of subordinated debt securities then outstanding and affected, voting as one class, add any provisions to, or change in any manner, eliminate or modify in any way the provisions of, the indenture or modify in any manner the rights of the holders of the debt securities. We and the trustee may not, however, without the consent of the holder of each outstanding debt security affected:

extend the stated maturity of any debt security;

reduce the principal amount or premium, if any;

reduce the rate or extend the time of payment of interest;

reduce any amount payable on redemption;

change the currency in which the principal, unless otherwise provided for a series, premium, if any, or interest is payable;

reduce the amount of the principal of any debt security issued with an original issue discount that is payable upon acceleration or provable in bankruptcy;

impair the right to institute suit for the enforcement of any payment on any debt security when due; or

reduce the percentage of holders of debt securities of any series whose consent is required for any modification of the indenture for any such series.

#### Concerning the Trustee

Each indenture provides that there may be more than one trustee under the indenture, each for one or more series of debt securities. If there are different trustees for different series of debt securities, each trustee will be a trustee of a trust under the indentures separate and apart from the trust administered by any other trustee under the indenture. Except as otherwise indicated in this prospectus or any prospectus supplement, any action permitted to be taken by a trustee may be taken by that trustee only on the one or more series of debt securities for which it is the trustee under the indenture. Any trustee under the indentures may resign or be removed from one or more series of debt securities. All payments of principal of, premium, if any, and interest on, and all registration, transfer, exchange, authentication and delivery of, the debt securities of a series may be effected by the trustee for that series at an office or agency designated by the trustee of that series.

If the trustee becomes a creditor of our company, each indenture places limitations on the right of the trustee to obtain payment of claims or to realize on property received in respect of any such claim as security or otherwise. The trustee may engage in other transactions. If it acquires any conflicting interest relating to any duties concerning the debt securities, however, it must eliminate the conflict or resign as trustee.

The holders of a majority in aggregate principal amount of any series of debt securities then outstanding will have the right to direct the time, method and place of conducting any proceeding for exercising any remedy available to the trustee concerning the applicable series of debt securities, so long as the direction:

would not conflict with any rule of law or with the applicable indenture;

would not be unduly prejudicial to the rights of another holder of the debt securities; and

would not involve any trustee in personal liability.

Each indenture provides that if an event of default occurs, is not cured and is known to any trustee, the trustee must use the same degree of care as a prudent person would use in the conduct of his or her own affairs in the exercise of the trust's power. The trustee will be under no obligation to exercise any of its rights or powers under the indenture at

the request of any of the holders of the debt securities, unless they have offered to the trustee security and indemnity satisfactory to the trustee.

No Individual Liability of Incorporators, Stockholders, Officers or Directors

Each indenture provides that no incorporator and no past, present or future stockholder, officer or director of our company or any successor corporation in those capacities will have any individual liability for any of our obligations, covenants or agreements under the debt securities or such indenture.

## Governing Law

The indentures and the debt securities will be governed by, and construed in accordance with, the laws of the State of New York.

## DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements and free writing prospectuses, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may consist of warrants to purchase common stock, preferred stock or debt securities and may be issued in one or more series. Warrants may be offered independently or together with common stock, preferred stock or debt securities offered by any prospectus supplement, and may be attached to or separate from those securities. While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any warrants that we may offer in more detail in the applicable prospectus supplement and any applicable free writing prospectus. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of warrant document or agreement that describes the terms of the particular warrants we are offering before the issuance of the related warrants. The following summaries of material provisions of the warrants are subject to, and qualified in their entirety by reference to, all the provisions of the warrant document or agreement applicable to particular warrants. We urge you to read the applicable prospectus supplement and any applicable free writing prospectus related to the particular warrants that we sell under this prospectus, as well as the complete warrant document or agreement that contain the terms of the warrants.

