NEPHROS INC Form S-1 June 23, 2015

As filed with the Securities and Exchange Commission on June 23, 2015

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D. C. 20549

FORM S-1

REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

NEPHROS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware384113-3971809(State or Other Jurisdiction of
Incorporation or Organization)(Primary Standard Industrial (I.R.S. Employer
Identification No.)

41 Grand Avenue

River Edge, New Jersey 07661

(201) 343-5202

(Address, Including Zip Code, and Telephone Number,

Including Area Code, of Registrant's Principal Executive Offices)

| Daron Evans | |
|---|------------------------------|
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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement, as shall be determined by the selling shareholder identified herein.

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, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) 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 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 post-effective amendment filed pursuant to Rule 462(d) 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.

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

Large accelerated filer " Accelerated filer " Accelerated filer " Non-accelerated filer " (Do not check if smaller reporting company) Smaller reporting company x

CALCULATION OF REGISTRATION FEE (1)

| | | Proposed | | |
|--|-----------------|---------------------|----------------------------------|------------------------|
| Title of Each Class of | Amount to be | Maximum Offering | Proposed Maximum Aggregate | Amount of |
| Securities to be Registered | Registered(1) | | Offering Price | Registration Fee |
| Common stock, \$0.001 par value per share Total | 2,751,448 | (2) \$ 0.70 | \$ 1,926,014 \$ 1,926,014 | \$ 223.80 \$ 223.80 |

Pursuant to Rule 416 under the Securities Act, the shares being registered hereunder include such indeterminate (1)number of shares as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

Estimated solely for purposes of calculating the amount of the registration fee pursuant to Rule 457(c). The (2) offering price per share and the aggregate offering price are based upon the average of the high and low prices of

the registrant's common stock as reported on the OTCQB on June 18, 2015.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THIS REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SUCH SECTION 8(A), MAY DETERMINE. The information in this prospectus is not complete and may be changed. We may not sell these securities until the Registration Statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities or the solicitation of an offer to buy these securities in any state in which such offer, solicitation or sale is not permitted.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION - DATED JUNE 23, 2015

NEPHROS, INC.

2,751,448 Shares of Common Stock

The selling stockholders identified beginning on page 18 of this prospectus are offering on a resale basis a total of 2,751,448 shares of our common stock, of which 917,149 are issuable upon the exercise of outstanding warrants. We will not receive any proceeds from the sale of these shares by the selling stockholders.

Shares of our common stock are quoted on the OTCQB Marketplace operated by the OTC Markets Group, Inc., or OTCQB, under the ticker symbol "NEPH." On 2015, the closing sales price for our common stock was per share. The shares of common stock issued upon the exercise of warrants will also be quoted on the OTCQB under the same ticker symbol. The warrants are not listed for trading on any stock exchange or market or quoted on the OTCQB.

Investing in our common stock involves substantial risks. See <u>"Risk Factors</u>" beginning on page 6 of this prospectus to read about important factors you should consider before purchasing our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2015.

NEPHROS, INC.

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FINANCIAL STATEMENTS

ABOUT THIS PROSPECTUS

We refer to Nephros, Inc. and its consolidated subsidiary as "Nephros", the "Company", "we", "our", and "us". This prospectu is part of a registration statement that we have filed with the Securities and Exchange Commission, which we refer to as the SEC or the Commission, utilizing a registration process. It is important for you to read and consider all of the information contained in this prospectus and any applicable prospectus before making a decision whether to invest in the common stock. You should also read and consider the information contained in the exhibits filed with our registration statement, of which this prospectus is a part, as described in "Where You Can Find More Information" in this prospectus.

You should rely only on the information contained in this prospectus and any applicable prospectus supplement, including the information incorporated by reference. We have not authorized anyone to provide you with different information. We are not offering to sell or soliciting offers to buy, and will not sell, any securities in any jurisdiction where it is unlawful. You should assume that the information contained in this prospectus or any prospectus supplement, as well as information contained in a document that we have previously filed or in the future will file with the SEC is accurate only as of the date of this prospectus, the applicable prospectus supplement or the document containing that information, as the case may be.

PROSPECTUS SUMMARY

This summary highlights information contained in other parts of this prospectus. Because it is a summary, it does not contain all of the information that is important to you. For a more complete understanding of our business, you should read this summary together with the more detailed information and financial statements for the three months ended March 31, 2015 and March 31, 2014 and for the years ended December 31, 2014 and 2013, and related notes appearing elsewhere in this prospectus. You should read this entire prospectus carefully, including the "Risk Factors" section beginning on page 6 and the "Special Note Regarding Forward-Looking Statements" section beginning on page 16. This prospectus contains important information that you should consider when making your investment decision.

About the Company

Nephros is a commercial stage medical device company that develops and sells high performance liquid purification filters. Our filters, which we call ultrafilters, are primarily used in dialysis centers for the removal of biological contaminants from water, bicarbonate concentrate and/or blood. Because our ultrafilters capture contaminants as small as 0.005 microns in size, they minimize exposure to a wide variety of bacteria, viruses, fungi, parasites, and endotoxins.

Our ultrafilters use proprietary hollow fiber technology. We believe the hollow fiber design allows our ultrafilters to optimize the three elements critical to filter performance:

·Filtration - as low as 0.005 microns

·Flow rate - minimal disruption

·Filter life - up to 12 months

We were founded in 1997 by healthcare professionals affiliated with Columbia University Medical Center/New York-Presbyterian Hospital to develop and commercialize an alternative method to hemodialysis, or HD. We have extended our filtration technologies to meet the demand for liquid purification in other areas, in particular water purification.

Our Products

Presently, we offer ultrafilters for sale to customers in five markets:

Hospitals and Other Healthcare Facilities: Filtration of water to be used for patient washing and drinking as an aid in •infection control. The filters also produce water that is suitable for wound cleansing, cleaning of equipment used in medical procedures and washing of surgeons' hands.

· Dialysis Centers - Water/Bicarbonate: Filtration of water or bicarbonate concentrate used in hemodialysis devices.

1

Dialysis Centers - Blood: Treatment of patients with chronic renal failure using the OLpūr H2H Hemodiafiltration, or HDF, Module in conjunction with a UF controlled hemodialysis machine and its accessories, the H2H Module accessories, appropriately prepared water and ultrapure dialysate for hemodialysis and the OLpūr MD 220 Hemodiafilter.

Military and Outdoor Recreation: Highly compact, individual water purification devices used by soldiers and backpackers to produce drinking water in the field.

·Commercial Facilities: Filtration of water for washing and drinking including use in ice machines and soda fountains.

Our Target Markets

Hospitals and Other Healthcare Facilities. According to the American Hospital Association there are approximately 5,700 hospitals and 920,000 beds in the U.S. and the United States Centers for Disease Control and Prevention estimates that healthcare associated infections, or HAIs, annually account for 1.7 million infections and 99,000 deaths. HAIs affect patients in a hospital or other healthcare facility, and are not present or incubating at the time of admission. They also include infections acquired by patients in the hospital or facility but appearing after discharge, and occupational infections among staff. Many HAIs are waterborne bacteria and viruses that can thrive in aging or complex plumbing systems often found in healthcare facilities. The Affordable Care Act, which was passed in March 2010, puts in place comprehensive health insurance reforms that aim to lower costs and enhance quality of care. With its implementation, healthcare providers have substantial incentives to deliver better care or be forced to absorb the expenses associated with repeat medical procedures or complications like HAIs. As a consequence, hospitals and other healthcare facilities are proactively implementing strategies to reduce the potential for HAIs. Our ultrafilters are designed to aid in infection control in the hospital and healthcare setting by treating facility water at the point of delivery, for example, from sinks and showers.

On June 30, 2014, we submitted to the FDA, for 510(k) clearance, the DSU-H and SSU-H Ultrafilters to filter EPA quality drinking water to remove microbiological contaminants and waterborne pathogens. On October 28, 2014, we announced that we received 510(k) clearance from the FDA to market our DSU-H and SSU-H Ultrafilters as medical devices for use in the hospital setting. The DSU-H and SSU-H Ultrafilters are intended to be used to filter EPA quality drinking water. The filters retain bacteria, viruses and endotoxin. By providing ultrapure water for patient washing and drinking, the filters aid in infection control. The filters also produce water that is suitable for wound cleansing, cleaning of equipment used in medical procedures and washing of a surgeon's hands. The filters are not intended to provide water that can be used as a substitute for United States Pharmacopeia sterile water.

We anticipate that the impact of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. proposed Standard 188, "Prevention of Legionellosis Associated with Building Water Systems", when adopted, will be positive for the point of delivery filtration market. We will be enhancing our efforts to support our distributors by developing and delivering focused sales training to their sales forces on the use of our filters to support an overall program of infection risk prevention, as well as by offering the services of our sales representatives to jointly call on potential hospital customers to serve as a product expert when needed.

Dialysis Centers - Water/Bicarbonate. To perform hemodialysis, all dialysis clinics have dedicated water purification systems to produce water and bicarbonate concentrate. Water and bicarbonate concentrate are essential ingredients for making dialysate, the liquid that removes waste material from the blood. Within the U.S., there are approximately 6,000 clinics with 100,000 dialysis machines providing over 50 million dialysis treatments to 400,000 patients annually.

Medicare is the main payer for dialysis treatment in the U.S. To be eligible for Medicare reimbursement, dialysis centers must meet the minimum standards for water and bicarbonate concentrate quality set by the Association for the Advancement of Medical Instrumentation, or AAMI, the American National Standards Institute, or ANSI and the International Standards Organization, or ISO. We anticipate that the stricter standards approved by these organizations in 2009 will be adopted by Medicare in the near future.

Published studies have shown that the use of ultrapure dialysate can reduce the overall need for erythropoietin stimulating agents, or ESAs, expensive drugs used in conjunction with HD. By reducing the level of dialysate contaminants, specifically cytokine-inducing substances that can pass into a patient's blood stream, the stimulation of inflammation-inducing cytokines is reduced, thus reducing systemic inflammation. When inflammation is low, inflammatory morbidities are reduced and a patient's responsiveness to erythropoietin is enhanced, consequently the overall need for ESAs is reduced.

We believe that our ultrafilters are attractive to dialysis centers because they exceed currently approved and newly proposed standards for water and bicarbonate concentrate purity, assist in achieving those standards and may help dialysis centers reduce costs associated with the amount of ESA required to treat a patient. Our in-line filters are easily installed into the fluid circuits supplying water and bicarbonate concentrate just prior to entering each dialysis machine.

During March 2014 we signed a non-exclusive distributor agreement with Mar Cor Purification, a wholly-owned subsidiary of Cantel Medical Corp., to distribute our dialysis ultrafilters to U.S. and Canadian dialysis clinics. In July 2014, we received notification from Health Canada Therapeutic Products Directorate Medical Devices Bureau that we were successfully issued a license for our Single Stage Ultrafilter.

Dialysis Centers - Blood. The current standard of care in the U.S. for patients with chronic renal failure is HD, a process in which toxins are cleared via diffusion. Patients typically receive HD treatment at least 3 times weekly for 3-4 hours per treatment. HD is most effective in removing smaller, easily diffusible toxins. For patients with acute renal failure, the current standard of care in the U.S. is hemofiltration, or HF, a process where toxins are cleared via convection. HF offers a much better removal of larger sized toxins when compared to HD. However, HF treatment is performed on a daily basis, and typically takes 12-24 hours.

Hemodiafiltration, or HDF, is an alternative dialysis modality that combines the benefits of HD and HF into a single therapy by clearing toxins using both diffusion and convection. Though not widely used in the U.S., HDF is much more prevalent in Europe and is performed in approximately 16% of patients. Clinical experience and literature show the following clinical and patient benefits of HDF:

·Enhanced clearance of middle and large molecular weight toxins

·Improved survival - up to a 35% reduction in mortality risk

·Reduction in the occurrence of dialysis-related amyloidosis

·Reduction in inflammation

·Reduction in medication such as EPO and phosphate binders

·Improved patient quality of life

·Reduction in number of hospitalizations and overall length of stay

However, like HF, HDF can be resource intensive and can require a significant amount of time to deliver one course of treatment.