## General

We will describe in the applicable prospectus supplement the terms relating to the warrants, including, if applicable:

the offering price and aggregate number of warrants offered;

the currency for which the warrants may be purchased;

if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;

if applicable, the date on and after which the warrants and the related securities will be separately transferable;

in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;

in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;

the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;

the terms of any rights to redeem or call the warrants;

any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;

the dates on which the right to exercise the warrants will commence and expire;

the manner in which the warrant agreements and warrants may be modified;

material United States federal income tax consequences of holding or exercising the warrants;

the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or

in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

#### Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth in the warrant agreement or documents and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant documents properly completed and duly executed at the office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

#### DESCRIPTION OF UNITS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.



We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of unit agreement that describes the terms of the units we are offering, and any supplemental agreements, before the issuance of the related units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to particular units. We urge you to read the applicable prospectus supplements related to the particular units that we sell under this prospectus, as well as the complete unit agreement and any supplemental agreements that contain the terms of the units.

## General

We may issue units comprised of one or more debt securities, shares of common stock, shares of preferred stock and warrants in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the units, including:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

any provisions of the governing unit agreement that differ from those described below; and

any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Capital Stock,” “Description of Debt Securities” and “Description of Warrants” will apply to each unit and to any common stock, preferred stock, debt security or warrant included in each unit, respectively.

## Issuance in Series

We may issue units in such amounts and in numerous distinct series as we determine.

## Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

We, the unit agents, and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary.

## PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus from time to time in one or more transactions, including without limitation:

directly to one or more purchasers;

through agents;

to or through underwriters, brokers or dealers; or

through a combination of any of these methods.

If we use underwriters or dealers in the sale, the securities will be acquired by the underwriters or dealers for their own account and may be resold from time to time in one or more transactions, including:

at a fixed price or prices, which may be changed from time to time;

in “at the market offerings” within the meaning of Rule 415(a)(4) under the Securities Act;

at prices related to such prevailing market prices; or

at negotiated prices.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

the names of any underwriters, dealers or agents;

any agency fees or underwriting discounts or commissions and other items constituting agents’ or underwriters’ compensation;

any discounts or concessions allowed or reallocated or paid to dealers;

details regarding over-allotment options under which underwriters may purchase additional securities from us, if any;

the purchase price of the securities being offered and the proceeds we will receive from the sale;

the public offering price; and

the securities exchanges on which such securities may be listed, if any.

#### By Underwriters

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement. Any public offering price and any discounts or concessions allowed or reallocated may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

#### By Dealers

If a dealer is utilized in the sale of any securities offered by this prospectus, we will sell those securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. We will set forth the names of the dealers and the terms of the transaction in the applicable prospectus supplement.

By Agents

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

By Direct Sales

We may also directly sell securities offered by this prospectus. In this case, no underwriters or agents would be involved. We will describe the terms of those sales in the applicable prospectus supplement.

## General Information

Underwriters, dealers and agents that participate in the distribution of the securities offered by this prospectus may be deemed underwriters under the Securities Act, and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the Securities Act.

We may authorize agents, dealers or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities related to this offering, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

Some or all of the securities we offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third parties may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third parties in such sale transactions will be identified in the applicable prospectus supplement.

One or more firms, referred to as “remarketing firms,” may also offer or sell the securities, if the prospectus supplement so indicates, in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own accounts or as agents for us. These remarketing firms will offer or sell the securities in accordance with the terms of the securities. The prospectus supplement will identify any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm’s compensation. Remarketing firms may be deemed to be underwriters in connection with the securities they remarket.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended. Overallotment involves sales in excess of the offering size, which create a short position. This short sales position may involve either “covered” short sales or “naked” short sales. Covered short sales are short sales made in an amount not greater than the underwriters’ over-allotment option to purchase additional securities in this offering described above. The underwriters may close out any covered short position either by exercising their over-allotment option or by purchasing securities in the open market. To determine how they will close the covered short position, the underwriters will consider, among other things, the price of securities available for purchase in the open market, as compared to the price at which they may purchase securities through the over-allotment option. Naked short sales are short sales in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that, in the open market after pricing, there may be downward pressure on the price of the securities that could adversely affect investors who purchase securities

in this offering. Stabilizing transactions permit bids to purchase the underlying security for the purpose of fixing the price of the security so long as the stabilizing bids do not exceed a specified maximum. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions.