We have developed a modified approach to HDF that we believe is more patient-friendly, less resource-intensive, and can be used in conjunction with current HD machines. We refer to our approach as an online mid-dilution hemodiafiltration (mid-dilution HDF) system and it consists of our OLpūr H2H Module and OLpūr MD 220 Hemodiafilter. The OLpūr H2H HDF Module and OLpūr MD 220 Hemodiafilter are cleared by the FDA to market for use with a ultrafiltration controlled hemodialysis machine that provides ultrapure dialysate in accordance with current ANSI/AAMI/ISO standards, for the treatment of patients with chronic renal failure in the United States. Our on-line mid-dilution HDF system is the only on-line mid-dilution HDF system of its kind to be cleared by the FDA to date.

We completed preparation of our OLpūr H2H HDF Modules and have manufactured lots of our OLpūr MD220 Hemodiafilters, H2H Substitution filters and H2H water filters. We also finalized our service contract to support the commercialization of our system in the field. In May 2014, DaVita Healthcare Partners announced that it had commenced delivering and evaluating on-line mid-dilution hemodiafiltration treatments to select patients at DaVita's North Colorado Springs Clinic. In February 2015, we announced that, in the course of the evaluation, DaVita informed Nephros that they would require additional validation of the system. Nephros and DaVita agreed upon a protocol for the additional validation work which was completed in March. We have submitted the data report to DaVita, and have been informed that it is still under review. Upon confirmatory review of the additional validation work, it is anticipated that DaVita will continue its evaluation. In March 2015, we announced that the Renal Research Institute, a research division of Fresenius Medical Care, was conducting an ongoing evaluation of our hemodiafiltration system in its clinic. We also anticipate evaluating our on-line mid-dilution HDF system at other clinics throughout the U.S. with the intent of developing a better understanding of how our system best fits into the current clinical and economic ESRD treatment paradigm with the ultimate goals of improving the quality of life for the patient, reducing overall expenditure compared to other dialysis modalities, minimizing the impact on nurse work flow at the clinic, and demonstrating the phamacoeconomic benefit of the HDF technology to the U.S. healthcare system, as has been done in Europe with other HDF systems.

Military and Outdoor Recreation. Water is a key requirement for the soldier to be fully mission-capable. The need for water supplies and immediate on-site water purification is critical to enhance the ability to operate in any environment. Currently, the military is heavily reliant on the use of bottled water to support its soldiers in the field. Bottled water is not always available, is very costly to move, resource intensive, and prone to constant supply disruptions. Soldiers conducting operations in isolated and rugged terrain must be able to use available local water sources when unable to resupply from bulk drinking water sources or bottled water. Therefore, the soldier needs the capability to purify water from indigenous water sources in the absence of available potable water. Soldiers must have the ability to remove microbiological contaminants in the water to levels specified by the Environmental Protection Agency, or EPA.

We developed our individual water treatment device, or IWTD, in both in-line (HydraGuard in-line) and point-of-use (HydraGuard Universal) configurations. Our IWTD allows a soldier in the field to derive drinking water from any fresh water source. This enables the soldier to remain hydrated which will maintain mission effectiveness and unit readiness, and extend mission reach. Our IWTD is one of the few portable filters that has been validated by the military to meet the NSF Protocol P248 standard. It has also been approved by U.S. Army Public Health Command and U.S. Army Test and Evaluation Command for deployment.

In May 2015, we entered into a Sublicense Agreement with CamelBak Products, LLC, or CamelBak. Under this Sublicense Agreement, we granted CamelBak an exclusive, non-transferable, worldwide (with the exception of Italy) sublicense and license, in each case solely to market, sell, distribute, import and export the HydraGuard individual water treatment devices. In exchange for the rights granted to CamelBak, CamelBak agreed to pay us a percentage of the gross profit on any sales made to a branch of the U.S. military, subject to certain exceptions, and to pay us a fixed per-unit fee for any other sales made. CamelBak is also required to meet or exceed certain minimum annual fees payable to us, and if such fees are not met or exceeded, we may convert the exclusive sublicense to a non-exclusive sublicense with respect to non-U.S. military sales. Additionally, we have the right to terminate the sublicense with respect to a specific geographic area if CamelBak enters into an agreement or otherwise obtains or develops the rights to market or sell a product that competes with the HydraGuard individual water treatment devices in such geographic area. If we do not terminate the sublicense in such situation, and the sales of the competing product in such geographic area exceed the sales of the HydraGuard individual water treatment devices in such geographic area area exceed the sales of the HydraGuard individual water treatment devices in the same area during any full calendar year, we may convert the exclusive sublicense to a non-exclusive sublicense solely with respect to such geographic area.

Commercial Facilities. In October 2013, we announced the voluntary recalls of our point of use, or POU, and DSU in-line ultrafilters used in hospital water treatment applications. As a result, we recalled all production lots of our POU filters, and also requested that customers remove and discard certain labeling/promotional materials for the products. In addition, for the DSU in-line ultrafilter, we also requested that customers remove and discard certain labeling/promotional materials for the product. These voluntary recalls did not affect our dialysis products. In March, 2014, we requested termination of our product recall from the FDA. As of the date of this report, there has been no additional communication from the FDA regarding our request.

We have launched our new NanoGuard-D and NanoGuard-S in-line ultrafilters for the filtration of water which is to be used for non-medical drinking and washing in non-transient non-community water systems, or commercial facilities. The NanoGuard-D and NanoGuard-S trap particulates greater than 5nm in size and the water permeability (the ease at which water can pass through a membrane at a given pressure) of the membrane is higher than membranes with a similar pore size. This provides improved flow performance relative to the physical size of the filter. We anticipate that the filters will be used as a component of a facility water treatment system and also for filtering water to be used in ice machines and soda fountains.

With respect to public drinking water systems, EPA regulations make a distinction between community and non-community systems. A community water system supplies water to the same population year-round. It serves at least 25 people at their primary residences or at least 15 residences that are primary residences. Community water systems include those that supply municipalities, mobile home parks, and residential sub-divisions.

Non-community water systems are composed of transient and non-transient water systems:

Transient non-community water systems provide water to 25 or more people for at least 60 days/year; however, not to the same people and not on a regular basis, e.g. gas stations, campgrounds.

Non-transient non-community water systems regularly supply water to at least 25 of the same people at least six •months per year, but not year-round, e.g. office buildings, schools, hotels and factories which have their own water systems.

Corporate Information

We were incorporated under the laws of the State of Delaware in April 1997. Our principal executive offices are located at 41 Grand Avenue, River Edge, New Jersey, 07661, and our telephone number is (201) 343-5202. We also have an office in Dublin, Ireland. For more information about Nephros, please visit our website at www.nephros.com.

Where You Can Find More Information

We make available free of charge on our website (<u>http://www.nephros.com</u>) our Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. We provide electronic or paper copies of filings free of charge upon request. The public may read and copy any materials filed with the SEC at the SEC's Public Reference Room at 100 F Street N.E. Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers that file with the SEC at <u>http://www.sec.gov</u>.

The Offering

The following summary describes the principal terms of the rights offering, but is not intended to be complete.

| Securities Offered | 2,751,448 shares of common stock, including 917,149 shares of common stock issuable upon exercise of certain outstanding warrants. |
|--|---|
| Exercise Price and Term of Warrants | The warrants have an exercise price of \$0.85 per share and are exercisable at any time prior to May 19, 2020. For a more complete description of the terms of the warrants, see "Description of 2015 Private Placement – The 2015 Warrants." |
| Use of Proceeds | We will receive none of the proceeds from the sale of the shares by the selling stockholders, except for the warrant exercise price upon exercise of the warrants, which we expect to use to further |

develop our products and for general for working capital purposes.

Risk Factors The acquisition of our common stock involves substantial risks. See "Risk Factors" beginning on page 6 of this prospectus.

OTCQB Symbol NEPH

Recent Developments

On May 12, 2015, we entered into a securities purchase agreement with various accredited investors pursuant to which we agreed to sell in a private placement a total of 1,834,299 units of our securities, each unit consisting of one share of our common stock and a five-year warrant to purchase one-half of one share of our common stock. The closing of the private placement occurred on May 19, 2015. We refer to the offer and sale of our securities pursuant to the purchase agreement as our "2015 Private Placement." The purchase price for each unit was \$0.67. The warrants are exercisable at a price of \$0.85 per warrant share. The sale of the shares and warrants resulted in aggregate gross proceeds of approximately \$1.23 million, before deducting expenses.

RISK FACTORS

An investment in our securities involves a high degree of risk. You should consider carefully the following information about these risks, together with the other information contained in this prospectus, before you decide whether to buy our securities. The occurrence of any of the following risks could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Our Company

If we are unable to maintain effective internal control over financial reporting, our ability to produce accurate financial statements on a timely basis could be impaired and the market price of our securities may be negatively affected.

Section 404 of the Sarbanes-Oxley Act of 2002 requires us to maintain internal control over financial reporting and to report any material weaknesses in such internal control. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented or detected and corrected on a timely basis. We also are required to furnish a report by management on the effectiveness of our internal control over financial reporting. We perform system and process evaluation and testing of our internal controls over financial reporting to allow management to prepare and furnish such a report.

In connection with the preparation of our consolidated financial statements for the year ended December 31, 2014, we discovered that we had improperly accounted for our warrants as components of equity instead of as derivative liabilities, and our management and auditors determined that this resulted from a material weakness in internal control over financial reporting. This material weakness led to the need for the restatement of (i) our audited consolidated financial statements as of and for the years ended December 31, 2013, 2012, 2011, 2010 and 2009, including the cumulative effect as of January 1, 2009, and (ii) our unaudited condensed consolidated interim financial statements as of, and for each of the quarterly periods ended, March 31, June 30, and September 30, in the years 2014 and 2013.

If we are unable to maintain proper and effective internal control over financial reporting, we may not be able to produce timely and accurate financial statements. If that were to happen, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our securities could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities.

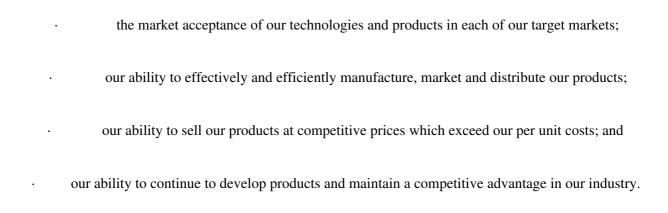
Our independent registered public accounting firm, in its audit report related to our financial statements for the fiscal year ended December 31, 2014, expressed substantial doubt about our ability to continue as a going concern.

Our independent registered public accounting firm has included an explanatory paragraph in its report on our consolidated financial statements included in this prospectus expressing doubt as to our ability to continue as a going concern. The accompanying consolidated financial statements have been prepared assuming that we will continue as a going concern. However, there can be no assurance that we will be able to do so. Our recurring losses and difficulty in generating sufficient cash flow to meet our obligations and sustain our operations raise substantial doubt about our ability to continue as a going concern, and our consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. Based on our current cash flow projections, we will need to raise additional funds through either the licensing or sale of our technologies or the additional public or private offerings of our securities. However, there is no guarantee that we will be able to obtain further financing, or do so on reasonable terms. If we are unable to raise additional funds on a timely basis, or at all, we would be materially adversely affected.

We have a history of operating losses and a significant accumulated deficit, and we may not achieve or maintain profitability in the future.

As of March 31, 2015, we had an accumulated deficit of approximately \$113,922,000, as a result of historical operating losses. We expect to continue to incur additional losses for the foreseeable future as a result of a high level of operating expenses, significant up-front expenditures, including the cost of clinical trials, production and marketing activities and very limited revenue from the sale of our products. We began sales of our first product in March 2004, and we may never realize sufficient revenues from the sale of our products or be profitable. Each of the following factors, among others, may influence the timing and extent of our profitability, if any:

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If we violate any provisions of the FDC Act or any other statutes or regulations, then we could be subject to enforcement actions by the FDA or other governmental agencies.

We face a significant compliance burden under the FDC Act and other applicable statutes and regulations which govern the testing, labeling, storage, record keeping, distribution, sale, marketing, advertising and promotion of our medically approved products.

On October 30, 2013, we initiated a voluntary recall of our point of use (POU) and DSU in-line ultrafilters used in hospital water treatment applications. We initiated the voluntary recall of these POU filters because the FDA informed us that promotional materials for these non-medical water filtration products were determined to promote claims which constitute marketing the product as a medical device. In addition, we received reports from one customer of high bacterial counts that may be associated with the breakage of fiber in four filters. According to the reports received, one death and one infection may have occurred due to the failure mode associated with this voluntary recall. Investigation into these reports is ongoing. Prior to receiving the complaints mentioned previously, since we began marketing the products, we received 29 additional complaints of high bacterial counts that may be associated with the breakage of filter fiber. We have had no reports of adverse events associated with these 29 complaints. We have recalled all production lots of these POU filters, and are also requesting that customers remove and discard certain labeling/promotional materials for the products. We initiated the voluntary recall of the DSU in-line ultrafilter because the FDA informed us that promotional materials for these non-medical water filtration products were determined to promote claims which constitute marketing the product as a medical device. We are requesting that customers remove and discard certain labeling/promotional materials for the product as a medical device. We are requesting that customers remove and discard certain to promote claims which constitute marketing the product as a medical device. We are requesting that customers remove and discard certain labeling/promotional materials for the product.

On May 28, 2015, we received a warning letter from the FDA resulting from an October 2014 inspection of our facility in River Edge, New Jersey. The warning letter alleges deficiencies relating to our compliance with the Quality System regulation and the Medical Device Reporting regulation. We take the matters identified in the warning letter seriously and are in the process of evaluating the corrective actions required to address the matters raised in the warning letter. We responded to the warning letter within 15 business days as requested by the FDA, and intend to work diligently and expeditiously to resolve the issues raised by the FDA. The warning letter does not restrict the manufacture, production or shipment of any of our products, nor require the withdrawal of any product from the

marketplace.

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If we violate the FDC Act or other regulatory requirements (either with respect to our POU or DSU ultrafilters or otherwise) at any time during or after the product development and/or approval process or we fail to promptly address the issues raised in the warning letter discussed above, we could be subject to enforcement actions by the FDA or other agencies, including:

fines;

injunctions;

civil penalties;

recalls or seizures of products;

total or partial suspension of the production of our products;

withdrawal of any existing approvals or pre-market clearances of our products;

refusal to approve or clear new applications or notices relating to our products;

recommendations that we not be allowed to enter into government contracts; and

criminal prosecution.

Any of the above could have a material adverse effect on our business, financial condition and results of operations.

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We cannot assure you that our products will be safe or that there will not be product-related deaths, serious injuries or product malfunctions. Further, we are required under applicable law to report any circumstances relating to our medically approved products that could result in deaths or serious injuries. These circumstances could trigger recalls, class action lawsuits and other events that could cause us to incur expenses and may also limit our ability to generate revenues from such products.

We cannot assure you that our products will prove to be safe or that there will not be product-related deaths or serious injuries or product malfunctions, which could trigger recalls, class action lawsuits and other events that could cause us to incur significant expenses, limit our ability to market our products and generate revenues from such products or cause us reputational harm.

In particular, the voluntary recalls of the POU and DSU in-line ultrafilters used in hospital water treatment applications announced on October 30, 2013 and the related circumstances could subject us to claims or proceedings by consumers, the FDA or other regulatory authorities which may adversely impact our sales and revenues.

Under the FDC Act, we are required to submit medical device reports, or MDRs, to the FDA to report device-related deaths, serious injuries and malfunctions of medically approved products that could result in death or serious injury if they were to recur. Depending on their significance, MDRs could trigger events that could cause us to incur expenses and may also limit our ability to generate revenues from such products, such as the following:

information contained in the MDRs could trigger FDA regulatory actions such as inspections, recalls and patient/physician notifications;

because the reports are publicly available, MDRs could become the basis for private lawsuits, including class actions; and

· if we fail to submit a required MDR to the FDA, the FDA could take enforcement action against us.

If any of these events occur, then we could incur significant expenses and it could become more difficult for us to market and sell our products and to generate revenues from sales. Other countries may impose analogous reporting requirements that could cause us to incur expenses and may also limit our ability to generate revenues from sales of our products.

Product liability associated with the production, marketing and sale of our products, and/or the expense of defending against claims of product liability, could materially deplete our assets and generate negative publicity which could impair our reputation.

The production, marketing and sale of kidney dialysis and water-filtration products have inherent risks of liability in the event of product failure or claim of harm caused by product operation. In particular, the voluntary recalls of the POU and DSU in-line ultrafilters used in hospital water treatment applications announced on October 30, 2013 and the related circumstances could subject us to claims or proceedings by consumers, the FDA or other regulatory authorities which may adversely impact our sales and revenues. Furthermore, even meritless claims of product liability may be costly to defend against. Although we have acquired product liability insurance for our products, we may not be able to maintain or obtain this insurance on acceptable terms or at all. Because we may not be able to obtain insurance that provides us with adequate protection against all potential product liability claims, a successful claim in excess of our insurance coverage could materially deplete our assets. Moreover, even if we are able to obtain adequate insurance, any claim against us could generate negative publicity, which could impair our reputation and adversely affect the demand for our products, our ability to generate sales and our profitability.

Some of the agreements that we may enter into with manufacturers of our products and components of our products may require us:

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to obtain product liability insurance; or

to indemnify manufacturers against liabilities resulting from the sale of our products.

For example, the agreement with our contract manufacturer, or CM, requires that we obtain and maintain certain minimum product liability insurance coverage and that we indemnify our CM against certain liabilities arising out of our products that they manufacture, provided they do not arise out of our CM's breach of the agreement, negligence or willful misconduct. If we are not able to obtain and maintain adequate product liability insurance, then we could be in breach of these agreements, which could materially adversely affect our ability to produce our products and generate revenues. Even if we are able to obtain and maintain product liability insurance, if a successful claim in excess of our insurance coverage is made, then we may have to indemnify some or all of our manufacturers for their losses, which could materially deplete our assets.

We face significant challenges in obtaining market acceptance of our products, which could adversely affect our potential sales and revenues.

We do not yet have an established market or customer base for our products. Acceptance of our products in the marketplace by both potential users, including chronic renal failure patients, and potential purchasers, including nephrologists, dialysis clinics and other health care providers, is uncertain, and our failure to achieve sufficient market acceptance will significantly limit our ability to generate revenue and be profitable. Market acceptance will require substantial marketing efforts and the expenditure of significant funds by us to inform dialysis patients and nephrologists, dialysis clinics and other health care providers of the benefits of using our products. We may encounter significant clinical and market resistance to our products and our products may never achieve market acceptance. We may not be able to build key relationships with physicians, clinical groups and government agencies, pursue or increase sales opportunities in Europe or elsewhere, or be the first to introduce hemodiafiltration therapy in the United States. Product orders may be cancelled, patients or customers currently using our products may cease to do so and patients or customers expected to begin using our products may not. Factors that may affect our ability to achieve acceptance of our chronic renal failure therapy products in the marketplace include whether:

such products will be safe for use;

such products will be effective;

such products will be cost-effective;

we will be able to demonstrate product safety, efficacy and cost-effectiveness;

• there are unexpected side effects, complications or other safety issues associated with such products; and

• government or third party reimbursement for the cost of such products is available at reasonable rates, if at all.

Acceptance of our water filtration products in the marketplace is also uncertain, and our failure to achieve sufficient market acceptance and sell such products at competitive prices will limit our ability to generate revenue and be profitable. Our water filtration products and technologies may not achieve expected reliability, performance and endurance standards. Our water filtration products and technology may not achieve market acceptance, including among hospitals, or may not be deemed suitable for other commercial, military, industrial or retail applications.

Many of the same factors that may affect our ability to achieve acceptance of our chronic renal failure therapy products in the marketplace will also apply to our water filtration products, except for those related to side effects, clinical trials and third party reimbursement.

If we are not able to successfully scale-up production of our products, then our sales and revenues will suffer.

In order to commercialize our products, we need to be able to produce them in a cost-effective way on a large scale to meet commercial demand, while maintaining extremely high standards for quality and reliability. The extent to which we fail to successfully commercialize our products will limit our ability to be profitable.

We expect to rely on a limited number of independent manufacturers to produce our products. Our manufacturers' systems and procedures may not be adequate to support our operations and may not be able to achieve the rapid execution necessary to exploit the market for our products. Our manufacturers could experience manufacturing and control problems as they begin to scale-up our future manufacturing operations, if any, and we may not be able to scale-up manufacturing in a timely manner or at a commercially reasonable cost to enable production in sufficient quantities. If we experience any of these problems with respect to our manufacturers' initial or future scale-ups of manufacturing operations, then we may not be able to have our products manufactured and delivered in a timely manner. Our products are new and evolving, and our manufacturers may encounter unforeseen difficulties in manufacturing them in commercial quantities or at all.

If we cannot develop adequate distribution, customer service and technical support networks, then we may not be able to market and distribute our products effectively and/or customers may decide not to order our products. In either case, our sales and revenues will suffer.

Our strategy requires us to distribute our products and provide a significant amount of customer service and maintenance and other technical service. To provide these services, we have begun, and will need to continue, to develop a network of distribution and a staff of employees and independent contractors in each of the areas in which we intend to operate. We cannot assure that we will be able to organize and manage this network on a cost-effective basis. If we cannot effectively organize and manage this network, then it may be difficult for us to distribute our products and to provide competitive service and support to our customers, in which case customers may be unable, or decide not, to order our products and our sales and revenues will suffer.

We have limited experience selling our products to healthcare facilities, and we might be unsuccessful in increasing our sales.

Our business strategy depends in part on our ability to sell our products to hospitals and other healthcare facilities that include dialysis clinics. We have limited experience with respect to sales and marketing. If we are unsuccessful at manufacturing, marketing and selling our products, our operations and potential revenues will be materially adversely affected.

We cannot sell our products, including certain modifications thereto, until we obtain the requisite regulatory approvals and clearances in the countries in which we intend to sell our products. If we fail to receive, or experience a significant delay in receiving, such approvals and clearances, then we may not be able to get our products to market and enhance our revenues.

Our business strategy depends in part on our ability to get our products into the market as quickly as possible. We have obtained a Conformité Européene, or CE, mark, which demonstrates compliance with the relevant European Union requirements and is a regulatory prerequisite for selling our products in the European Union and certain other countries that recognize CE marking (collectively, "European Community"), for our OLpūr mid dilution hemodiafilter series product and our Dual Stage Ultrafilter. We have not yet obtained the CE mark for any of our other products. On April 30, 2012, we announced that we received clearance from the FDA to market our OLpūr MD220 Hemodiafilter and OLpūr H2H Module for use with a hemodialysis machine that provides ultrapure dialysate in accordance with current ANSI/AAMI/ISO standards, for the treatment of chronic renal failure patients. We have not begun to broadly market these products and are actively seeking a commercialization partner in the U.S.

There is no assurance that any existing products that have not yet been approved, or any new products developed by us in the future, will be approved for marketing. The clearance and/or approval processes can be lengthy and uncertain and each requires substantial commitments of our financial resources and our management's time and effort. We may not be able to obtain further CE marking or regulatory approval for any of our existing or new products in a timely manner or at all. Even if we do obtain regulatory approval, approval may be only for limited uses with specific classes of patients, processes or other devices. Our failure to obtain, or delays in obtaining, the necessary regulatory clearance and/or approvals would prevent us from selling our affected products in the applicable regions. If we cannot sell some of our products in such regions, or if we are delayed in selling while waiting for the necessary clearance and/or approvals, our ability to generate revenues from these products will be limited.

We intend to market our products globally. Requirements pertaining to the sale of our products vary widely from country to country. It may be very expensive and difficult for us to meet the requirements for the sale of our products in many countries. As a result, we may not be able to obtain the required approvals in a timely manner, if at all. If we cannot sell our products in a particular region, then the size of our potential market could be reduced, which would limit our potential sales and revenues.