Any underwriters who are qualified market makers on The NASDAQ Capital Market may engage in passive market making transactions in our common stock, preferred stock, warrants and debt securities, as applicable, on The NASDAQ Capital Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

Similar to other purchase transactions, an underwriter's purchase to cover the syndicate short sales or to stabilize the market price of our securities may have the effect of raising or maintaining the market price of our securities or preventing or mitigating a decline in the market price of our securities. As a result, the price of our securities may be higher than the price that might otherwise exist in the open market. The imposition of a penalty bid might also have an effect on the price of the securities if it discourages resales of the securities.

Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of the securities. If such transactions are commenced, they may be discontinued without notice at any time.

#### LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities being offered by this prospectus will be passed upon for us by Dorsey & Whitney LLP, Seattle, Washington.

#### EXPERTS

The financial statements for the years ended December 31, 2014 and 2013, consisting of our consolidated balance sheets as of December 31, 2014 and 2013, and the related consolidated statements of operations, comprehensive loss, shareholders' equity (deficiency) and cash flows for the years then ended, incorporated by reference in this prospectus have been audited by Peterson Sullivan LLP, independent registered public accounting firm, to the extent and for the periods set forth in their report incorporated by reference herein, and are included in reliance upon such report given upon the authority of said firm as experts in auditing and accounting.

#### WHERE YOU CAN FIND MORE INFORMATION

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](http://www.sec.gov). 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.

This prospectus is part of a registration statement filed on Form S-3 with the SEC under the Securities Act. As allowed by the SEC's rules, this prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information concerning us and the securities, you should read the entire registration statement and the additional information described under "Incorporation of Certain Documents by Reference" below. The registration statement has been filed electronically and may be obtained in any manner listed above. Any statements contained herein concerning the provisions of any document are not necessarily complete, and, in each instance, reference is made to the copy of such document filed as an exhibit to the registration statement or otherwise filed with the SEC. Each such statement is qualified in its entirety by such reference.

We will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus has been delivered, a copy of any and all of the information that has been incorporated by reference in this prospectus but not delivered with the prospectus, if such person makes a written or oral request. 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](http://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.





INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” certain information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. We incorporate by reference the documents listed below filed by us with the SEC (File No. 1-36362):

our Annual Report on Form 10-K for the year ended December 31, 2014 filed with the SEC on March 12, 2015;

our Definitive Proxy Statement on Form 14A filed with the SEC on March 24, 2015;

our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2015 filed with the SEC on May 7, 2015, for the quarter ended June 30, 2015 filed with the SEC on August 6, 2015 and for the quarter ended September 30, 2015 filed with the SEC on November 12, 2015, as amended by Amendment No. 1 thereto filed with the SEC on November 16, 2015;

our Current Reports on Form 8-K filed with the SEC on January 8, 2015, February 24, 2015, and May 5, 2015; and

the description of our common stock, which is contained in the Registration Statement on Form 8-A filed with the SEC on March 19, 2014, including any amendment or report filed for the purpose of updating such description.

We also 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, until the date of the completion of this offering (except for information and exhibits furnished under Items 2.02 or 7.01 of our current reports on Form 8-K). The information contained in any such document will be considered part of this prospectus from the date the document is filed with the SEC. 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.

BioLife Solutions, Inc.

\$20,000,000

Common Stock  
Preferred Stock  
Debt Securities  
Warrants  
Units

, 2016

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PART II  
INFORMATION NOT REQUIRED IN THE PROSPECTUS

## Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, payable by the registrant in connection with the offering of the securities being registered. All of the costs and expenses are estimates, except the Securities and Exchange Commission registration fee.

|   |         |
|---|---------|
| Securities and Exchange Commission registration fee | \$2,014 |
| Accounting fees and expenses                        | *       |
| Legal fees and expenses                             | *       |
| Transfer agent and registrar fees and expenses      | *       |
| Trustee fees and expenses                           | *       |
| Printing and distributing                           | *       |
| Miscellaneous expenses                              | *       |
| Total   | *       |

\*These fees are calculated based on the number of issuances and amount of securities offered and accordingly cannot be estimated at this time. An estimate of the aggregate amount of these expenses will be reflected in the applicable prospectus supplement.