Clinical studies that may be required for our products are costly and time-consuming, and their outcome is uncertain.

Before obtaining regulatory approvals for the commercial sale of any of our products, other than those for which we have already received marketing approval in the United States and elsewhere, we must demonstrate through clinical studies that our products are safe and effective.

For products other than those for which we have already received marketing approval, if we do not prove in clinical trials that our products are safe and effective, we will not obtain marketing approvals from the applicable regulatory authorities. In particular, one or more of our products may not exhibit the expected medical benefits, may cause harmful side effects, may not be effective in treating dialysis patients or may have other unexpected characteristics that preclude regulatory approval for any or all indications of use or limit commercial use if approved. The length of time necessary to complete clinical trials varies significantly and is difficult to predict. Factors that can cause delay or termination of our clinical trials include:

slower than expected patient enrollment due to the nature of the protocol, the proximity of subjects to clinical sites, the eligibility criteria for the study, competition with clinical trials for similar devices or other factors;

lower than expected retention rates of subjects in a clinical trial;

·inadequately trained or insufficient personnel at the study site to assist in overseeing and monitoring clinical trials;

delays in approvals from a study site's review board, or other required approvals;

longer treatment time required to demonstrate effectiveness;

lack of sufficient supplies of the product;

adverse medical events or side effects in treated subjects; and

lack of effectiveness of the product being tested.

Even if we obtain positive results from clinical studies for our products, we may not achieve the same success in future studies of such products. Data obtained from clinical studies are susceptible to varying interpretations that could delay, limit or prevent regulatory approval. In addition, we may encounter delays or rejections based upon changes in regulatory policy for device approval during the period of product development and regulatory review of each submitted new device application. Moreover, regulatory approval may entail limitations on the indicated uses of the device. Failure to obtain requisite governmental approvals or failure to obtain approvals of the scope requested will delay or preclude our licensees or marketing partners from marketing our products or limit the commercial use of such products and will have a material adverse effect on our business, financial condition and results of operations.

In addition, some or all of the clinical trials we undertake may not demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals, which could prevent or delay the creation of marketable products. Our product development costs will increase if we have delays in testing or approvals, if we need to perform more, larger or different clinical trials than planned or if our trials are not successful. Delays in our clinical trials may harm our financial results and the commercial prospects for our products. Additionally, we may be unable to complete our clinical trials if we are unable to obtain additional capital.

We may be required to design and conduct additional clinical trials.

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We may be required to design and conduct additional clinical trials to further demonstrate the safety and efficacy of our products, which may result in significant expense and delay. Regulatory agencies may require new or additional

clinical trials because of inconclusive results from current or earlier clinical trials, a possible failure to conduct clinical trials in complete adherence to certain regulatory standards, the identification of new clinical trial endpoints, or the need for additional data regarding the safety or efficacy of our products. It is possible that regulatory authorities may not ultimately approve our products for commercial sale in any jurisdiction, even if we believe future clinical results are positive.

Significant additional governmental regulation could subject us to unanticipated delays which would adversely affect our sales and revenues.

Our business strategy depends in part on our ability to get our products into the market as quickly as possible. Additional laws and regulations, or changes to existing laws and regulations that are applicable to our business may be enacted or promulgated, and the interpretation, application or enforcement of the existing laws and regulations may change. We cannot predict the nature of any future laws, regulations, interpretations, applications or enforcements or the specific effects any of these might have on our business. Any future laws, regulations, interpretations, applications or enforcements could delay or prevent regulatory approval or clearance of our products and our ability to market our products. Moreover, changes that result in our failure to comply with the requirements of applicable laws and regulations could result in the types of enforcement actions by the FDA and/or other agencies as described above, all of which could impair our ability to have manufactured and to sell the affected products.

Protecting our intellectual property in our technology through patents may be costly and ineffective. If we are not able to adequately secure or enforce protection of our intellectual property, then we may not be able to compete effectively and we may not be profitable.

Our future success depends in part on our ability to protect the intellectual property for our technology through patents. We will only be able to protect our products and methods from unauthorized use by third parties to the extent that our products and methods are covered by valid and enforceable patents or are effectively maintained as trade secrets. Our 18 granted U.S. patents will expire at various times from 2018 to 2027, assuming they are properly maintained.

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The protection provided by our patents, and patent applications if issued, may not be broad enough to prevent competitors from introducing similar products into the market. Our patents, if challenged or if we attempt to enforce them, may not necessarily be upheld by the courts of any jurisdiction. Numerous publications may have been disclosed by, and numerous patents may have been issued to, our competitors and others relating to methods and devices for dialysis of which we are not aware and additional patents relating to methods and devices for dialysis may be issued to our competitors and others in the future. If any of those publications or patents conflict with our patent rights, or cover our products, then any or all of our patent applications could be rejected and any or all of our granted patents could be invalidated, either of which could materially adversely affect our competitive position.

Litigation and other proceedings relating to patent matters, whether initiated by us or a third party, can be expensive and time-consuming, regardless of whether the outcome is favorable to us, and may require the diversion of substantial financial, managerial and other resources. An adverse outcome could subject us to significant liabilities to third parties or require us to cease any related development, product sales or commercialization activities. In addition, if patents that contain dominating or conflicting claims have been or are subsequently issued to others and the claims of these patents are ultimately determined to be valid, then we may be required to obtain licenses under patents of others in order to develop, manufacture, use, import and/or sell our products. We may not be able to obtain licenses under any of these patents on terms acceptable to us, if at all. If we do not obtain these licenses, we could encounter delays in, or be prevented entirely from using, importing, developing, manufacturing, offering or selling any products or practicing any methods, or delivering any services requiring such licenses.

If we file patent applications or obtain patents in foreign countries, we will be subject to laws and procedures that differ from those in the United States. Such differences could create additional uncertainty about the level and extent of our patent protection. Moreover, patent protection in foreign countries may be different from patent protection under U.S. laws and may not be as favorable to us. Many non-U.S. jurisdictions, for example, prohibit patent claims covering methods of medical treatment of humans, although this prohibition may not include devices used for such treatment.

If we are not able to secure and enforce protection of our trade secrets through enforcement of our confidentiality and non-competition agreements, then our competitors may gain access to our trade secrets, we may not be able to compete effectively and we may not be profitable. Such protection may be costly and ineffective.

We attempt to protect our trade secrets, including the processes, concepts, ideas and documentation associated with our technologies, through the use of confidentiality agreements and non-competition agreements with our current employees and with other parties to whom we have divulged such trade secrets. If these employees or other parties breach our confidentiality agreements and non-competition agreements, or if these agreements are not sufficient to protect our technology or are found to be unenforceable, then our competitors could acquire and use information that we consider to be our trade secrets and we may not be able to compete effectively. Policing unauthorized use of our trade secrets is difficult and expensive, particularly because of the global nature of our operations. The laws of other countries may not adequately protect our trade secrets.

If we are not able to maintain sufficient quality controls, then the approval or clearance of our products by the European Union, the FDA or other relevant authorities could be withdrawn, delayed or denied and our sales and revenues will suffer.

Approval or clearance of our products could be withdrawn, delayed or denied by the European Union, the FDA and the relevant authorities of other countries if our manufacturing facilities do not comply with their respective manufacturing requirements. The European Union imposes requirements on quality control systems of manufacturers, which are inspected and certified on a periodic basis and may be subject to additional unannounced inspections. Failure by our manufacturers to comply with these requirements could prevent us from marketing our products in the European Community. The FDA also imposes requirements through quality system requirements, or QSR, regulations, which include requirements for good manufacturing practices, or GMP. Failure by our manufacturers to comply with these requirements could prevent us from obtaining FDA approval of our products and from marketing such products in the United States. Although the manufacturing facilities and processes that we use to manufacture our OLpur MDHDF filter series have been inspected and certified by a worldwide testing and certification agency (also referred to as a notified body) that performs conformity assessments to European Union requirements for medical devices, they have not been inspected by the FDA. A "notified body" is a group accredited and monitored by governmental agencies that inspects manufacturing facilities and quality control systems at regular intervals and is authorized to carry out unannounced inspections. We cannot be sure that any of the facilities or processes we use will comply or continue to comply with their respective requirements on a timely basis or at all, which could delay or prevent our obtaining the approvals we need to market our products in the European Community and the United States.

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To market our products in the European Community, the United States and other countries, where approved, manufacturers of such products must continue to comply or ensure compliance with the relevant manufacturing requirements. Although we cannot control the manufacturers of our products, we may need to expend time, resources and effort in product manufacturing and quality control to assist with their continued compliance with these requirements. In particular, we are in the process of addressing certain issues raised by the FDA in the warning letter received in May 2015 and failure to promptly address these issues could result in regulatory action. If violations of applicable requirements are noted during periodic inspections of the manufacturing facilities of our manufacturers or we fail to address issues raised by the FDA in these inspections, then we may not be able to continue to market the products manufactured in such facilities and our revenues may be materially adversely affected.

We may face significant risks associated with international operations, which could have a material adverse effect on our business, financial condition and results of operations.

We expect to manufacture and to market our products globally. Our international operations are subject to a number of risks, including the following:

- fluctuations in exchange rates of the United States dollar could adversely affect our results of operations;
- we may face difficulties in enforcing and collecting accounts receivable under some countries' legal systems;

local regulations may restrict our ability to sell our products, have our products manufactured or conduct other operations;

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political instability could disrupt our operations;

some governments and customers may have longer payment cycles, with resulting adverse effects on our cash flow; and

some countries could impose additional taxes or restrict the import of our products.

Any one or more of these factors could increase our costs, reduce our revenues, or disrupt our operations, which could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Our Common Stock and Warrants

There currently is a limited trading market for our Common Stock.

We do not currently meet all of the requirements for initial listing of our Common Stock on a registered stock exchange. Our Common Stock is quoted on the OTCQB. Trading in our Common Stock on the OTCQB has been very limited. As a result, an investor may find it difficult to dispose of or to obtain accurate quotations as to the market value of our Common Stock, and our Common Stock may be less attractive for margin loans, for investment by financial institutions, as consideration in future capital raising transactions or other purposes. There is no guarantee that we will ever become listed on the Nasdaq Capital Market, or any other exchange, or that a liquid trading market for our Common Stock will develop.

Our Common Stock could be further diluted as a result of the issuance of additional shares of Common Stock, warrants or options.

In the past we have issued Common Stock and warrants in order to raise money. We have also issued stock options and restricted stock as compensation for services and incentive compensation for our employees, directors and consultants. We have shares of Common Stock reserved for issuance upon the exercise of certain of these securities and may increase the shares reserved for these purposes in the future. Our issuance of additional Common Stock, convertible securities, options and warrants could affect the rights of our stockholders, could reduce the market price of our Common Stock or could result in adjustments to exercise prices of outstanding warrants (resulting in these securities becoming exercisable for, as the case may be, a greater number of shares of our Common Stock), or could obligate us to issue additional shares of Common Stock.

Market sales of large amounts of our Common Stock, or the potential for those sales even if they do not actually occur, may have the effect of depressing the market price of our Common Stock, the supply of Common Stock available for resale could be increased which could stimulate trading activity and cause the market price of our Common Stock to drop, even if our business is doing well. Furthermore, the issuance of any additional shares of our Common Stock or securities convertible into our Common Stock could be substantially dilutive to holders of our Common Stock if they do not invest in future offerings.

The prices at which shares of the Common Stock trade have been and will likely continue to be volatile.

In the two years ended March 31, 2015, our Common Stock has traded at prices ranging from a high of \$1.71 to a low of \$0.30 per share. Due to the lack of an active trading market for our Common Stock, you should expect the prices at which our Common Stock might trade to continue to be highly volatile. The expected volatile price of our stock will make it difficult to predict the value of your investment, to sell your shares at a profit at any given time, or to plan purchases and sales in advance. A variety of other factors might also affect the market price of our Common Stock. These include, but are not limited to:

achievement or rejection of regulatory approvals by our competitors or us;

publicity regarding actual or potential clinical or regulatory results relating to products under development by our competitors or us;

delays or failures in initiating, completing or analyzing clinical trials or the unsatisfactory design or results of these trials;

announcements of technological innovations or new commercial products by our competitors or us;

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developments concerning proprietary rights, including patents;

regulatory developments in the United States and foreign countries;

economic or other crises and other external factors;

period-to-period fluctuations in our results of operations;

threatened or actual litigation;

changes in financial estimates by securities analysts; and

sales of our Common Stock.

We are not able to control many of these factors, and we believe that period-to-period comparisons of our financial results will not necessarily be indicative of our future performance.

In addition, the stock market in general, and the market for medical technology companies in particular, has experienced extreme price and volume fluctuations in recent years that might have been unrelated or disproportionate to the operating performance of individual companies. These broad market and industry factors might seriously harm the market price of our Common Stock, regardless of our operating performance. Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of a company's securities. This litigation, if instituted against us, could result in very substantial costs, divert our management's attention and resources and harm our business, operating results and financial condition.

We have never paid dividends and do not intend to pay cash dividends.

We have never paid dividends on our Common Stock and currently do not anticipate paying cash dividends on our Common Stock for the foreseeable future. Consequently, any returns on an investment in our Common Stock in the foreseeable future will have to come from an increase in the value of the stock itself. As noted above, the lack of an active trading market for our Common Stock will make it difficult to value and sell our Common Stock. While our dividend policy will be based on the operating results and capital needs of our business, it is anticipated that all earnings, if any, will be retained to finance our future operations.

Because we are subject to the "penny stock" rules, you may have difficulty in selling our Common Stock.

Our Common Stock is subject to regulations of the SEC relating to the market for penny stocks. Penny stock, as defined by the Penny Stock Reform Act, is any equity security not traded on a national securities exchange that has a market price of less than \$5.00 per share. The penny stock regulations generally require that a disclosure schedule explaining the penny stock market and the risks associated therewith be delivered to purchasers of penny stocks and impose various sales practice requirements on broker-dealers who sell penny stocks to persons other than established customers and accredited investors. The broker-dealer must make a suitability determination for each purchaser and receive the purchaser's written agreement prior to the sale. In addition, the broker-dealer must make certain mandated disclosures, including the actual sale or purchase price and actual bid offer quotations, as well as the compensation to be received by the broker-dealer and certain associated persons. The regulations applicable to penny stocks may severely affect the market liquidity for your Common Stock and could limit your ability to sell your securities in the secondary market.

Several provisions of the Delaware General Corporation Law, our fourth amended and restated certificate of incorporation, as amended, and our second amended and restated bylaws could discourage, delay or prevent a merger or acquisition, which could adversely affect the market price of our Common Stock.

Several provisions of the Delaware General Corporation Law, our fourth amended and restated certificate of incorporation, as amended, and our second amended and restated bylaws could discourage, delay or prevent a merger or acquisition that stockholders may consider favorable, and the market price of our Common Stock could be reduced as a result. These provisions include:

• authorizing our board of directors to issue "blank check" preferred stock without stockholder approval;

providing for a classified board of directors with staggered, three-year terms;

prohibiting us from engaging in a "business combination" with an "interested stockholder" for a period of three years • after the date of the transaction in which the person became an interested stockholder unless certain provisions are met;

prohibiting cumulative voting in the election of directors;

limiting the persons who may call special meetings of stockholders; and

establishing advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

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As a smaller reporting company with little or no name recognition and with several risks and uncertainties that could impair our business operations, we are not likely to generate widespread interest in our Common Stock. Without widespread interest in our Common Stock, our Common Stock price may be highly volatile and an investment in our Common Stock could decline in value.

Unlike many companies with publicly traded securities, we have little or no name recognition in the investment community. We are a relatively new company and very few investors are familiar with either our company or our products. We do not have an active trading market in our Common Stock, and one might never develop, or if it does develop, might not continue.

Additionally, the market price of our Common Stock may fluctuate significantly in response to many factors, many of which are beyond our control. Risks and uncertainties, including those described elsewhere in this "Risk Factors" section could impair our business operations or otherwise cause our operating results or prospects to be below expectations of investors and market analysts, which could adversely affect the market price of our Common Stock. As a result, investors in our Common Stock may not be able to resell their shares at or above their purchase price and could lose all of their investment.

Securities class action litigation is often brought against public companies following periods of volatility in the market price of such company's securities. We may become subject to this type of litigation in the future. Litigation of this type could be extremely expensive and divert management's attention and resources from running our company.

Our directors, executive officers and Lambda control a significant portion of our stock and, if they choose to vote together, could have sufficient voting power to control the vote on substantially all corporate matters.

As of May 31, 2015, our directors, executive officers and Lambda, our largest stockholder, beneficially owned approximately 48% of our outstanding Common Stock, representing approximately 56% on a fully-diluted basis. As a result of this ownership, Lambda has the ability to exert significant influence over our policies and affairs, including the election of directors. Lambda, whether acting alone or acting with other stockholders, could have the power to elect all of our directors and to control the vote on substantially all other corporate matters without the approval of other stockholders. Furthermore, such concentration of voting power could enable Lambda, whether acting alone or acting with other stockholders, to delay or prevent another party from taking control of our company even where such change of control transaction might be desirable to other stockholders. The interests of Lambda in any matter put before the stockholders may differ from those of any other stockholder.

Future sales of our Common Stock could cause the market price of our Common Stock to decline.

The market price of our Common Stock could decline due to sales of a large number of shares in the market, including sales of shares by Lambda or any other large stockholder, or the perception that such sales could occur. These sales could also make it more difficult or impossible for us to sell equity securities in the future at a time and price that we deem appropriate to raise funds through future offerings of Common Stock. Future sales of our Common Stock by stockholders could depress the market price of our Common Stock.

Shares eligible for future sale may adversely affect the market.

From time to time, certain of our stockholders may be eligible to sell all or some of their shares of Common Stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144 promulgated under the Securities Act, subject to certain limitations. In general, pursuant to Rule 144, non-affiliate stockholders may sell freely after holding their shares for six months and affiliates may sell freely after holding their shares for one year, in each case, subject to current public information, notice and other requirements. Any substantial sales of our Common Stock pursuant to Rule 144 may have a material adverse effect on the market price of our Common Stock.

The market price of our common stock may fall below the exercise price of the warrants issued in connection with the 2015 Private Placement.

The 2015 Warrants are currently exercisable and will expire on May 19, 2020. The market price of our common stock may fall below the exercise price for the 2015 Warrants prior to their expiration. Any 2015 Warrants not exercised by their date of expiration will expire worthless and we will be under no further obligation to the holders of the 2015 Warrants.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this prospectus constitute "forward-looking statements". Such statements include statements regarding the efficacy and intended use of our technologies under development, the timelines and strategy for bringing such products to market, the availability of funding sources for continued development of such products, and our ability to continue as a going concern and other statements that are not historical facts, including statements which may be preceded by the words "intends," "may," "will," "plans," "expects," "anticipates," "projects," "predicts," "estimates," "believes," "hopes," "potential" or similar words. Forward-looking statements are not guarantees of future performance, are

based on certain assumptions and are subject to various known and unknown risks and uncertainties, many of which are beyond our control. Actual results may differ materially from the expectations contained in the forward-looking statements. Factors that may cause such differences include, but are not limited to, the risks that:

we may not be able to continue as a going concern;

the voluntary recalls of point of use and DSU in-line ultrafilters used in hospital water treatment applications • announced on October 30, 2013 and the related circumstances could subject us to claims or proceedings by consumers, the FDA or other regulatory authorities which may adversely impact our sales and revenues;

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we face significant challenges in obtaining market acceptance of our products, which could adversely affect our potential sales and revenues;

there are product-related deaths or serious injuries or product malfunctions, which could trigger recalls, class action ·lawsuits and other events that could cause us to incur expenses and may also limit our ability to generate revenues from such products;

we face potential liability associated with the production, marketing and sale of our products and the expense of •defending against claims of product liability could materially deplete our assets and generate negative publicity which could impair our reputation;

to the extent our products or marketing materials are found to violate any provisions of the FDC Act or any other statutes or regulations then we could be subject to enforcement actions by the FDA or other governmental agencies;

•we may not be able to obtain funding if and when needed or on terms favorable to us in order to continue operations;

we may not have sufficient capital to successfully implement our business plan;

we may not be able to effectively market our products;

we may not be able to sell our water filtration products or chronic renal failure therapy products at competitive prices or profitably;

we may encounter problems with our suppliers, manufacturers and distributors;

we may encounter unanticipated internal control deficiencies or weaknesses or ineffective disclosure controls and procedures;

we may not obtain appropriate or necessary regulatory approvals to achieve our business plan;

products that appeared promising to us in research or clinical trials may not demonstrate anticipated efficacy, safety or cost savings in subsequent pre-clinical or clinical trials;

•we may not be able to secure or enforce adequate legal protection, including patent protection, for our products; and

we may not be able to achieve sales growth in key geographic markets.

More detailed information about the Company and the risk factors that may affect the realization of forward-looking statements, including the forward-looking statements in this prospectus and in our Annual Report on Form 10-K for the year ended December 31, 2014, is set forth in our filings with the SEC, including our other periodic reports filed with the SEC. We urge investors and security holders to read those documents free of charge at the SEC's web site at <u>www.sec.gov</u>. We do not undertake to publicly update or revise our forward-looking statements as a result of new information, future events or otherwise, except as required by law.

DESCRIPTION OF 2015 PRIVATE PLACEMENT

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The following description is qualified in its entirety by the terms and conditions of the Securities Purchase Agreement, which is incorporated by reference into the registration statement of which this prospectus forms a part, and the 2015 Warrants, the form of which is incorporated by reference into the registration statement of which this prospectus forms a part. The following description may not contain all the information with respect to the Securities Purchase Agreement and the 2015 Warrants that is important to you. We encourage you to read each of the Securities Purchase Agreement and the form of 2015 Warrant in its entirety.

On May 12, 2015, we entered into a securities purchase agreement, referred to as the Securities Purchase Agreement, with various accredited investors pursuant to which we agreed to sell in a private placement, referred to as the 2015 Private Placement, a total of 1,834,299 units of our securities, each unit consisting of one share of our common stock and a five-year warrant to purchase one-half of one share of our common stock, referred to as the 2015 Warrants. The closing of the 2015 Private Placement occurred on May 19, 2015. The purchase price for each unit was \$0.67. The 2015 Warrants are exercisable at a price of \$0.85 per warrant share. The sale of the shares and 2015 Warrants resulted in aggregate gross proceeds of approximately \$1.23 million, before deducting expenses.

The 2015 Warrants

The 2015 Warrants have a five-year term and are exercisable at a price of \$0.85 per share, subject to adjustment for stock splits, combinations and recapitalization events. The 2015 Warrants are required to be exercised for cash, provided that if during the term of the 2015 Warrants there is not an effective registration statement under the Securities Act covering the resale of the shares issuable upon exercise of the 2015 Warrants, then the 2015 Warrants may be exercised on a cashless (net exercise) basis.

We will not issue fractional shares of common stock or cash in lieu of fractional shares of common stock upon the exercise of the 2015 warrants. Warrant holders do not have any voting or other rights as a stockholder of our company. No market exists for the 2015 Warrants. We do not intend to list the 2015 Warrants offered hereby on any securities exchange or automated quotation system.

If we (i) pay a dividend or make a distribution on our common stock in shares of common stock, (ii) subdivide our outstanding shares of common stock into a greater number of shares, or (iii) combine our outstanding shares of common stock into a smaller number of shares, then the per share exercise price and the number of warrant shares will be proportionately adjusted so that the aggregate warrant price payable for the then total number of warrant shares available for exercise under the 2015 Warrant will remain consistent.

If we effect any merger or consolidation, or a sale any of all or substantially all of our assets or the majority of our shares are acquired by a third party, or any tender offer or exchange offer is completed, or we effect any reclassification or compulsory share exchange, the holder of the 2015 Warrant will have the right to receive on the exercise of the 2015 Warrant the kind and amount of securities, cash or other property which the holder would have owned or have been entitled to receive immediately after such reorganization, reclassification, consolidation, merger or reorganization had the 2015 Warrant been exercised immediately prior to the effective date of such transaction. Our consummation of any such transaction in which we are not the surviving entity will be contingent upon the assumption of the 2015 Warrants by the surviving party to such transaction.