## Item 15. Indemnification of Officers and Directors

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.

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## Item 16. Exhibits

| Exhibit Number | Description  |
|----------------|--|
| 1.1*           | Form of Underwriting Agreement   |
| 3.1            | Amended and Restated Certificate of Incorporation of BioLife Solutions, Inc. (included as Exhibit 4.1 to the Registration Statement on Form S-8 filed on June 24, 2013)                            |
| 3.2            | Certificate of Amendment of Amended and Restated Certificate of Incorporation Of BioLife Solutions, Inc. (included as Exhibit 3.1 to the Current Report on Form 8-K filed on January 30, 2014)     |
| 3.3            | Amended and Restated Bylaws of BioLife Solutions, Inc., effective April 25, 2013 (included as Exhibit A to the Registrant's Definitive Information Statement on Schedule 14C filed March 27, 2013) |
| 4.1            | Specimen Common Stock Certificate (included as Exhibit 4.1 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2013 filed February 12, 2014)                     |
| <u>4.2+</u>    | Form of Senior Indenture   |
| <u>4.3+</u>    | Form of Subordinated Indenture   |
| 4.4*           | Form of Debt Security  |
| 4.5*           | Form of Subordinated Debt Security   |
| 4.6*           | Form of Certificate of Designation   |
| 4.7*           | Form of Preferred Stock Certificate  |
| 4.8*           | Form of Warrant Agreement  |
| 4.9*           | Form of Warrant Certificate  |
| 4.10*          | Form of Unit Agreement   |
| 4.11*          | Form of Unit Certificate   |
| <u>5.1+</u>    | Opinion of Dorsey & Whitney LLP  |
| <u>23.1+</u>   | Consent of Peterson Sullivan LLP, independent registered public accounting firm  |
| 23.2+          | Consent of Dorsey & Whitney LLP (included in Exhibit 5.1)  |
| 24.1+          | Power of Attorney (included on the signature page of this Registration Statement)  |
| 25.1*          | Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939, as amended, of Trustee under the Senior Indenture   |
| 25.2*          | Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939, as amended, of Trustee under the Subordinated Indenture   |

+ Filed herewith.

\* To be filed by amendment or as an exhibit to a report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and incorporated herein by reference.

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 of 1933;
  - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the 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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
  - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that the undertakings set forth in paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the registration statement is on Form S-3 or Form F-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statements or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment 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.

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

(4) That, for the purpose of determining liability under the Securities Act of 1933 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 of 1933 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

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(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 of 1933 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.

(6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the 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.

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 Securities and Exchange Commission 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 of 1933 and will be governed by the final adjudication of such issue.

(8) That:

(i) for purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(ii) for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus 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.

(9) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Trust Indenture Act.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Bothell, State of Washington, on this 8th day of January, 2016.

BIOLIFE SOLUTIONS, INC.

By: /s/ Daphne Taylor  
Name: Daphne Taylor  
Title: Chief Financial Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Michael Rice and Daphne Taylor, his or her true and lawful attorney-in-fact and agent with full powers of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, 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 in about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or his or her 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 indicated on January 8, 2016.

|  |   |
|--|---|
| /s/Michael Rice<br>Michael Rice                | President, Chief Executive Officer and Director<br>(Principal Executive Officer)          |
| /s/ Daphne Taylor<br>Daphne Taylor             | Chief Financial Officer<br>(Principal Financial Officer and Principal Accounting Officer) |
| /s/ Raymond Cohen<br>Raymond Cohen             | Chairman of the Board of Directors  |
| /s/ Thomas Girschweiler<br>Thomas Girschweiler | Director  |
| /s/ Andrew Hinson<br>Andrew Hinson             | Director  |
| /s/ Joseph Schick<br>Joseph Schick             | Director  |
| /s/ Rick Stewart                               | Director  |

Rick Stewart

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+ Filed herewith.

\* To be filed by amendment or as an exhibit to a report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and incorporated herein by reference.