Registration Rights

Pursuant to the terms of the Securities Purchase Agreement, we agreed to file a registration statement with the SEC in order to register the resale of the shares of common stock issued in the 2015 Private Placement and the shares of common stock issuable upon exercise of the 2015 Warrants. In the event we did not file the registration statement by July 18, 2015, we agreed to pay liquidated damages to the investors in the amount of 1% of such investor's aggregate investment amount each month until the registration statement is filed. The registration statement of which this prospectus forms a part covers the resale of the shares of common stock issued in the 2015 Private Placement, including the shares issued upon the exercise of the 2015 Warrants. We are required to maintain the effectiveness of the registration statement until all of the shares covered thereby are sold or may be sold pursuant to Rule 144 under the Securities Act without volume restrictions.

USE OF PROCEEDS

We will receive none of the proceeds from the sale of the shares by the selling stockholders, except for the warrant exercise price upon exercise of the 2015 Warrants, which would be used to further develop our products and for general working capital purposes.

SELLING STOCKHOLDERS

This prospectus covers the resale by the selling stockholders identified below of 2,751,448 shares of our common stock, of which 917,149 shares are issuable upon the exercise of certain outstanding warrants.

The following table sets forth the number of shares of our common stock beneficially owned by the selling stockholders as of May 31, 2015, and after giving effect to this offering, except as otherwise referenced below.

| Selling Stockholder | Shares beneficially owned before offering (1) | Number of outstanding shares offered by selling stockholder | Number of shares offered by selling stockholder upon exercise of warrants | Beneficia ownership after offering (Number of shares |) 1) | ht |
|---|---|--|--|--|---------|----|
| Senning Stockholder | onening (1) | stockholder | warrants | of shares | 1 01001 | |
| Best Six, LLC (2) | 223,881 | 149,254 | 74,627 | - | * | |
| Bumack LLC (3) | 55,971 | 37,314 | 18,657 | - | * | |
| Crockett-Boragno Trust (4) | 55,971 | 37,314 | 18,657 | - | * | |
| Patricia M. and Preston W. Evans, JTWROS | 22,500 | 15,000 | 7,500 | - | * | |
| Franklin Associates, LLC (5) | 111,945 | 74,630 | 37,315 | - | * | |
| Allan Gordon | 22,500 | 15,000 | 7,500 | - | * | |
| Arlene R. and David Henick (6) | 30,889 | 14,926 | 7,463 | 8,500 | * | |
| Karen Weil Revocable Trust u/a dtd 7/2/10 (7) | 150,000 | 100,000 | 50,000 | - | * | |
| Leon J. Laviolette (8) | 91,850 | 40,000 | 20,000 | 31,850 | * | |
| Stephen Todd Leis | 55,969 | 37,313 | 18,656 | - | * | |
| Hsiao Dee Lieu | 22,500 | 15,000 | 7,500 | - | * | |
| Lincoln Park Capital Fund, LLC (9) | 225,000 | 150,000 | 75,000 | - | * | |
| Theodore James Mallinson (10) | 142,403 | 94,030 | 47,015 | 1,358 | * | |
| Richard Molinsky | 55,971 | 37,314 | 18,657 | - | * | |
| Janet C. Persen (11) | 65,734 | 31,160 | 15,580 | 18,994 | * | |
| Fredric R. Rosenberg | 330,000 | 220,000 | 110,000 | - | * | |
| Matthew Rosenberg (12) | 922,271 | 200,000 | 100,000 | 622,271 | 1.9 | % |
| Michael Rosenberg | 55,971 | 37,314 | 18,657 | - | * | |
| Seligman Rosenberg (13) | 132,939 | 74,626 | 37,313 | 21,000 | * | |
| Lewis Schneider (14) | 1,062,000 | 100,000 | 50,000 | 912,000 | 2.8 | % |
| Robert W. Schubert (15) | 55,875 | 29,850 | 14,925 | 11,100 | * | |
| Joseph Schueller | 404,893 | 100,000 | 50,000 | 254,893 | * | |
| Peter Vasconcelos | 55,971 | 37,314 | 18,657 | - | * | |
| James Waldron | 112,500 | 75,000 | 37,500 | - | * | |
| Norman M. Whitton | 67,164 | 44,776 | 22,388 | - | * | |
| L.E. Luke Wilson (16) | 101,306 | 67,164 | 33,582 | 560 | * | |
| TOTALS | | 1,834,299 | 917,149 | | | |

* denotes less than 1%

Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act, and includes any shares as to which the security or stockholder has sole or shared voting power or investment power, and also any shares which the security or stockholder has the right to acquire within 60 days of the date hereof, whether

- (1) through the exercise or conversion of any stock option, convertible security, warrant or other right. The indication herein that shares are beneficially owned is not an admission on the part of the security or stockholder that he, she or it is a direct or indirect beneficial owner of those shares. Percentage of shares beneficially owned after the resale of all the shares offered by this prospectus assumes there are outstanding 33,145,088 shares of common stock, including all shares offered hereby that are issuable upon exercise of warrants.
- (2) Phyllis Rosenberg holds voting and/or dispositive power over the shares held by the selling stockholder.
- (3) Josh Lebewohl and Jeremy Lebewohl hold voting and/or dispositive power over the shares held by the selling stockholder.
- (4) Michael Crockett, trustee, holds voting and/or dispositive power over the shares held by the selling stockholder.
- (5) Harrison Rosenberg holds voting and/or dispositive power over the shares held by the selling stockholder.
- (6) In addition to the shares offered hereby, beneficial ownership also includes 3,800 shares of our common stock held by Arlene Henick and 4,700 shares of our common stock held by David Henick.
- (7) Karen Weil, trustee, holds voting and/or dispositive power over the shares held by the selling stockholder.
- (8) In addition to the shares offered hereby, beneficial ownership also includes 31,850 shares of our common stock. Joshua Scheinfeld and Jonathan Cope, the principals of Lincoln Park are deemed to be beneficial owners of all of
- (9) shares of common stock owned by Lincoln Park. Messrs. Scheinfeld and Cope have shared voting and dispositive power over the shares being offered under this prospectus.
- (10)In addition to the shares offered hereby, beneficial ownership also includes 1,358 shares of our common stock. Ms. Persen is the spouse of Malcolm Persen, a director of the Company. In addition to the shares offered hereby,
- (11)beneficial ownership also includes 18,994 shares issuable upon the exercise of options to purchase common stock held by Malcolm Persen.

Mr. Rosenberg is a director of the Company. In addition to the shares offered hereby, beneficial ownership also (12)includes 589,695 shares of our common stock and 32,576 shares issuable upon the exercise of options to

- purchase common stock.
- (13)In addition to the shares offered hereby, beneficial ownership also includes 21,000 shares of our common stock.
- (14)In addition to the shares offered hereby, beneficial ownership also includes 912,000 shares of our common stock.
- (15)In addition to the shares offered hereby, beneficial ownership also includes 11,100 shares of our common stock.
- (16) In addition to the shares offered hereby, beneficial ownership also includes 560 shares of our common stock.

DIVIDEND POLICY

We have neither paid nor declared dividends on our common stock since our inception. We do not anticipate paying any dividends on our common stock in the foreseeable future. We expect to retain future earnings, if any, for use in our development activities and the operation of our business. The payment of any future dividends will be subject to the discretion of our board of directors and will depend, among other things, upon our results of operations, financial

condition, cash requirements, prospects and other factors that our board of directors may deem relevant. Additionally, our ability to pay future dividends may be restricted by the terms of any debt financing, tax considerations and applicable law.

MARKET FOR OUR COMMON STOCK

Our common stock is quoted on the OTCQB Marketplace operated by the OTC Markets Group, Inc., or OTCQB, under the symbol "NEPH." The following table sets forth the high and low bid and ask prices for our common stock as reported on the OTCQB for each quarter listed. Such over the counter market quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

| Quarter Ended | High | Low |
|-------------------------------------|--------|--------|
| March 31, 2013 | \$1.49 | \$0.73 |
| June 30, 2013 | \$1.25 | \$0.63 |
| September 30, 2013 | \$1.71 | \$0.85 |
| December 31, 2013 | \$1.25 | \$0.31 |
| March 31, 2014 | \$0.75 | \$0.30 |
| June 30, 2014 | \$1.29 | \$0.35 |
| September 30, 2014 | \$1.19 | \$0.76 |
| December 31, 2014 | \$1.00 | \$0.61 |
| March 31, 2015 | \$0.96 | \$0.50 |
| April 1, 2015 through June 18, 2015 | \$0.80 | \$0.49 |
| | | |

As of May 31, 2015, there were approximately 61 holders of record and approximately 1,000 beneficial holders of our common stock.

On , 2015, the last reported sale price of our common stock on the OTCQB was \$ per share.

PLAN OF DISTRIBUTION

We are registering the shares offered by this prospectus on behalf of the selling stockholders. The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock or interests in shares of common stock or any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. To the extent any of the selling stockholders gift, pledge or otherwise transfer the shares offered hereby, such transferees may offer and sell the shares from time to time under this prospectus, provided that this prospectus has been amended under Rule 424(b)(3) or other applicable provision of the Securities Act to include the name of such transferee in the list of selling stockholders under this prospectus.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

short sales;

through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;

broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

a combination of any such methods of sale; and

any other method permitted pursuant to applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

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In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the warrants by payment of cash, however, we will receive the exercise price of the warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders might be, and any broker-dealers that act in connection with the sale of securities will be, deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act, and any commissions received by such broker-dealers and any profit on the resale of the securities sold by them while acting as principals will be deemed to be underwriting discounts or commissions under the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to keep the registration statement that includes this prospectus effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement that contains this prospectus or (2) the date on which the shares may be sold without registration or restriction pursuant to Rule 144 of the Securities Act.

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

The following discussion includes forward-looking statements about our business, financial condition, and results of operations, including discussions about management's expectations for our business. These statements represent projections, beliefs and expectations based on current circumstances and conditions and in light of recent events and trends, and you should not construe these statements either as assurances of performances or as promises of a given course of action. Instead, various known and unknown factors are likely to cause our actual performance and management's actions to vary, and the results of these variances may be both material and adverse. A list of the known material factors that may cause our results to vary, or may cause management to deviate from its current plans and expectations, is included herein under "Risk Factors" and Item 1A "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2014. The following discussion should also be read in conjunction with the consolidated financial statements and notes included herein.

Restatement

In connection with the audit of our consolidated financial statements for the year ended December 31, 2014, our management further evaluated the warrants under Accounting Standards Codification ("ASC") Subtopic 815-40, "Contracts in Entity's Own Equity." ASC Subtopic 815-40-15 addresses equity versus liability treatment and classification of equity-linked financial instruments, including common stock purchase warrants, and states that a warrant may be classified as a component of equity only if, among other things, the warrant is indexed to the issuer's common stock. Under ASC Subtopic 815-40-15, a warrant is not indexed to the issuer's common stock if the terms of the warrant require an adjustment to the exercise price upon a specified event and that event is not an input to the fair value of the warrant. Based on management's evaluation, our audit committee, in consultation with management and after discussion with WithumSmith+Brown PC, our independent registered public accounting firm, concluded that our warrants are not indexed to our common stock in the manner contemplated by ASC Section 815-40-15 because the transactions that would trigger the Anti-Dilution Adjustment Provision are not inputs to the fair value of the warrants. As a result, we should have classified the warrants as derivative liabilities as of January 1, 2009, the date which ASC Section 815-40-15 was effective. Under this accounting treatment, we are required to measure the fair value of the warrants at the end of each reporting period beginning with the year ended December 31, 2009, with a cumulative effect presented as of January 1, 2009, and recognize changes in the fair value for all periods beginning with January 1, 2009 in our operating results for the current period.

The Company's financial statements as of January 1, 2009 and for the years ended December 31, 2009 to 2013 (the "Prior Financial Statements"), were audited by Rothstein Kass, an independent registered public accounting firm. Though it still exists, Rothstein Kass has ceased practicing public accounting and is therefore no longer able to re-audit the Prior Financial Statements. The report of WithumSmith+Brown PC regarding the audit of our financial statements as of and for the year ended December 31, 2014, included in this prospectus includes a statement that such firm has only been engaged to audit the adjustments required by the restatement of the Prior Financial Statements, and not the Prior Financial Statements taken as a whole, as to which it expresses no opinion.

Our accounting for the warrants as components of equity instead of as derivative liabilities did not have any effect on our previously reported revenue, operating expenses, operating income, cash flows or cash.

We have not amended our previously filed Annual Reports on Form 10-K or Quarterly Reports on Form 10-Q for the periods affected by the restatement. The financial information that has been previously filed or otherwise reported for these periods is superseded by the information in our Annual Report on Form 10-K for the year ended December 31, 2014, and the financial statements and related financial information contained in such previously filed reports should no longer be relied upon.

The restatement is more fully described in Note 2 of the notes to the financial statements for the year ended December 31, 2014 included herein.

Business Overview

Nephros is a commercial stage medical device company that develops and sells high performance liquid purification filters. Our filters, which we call ultrafilters, are primarily used in dialysis centers for the removal of biological contaminants from water, bicarbonate concentrate and/or blood. Because our ultrafilters capture contaminants as small as 0.005 microns in size, they minimize exposure to a wide variety of bacteria, viruses, fungi, parasites, and endotoxins.

Our ultrafilters use proprietary hollow fiber technology. We believe the hollow fiber design allows our ultrafilters to optimize the three elements critical to filter performance:

Filtration - as low as 0.005 microns

Flow rate - minimal disruption

Filter life - up to 12 months

We were founded in 1997 by healthcare professionals affiliated with Columbia University Medical Center/New York-Presbyterian Hospital to develop and commercialize an alternative method to hemodialysis, or HD. We have extended our filtration technologies to meet the demand for liquid purification in other areas, in particular water purification.

The following trends, events and uncertainties may have a material impact on our potential sales, revenue and income from operations:

the market acceptance of our products in the United States and of our technologies and products in each of our target markets;

- our ability to effectively and efficiently manufacture, market and distribute our products;
- our ability to sell our products at competitive prices which exceed our per unit costs;
 - the consolidation of dialysis clinics into larger clinical groups; and

the current U.S. healthcare plan is to bundle reimbursement for dialysis treatment which may force dialysis clinics to change therapies due to financial reasons.

To the extent we are unable to succeed in accomplishing the foregoing, our sales could be lower than expected and dramatically impair our ability to generate income from operations.

Recently Adopted Accounting Pronouncements

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In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers," related to revenue recognition. The underlying principle of the new standard is that a business or other organization will recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects what it expects in exchange for the goods or services. The standard also requires more detailed disclosures and provides additional guidance for transactions that were not addressed completely in prior accounting guidance. ASU 2014-09 provides alternative methods of initial adoption, and it is effective for annual reporting periods beginning after December 15, 2016, and interim periods within those annual periods. Early adoption is not permitted. We are currently reviewing the revised guidance and assessing the potential impact on our consolidated financial statements.

In August 2014, the FASB issued ASU No. 2014-15, "Presentation of Financial Statements - Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern." ASU 2014-15 provides guidance about management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and sets rules for how this information should be disclosed in the financial statements. ASU 2014-15 is effective for annual periods ending after December 15, 2016 and interim periods thereafter. Early adoption is permitted. We are currently evaluating any impact the adoption of ASU 2014-15 might have on our consolidated financial statements.

In April 2015, the FASB issued ASU No. 2015-03, "Interest – Imputation of Interest (Subtopic 2015-03): Simplifying the Presentation of Debt Issuance Costs" related to the presentation requirements for debt issuance costs and debt discount and premium. ASU 2015-03 requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The recognition and measurement guidance for debt issuance costs are not affected by ASU 2015-03. ASU 2015-03 is effective for annual and interim periods beginning after December 15, 2015. Early adoption of the amendments in ASU 2015-03 is permitted for financial statements that have not been previously issued. We do not believe that the adoption of ASU 2015-03 will have a significant impact on our consolidated financial statements.

Going Concern

Our independent registered public accounting firm has included an explanatory paragraph in their report on our consolidated financial statements included in this prospectus which expressed doubt as to our ability to continue as a going concern. The accompanying consolidated financial statements have been prepared assuming that we will continue as a going concern. However, there can be no assurance that we will be able to do so. Our recurring operating losses and difficulty in generating sufficient cash flow to meet our obligations and sustain our operations raise substantial doubt about our ability to continue as a going concern, and our consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of financial statements in accordance with generally accepted accounting principles in the United States requires application of management's subjective judgments, often requiring the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. Our actual results may differ substantially from these estimates under different assumptions or conditions. While our significant accounting policies are described in more detail in the notes to consolidated financial statements included in this prospectus, we believe that the following accounting policies require the application of significant judgments and estimates.

Revenue Recognition

Revenue is recognized in accordance with Accounting Standards Codification ("ASC") Topic 605. Four basic criteria must be met before revenue can be recognized: (i) persuasive evidence that an arrangement exists; (ii) delivery has occurred or services have been rendered; (iii) the fee is fixed or determinable; and (iv) collectability is reasonably assured.

We recognize revenue related to product sales when delivery is confirmed by our external logistics provider and the other criteria of ASC Topic 605 are met. Product revenue is recorded net of returns and allowances. All costs and duties relating to delivery are absorbed by us. Shipments for all products are currently received directly by our customers.

We are recognizing the remaining deferred revenue under the Bellco license agreement on a straight line basis over the remaining eighty-four month expected obligation period which ends on December 31, 2021. Any difference between payments received and recognized revenue is reported as deferred revenue.

Deferred revenue on the accompanying December 31, 2014 consolidated balance sheet is approximately \$487,000 and is related to the Bellco license agreement. We have recognized approximately \$2,589,000 of revenue related to this license agreement to date and approximately \$834,000 for the year ended December 31, 2014, resulting in \$487,000 being deferred over the remainder of the expected obligation period. We amortize the deferred revenue monthly over the expected obligation period which ends on December 31, 2021. As a result, expected revenue to be recognized will be approximately \$70,000 in each of the next seven years.

Stock-Based Compensation

We account for stock-based compensation in accordance with ASC 718 by recognizing the fair value of stock-based compensation in net income. The fair value of our stock option awards are estimated using a Black-Scholes option valuation model. This model requires the input of highly subjective assumptions and elections including expected stock price volatility and the estimated life of each award. In addition, the calculation of compensation costs requires that we estimate the number of awards that will be forfeited during the vesting period. The fair value of stock-based awards is amortized over the vesting period of the award. For stock awards that vest based on performance conditions (e.g. achievement of certain milestones), expense is recognized when it is probable that the condition will be met.

Warrants

We account for stock warrants as either equity instruments or derivative liabilities depending on the specific terms of the warrant agreement. Stock warrants that allow for cash settlement or provide for modification of the warrant exercise price under certain conditions are accounted for as derivative liabilities. We classify derivative warrant liabilities on the balance sheet as a liability, which is revalued using a binomial options pricing model at each balance sheet date subsequent to the initial issuance. A binomial options pricing model requires the input of highly subjective assumptions and elections including expected stock price volatility and the estimated life of each award. The changes in fair value of the derivative warrant liabilities resulting from their remeasurement at each balance sheet date are recorded in current period earnings.

Accounts Receivable

We provide credit terms to our customers in connection with purchases of our products. We periodically review customer account activity in order to assess the adequacy of the allowances provided for potential collection issues and returns. Factors considered include economic conditions, each customer's payment and return history and credit worthiness. Adjustments, if any, are made to reserve balances following the completion of these reviews to reflect our best estimate of potential losses.

Inventory Reserves

Our inventory reserve requirements are based on factors including the products' expiration date and estimates for the future sales of the product. If estimated sales levels do not materialize, we will make adjustments to our assumptions for inventory reserve requirements.

Accrued Expenses

We are required to estimate accrued expenses as part of our process of preparing financial statements. This process involves identifying services which have been performed on our behalf, and the level of service performed and the associated cost incurred for such service as of each balance sheet date in our consolidated financial statements. Examples of areas in which subjective judgments may be required include costs associated with services provided by contract organizations for the preclinical development of our products, the manufacturing of clinical materials, and clinical trials, as well as legal and accounting services provided by professional organizations. In connection with such service fees, our estimates are most affected by our understanding of the status and timing of services provided relative to the actual levels of services performed. In the event that we do not identify certain costs, which have begun to be incurred, or we under- or over-estimate the level of services performed or the costs of such services, our reported expenses for such period would be too low or too high. The date on which certain services commence, the level of services performed on or before a given date and the cost of such services are often determined based on subjective judgments. We make these judgments based upon the facts and circumstances known to us in accordance with U.S. generally accepted accounting principles.

Results of Operations

Fluctuations in Operating Results

Our results of operations have fluctuated significantly from period to period in the past and are likely to continue to do so in the future. We anticipate that our annual results of operations will be impacted for the foreseeable future by several factors including the progress and timing of expenditures related to our research and development efforts, marketing expenses related to product launches, timing of regulatory approval of our various products and market acceptance of our products. Due to these fluctuations, we believe that the period to period comparisons of our operating results are not a good indication of our future performance.

Three Months Ended March 31, 2015 Compared to the Three Months Ended March 31, 2014

Revenues

Total net revenues for the three months ended March 31, 2015 were approximately \$544,000 compared to approximately \$473,000 for the three months ended March 31, 2014. Total net revenues increased approximately \$71,000 or 15%, arising from a 140% increase, or approximately \$308,000, in higher water filter sales on dialysis and commercial water partially offset by a 93% decrease, or approximately \$237,000, in licensing revenue related to the Bellco license agreement. The increase in water filter sales was primarily driven by an increase in sales in the hospital market resulting from the DSU-H and SSU-H product launch following the FDA 510k clearance in October 2014. Revenue recognized related to the Bellco license agreement in the three months ended March 31, 2015 relates only to the upfront payment received in February 2014. All previously received payments related to the Bellco license agreement were fully recognized as revenue as of December 31, 2014.

Cost of Goods Sold

Cost of goods sold was approximately \$262,000 for the three months ended March 31, 2015 compared to approximately \$106,000 for the three months ended March 31, 2014. The increase of approximately \$156,000, or 147%, during the three months ended March 31, 2015 compared to the same period in 2014 is primarily due to increase in sales volume and any cost of sales gains arising from favorable exchange rate impacts, offset by product mix changes in the three months ended March 31, 2015 compared to the three months ended March 31, 2014.

Research and Development

Research and development expenses were approximately \$192,000 and \$163,000 respectively, for the three months ended March 31, 2015 and March 31, 2014. This increase of approximately \$29,000, or 18%, is primarily due to an increase in research and development costs and other project costs primarily related to our OLpūr H2H Module.

Depreciation and Amortization Expense

Depreciation and amortization expense was approximately \$53,000 for the three months ended March 31, 2015 compared to approximately \$55,000 for the three months ended March 31, 2014. Amortization expense related to the asset recognized in conjunction with the License and Supply Agreement with Medica S.p.A ("License and Supply Agreement") was \$52,000 for the three months ended March 31, 2015 and 2014. The remaining \$1,000 and \$3,000, respectively, recognized in the three months ended March 31, 2015 and 2014 was depreciation on equipment and tools.

Selling, General and Administrative Expenses

Selling, general and administrative expenses were approximately \$843,000 for the three months ended March 31, 2015 compared to approximately \$711,000 for the three months ended March 31, 2014, an increase of approximately \$132,000 or 19%. The increase is primarily due to an increase in personnel costs of approximately \$89,000 as a result of the former CEO severance, an increase in sales commission expense of approximately \$49,000 as a result of increased sales and an increase in professional services costs of approximately \$102,000 primarily related to timing of when services were rendered. In addition, other increases in selling, general and administrative expenses were related to an increase in directors' compensation expense of approximately \$19,000 due to an increase in the number of Board members and an increase in investor relations of approximately \$33,000. These expenses were partially offset by a decrease in stock based compensation expense of approximately \$94,000 primarily related to the forfeiture of the former CEO's unvested stock options and a decrease in legal expenses of approximately \$44,000. Legal expenses were higher for the three months ended March 31, 2014 as a result of fees incurred in relation to the October 2013 product recall.

Interest Expense

The table below summarizes interest expense for the three months ended March 31, 2015 and 2014:

| | 2015 | 2014 |
|---|----------|-----------|
| Interest related to November 2013 senior secured note | - | 37,000 |
| Amortization of debt discount - November 2013 senior secured note | - | 142,000 |
| Interest – outstanding payables due to a vendor | 11,000 | 15,000 |
| Other | - | 1,000 |
| Total interest expense | \$11,000 | \$195,000 |

Change in Fair Value of Warrant Liability

Certain warrants are classified as liabilities at their fair value and adjusted to their fair value at each reporting period. The fair value of such warrants issued have been estimated using a binomial options pricing model. For the three months ended March 31, 2015 and 2014, the change in fair value of the warrant liability was a decrease of approximately \$1,009,000 and an increase of approximately \$2,751,000, respectively.

Other Income (Expense)

Other income (expense) relates to foreign currency gains and losses on invoices paid to an international supplier. A foreign currency gain was recognized for the three months ended March 31, 2015 of approximately \$51,000 compared to a foreign currency loss of approximately \$3,000 for the three months ended March 31, 2014.

The Fiscal Year Ended December 31, 2014 Compared to the Fiscal Year Ended December 31, 2013

Revenues

Total revenues for the year ended December 31, 2014 were approximately \$1,748,000 compared to approximately \$1,740,000 for the year ended December 31, 2013. Total revenues increased approximately \$8,000, or 0.5%. An increase of approximately \$123,000 related to the Bellco license agreement was offset by a decrease in water filter sales of \$115,000. The decrease in water filter sales is primarily related to a decrease in water filter units sold partially offset by an increase in average selling price.

Cost of Goods Sold

Cost of goods sold was approximately \$549,000 for the year ended December 31, 2014 compared to approximately \$898,000 for the year ended December 31, 2013. The decrease of approximately \$349,000, or 39%, in cost of goods sold was primarily related to an increase in inventory reserves related to the recall of our point of use and DSU ultrafilters that we announced in October 2013. Inventory reserves increased approximately \$210,000 during the year ended December 31, 2013, \$203,000 of which was a result of the October 2013 voluntary product recall. For the year ended December 31, 2014, inventory reserves increased approximately \$59,000, a decrease compared to 2013 of \$151,000. The cost of goods sold related to water filter sales decreased by approximately \$64,000 due to lower water filter sales. In addition, included in cost of goods sold for the year ended December 31, 2013 was approximately \$151,000 related to additional costs as a result of the product recall. Partially offsetting these decreases was an additional \$17,000 in costs of goods sold for the year ended December 31, 2014 related to the Medica royalty payments which began in the second quarter of fiscal year 2014.

Research and Development

Research and development expenses were approximately \$781,000 and \$867,000, respectively, for the years ended December 31, 2014 and December 31, 2013. This decrease of approximately \$86,000, or 10%, is primarily due to lower stock compensation expense of approximately \$48,000. The decrease in stock compensation expense is related to restricted stock awards granted to employees during the year ended December 31, 2013. The remainder of the decrease in research and development expenses is due to a decrease of approximately \$38,000 in project costs primarily related to our OLpūr H2H Module.

Depreciation and Amortization Expense

Depreciation and amortization expense was approximately \$217,000 for the year ended December 31, 2014 compared to approximately \$223,000 for the year ended December 31, 2013, representing a decrease of 3%.

Selling, General and Administrative Expenses

Selling, general and administrative, or SG&A, expenses were approximately \$2,870,000 for the year ended December 31, 2014 compared to approximately \$3,069,000 for the year ended December 31, 2013, representing a decrease of \$199,000 or 7%. The decrease is primarily due to a decrease in personnel costs of approximately \$205,000 related to the absence of a chief financial officer in the year ended December 31, 2014, a decrease of approximately \$156,000

in legal and professional services and a decrease in stock compensation of approximately \$36,000, partly offset by an increase in SG&A expenses of approximately \$129,000 as a result of increased regulatory and quality system management resource costs due to the product recall and an increase in board of directors' fees of approximately \$89,000.

Interest Expense

The table below summarizes interest expense for the years ended December 31, 2014 and 2013:

| | 2014 | 2013 |
|---|-----------|-------------|
| Interest related to August 2014 senior secured note | \$63,000 | \$ - |
| Interest related to November 2013 senior secured note | 37,000 | 24,000 |
| Interest related to February 2013 senior secured note | - | 47,000 |
| Amortization of debt discount – August 2014 senior secured note | 178,000 | |
| Amortization of debt discount – November 2013 senior secured note | 142,000 | 53,000 |
| Amortization of debt discount – February 2013 senior secured note | - | 204,000 |
| Interest – outstanding payables due to a vendor | 61,000 | 21,000 |
| Other | 2,000 | 2,000 |
| Total interest expense | \$483,000 | \$351,000 |

Change in Fair Value of Warrant Liability

As a result of the restatement described in Note 2 of the notes to the financial statements included herein, we classify certain warrants as liabilities at their fair value and adjust the warrant liability to fair value at each reporting period. This liability is subject to re-measurement at each balance sheet date until exercised, and any change in fair value is recognized in our consolidated statement of operations and comprehensive income (loss). The fair value of such warrants issued have been estimated using a binomial options pricing model. For the years ended December 31, 2014 and 2013, the change in fair value of the warrant liability was an increase of approximately \$4,277,000 and a decrease of approximately \$5,020,000, respectively.

Other Income/Expense

Other income of approximately \$58,000 for the year ended December 31, 2014 is due to foreign currency gains.

Other expense, net, of approximately \$33,000 for the year ended December 31, 2013 is primarily due to other expenses of approximately \$36,000 related to foreign currency transaction losses and approximately \$14,000 of expenses related to the May 2013 rights offering warrant modification. These expenses were partially offset by other income of approximately \$17,000, which consisted primarily of a refund of \$15,000 received as a result of the Steris agreement termination.

Off-Balance Sheet Arrangements

We did not have any off-balance sheet arrangements as of March 31, 2015 or December 31, 2014.

Liquidity and Capital Resources

The following table summarizes our liquidity and capital resources as of March 31, 2015 and December 31, 2014 and is intended to supplement the more detailed discussion that follows. The amounts stated are expressed in thousands.

| Liquidity and capital resources | March 31, | December 31, | | |
|---------------------------------|--------------|-----------------|--|--|
| | 2015 | 2014 | | |
| Cash | \$367 | \$ 1,284 | | |
| Other current assets | 624 | 400 | | |
| Working capital (deficit) | (265) | 437 | | |
| Stockholders' deficit | (5,411) | (5,681) | | |

At March 31, 2015, we had an accumulated deficit of approximately \$113,922,000 and we expect to incur additional operating losses in the foreseeable future at least until such time, if ever, that we are able to increase product sales or license revenue. We have financed our operations since inception primarily through the private placements of equity and debt securities, our initial public offering, license revenue, and rights offerings.

Our future liquidity sources and requirements will depend on many factors, including:

the availability of additional financing, through the sale of equity securities or otherwise, on commercially reasonable terms or at all;

•the market acceptance of our products, and our ability to effectively and efficiently produce and market our products;

- the continued progress in, and the costs of, clinical studies and other research and development programs;
- the costs involved in filing and enforcing patent claims and the status of competitive products; and
- the cost of litigation, including potential patent litigation and any other actual or threatened litigation.

We expect to put our current capital resources to the following uses:

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for the marketing and sales of our water-filtration products;

to pursue business development opportunities with respect to our chronic renal treatment system; and

for working capital purposes.

We operate under an Investment, Risk Management and Accounting Policy adopted by our board of directors. Such policy limits the types of instruments or securities in which we may invest our excess funds: U.S. Treasury Securities; Certificates of Deposit issued by money center banks; Money Funds by money center banks; Repurchase Agreements; and Eurodollar Certificates of Deposit issued by money center banks. This policy provides that our primary objectives for investments shall be the preservation of principal and achieving sufficient liquidity to meet our forecasted cash requirements. In addition, provided that such primary objectives are met, we may seek to achieve the maximum yield available under such constraints.

On May 12, 2015, the Company entered into a Securities Purchase Agreement (the "Purchase Agreement") with certain purchasers identified therein. Pursuant to the Purchase Agreement, the Company agreed to issue and sell, and the purchasers agreed to purchase, an aggregate of approximately 1.8 million shares at a price of \$0.67 per share for total gross proceeds of approximately \$1.2 million (such transaction, the "2015 Private Placement"). In addition, the Company issued to the purchasers warrants to purchase approximately 0.9 million shares of common stock. The warrants have an exercise price of \$0.85 per share and are exercisable for 5 years from the closing date. The purchase and sale of the shares and warrants closed on May 19, 2015.

On February 19, 2014, we entered into the First Amendment to License Agreement (the "First Amendment"), with Bellco, which amends the License Agreement, entered into as of July 1, 2011. Pursuant to the First Amendment, both parties agreed to extend the term of the License Agreement through December 31, 2021. The First Amendment also expands the Territory covered by the License Agreement to include Sweden, Denmark, Norway, Finland, Korea, Mexico, Brazil, China and the Netherlands. The First Amendment further provides new minimum sales targets which, if not satisfied, will, at our discretion, result in conversion of the license to non-exclusive status. We have agreed to reduce the fixed royalty payment payable to us for the period beginning on January 1, 2015 through and including December 31, 2021. Beginning on January 1, 2015 through and including December 31, 2021. Bellco will pay us a royalty based on the number of units of Products sold per year in the Territory as follows: for the first 125,000 units sold in total, €1.75 (approximately \$2.40) per unit; thereafter, €1.25 (approximately \$1.71) per unit. In addition, we received a total of €450,000 (approximately \$612,000) in upfront fees in connection with the First Amendment, half of which was received on February 19, 2014 and the remaining half was received on April 4, 2014. In addition, the First Amendment provides that, in the event that we pursue a transaction to sell, assign or transfer all right, title and interest to the licensed patents to a third party, we will provide Bellco with written notice thereof and a right of first offer with respect to the contemplated transaction for a period of thirty (30) days.

We expect that the approximately \$1.2 million of gross proceeds that we received upon the closing of the 2015 Private Placement, and the projected increase in product sales from the hospital market, will allow us to fund our operations into the fourth quarter of fiscal year 2015. Our cash flow currently is not, and historically has not been, sufficient to meet our obligations and commitments. We must seek and obtain additional financing to fund our operations. If we cannot raise sufficient capital, in connection with offerings of our common stock or through other means, we will be forced to curtail our planned activities and operations or cease operations entirely. There can be no assurance that we could raise sufficient capital on a timely basis or on satisfactory terms or at all.

Cash Flows for the Three Months Ended March 31, 2015 Compared to the Three Months Ended March 31, 2014

Net cash used in operating activities was approximately \$917,000 for the three months ended March 31, 2015 compared to approximately \$622,000 for the three months ended March 31, 2014. Although our net income increased by approximately \$3,754,000 during the three months ended March 31, 2015 compared to the three months ended March 31, 2014, the primary reason for the increase was due to the noncash impact of the change in fair value of the warrant liability. The warrant liability decreased by approximately \$1,009,000 in the three months ended March 31, 2015 compared to an increase of approximately \$2,751,000 in the three months ended March 31, 2014.

The most significant items contributing to the net increase of approximately \$295,000 in cash used in operating activities during the three months ended March 31, 2015 compared to the three months ended March 31, 2014 are highlighted below:

our deferred revenue decreased by approximately \$17,000 in the 2015 period compared to an increase of approximately \$363,000 in the 2014 period; and

during the 2015 period, there was no amortization of debt discount compared to approximately \$142,000 in the 2014 period

Offsetting the above changes are the following items:

our stock based compensation was approximately \$26,000 during the 2015 period compared to approximately \$120,000 during the 2014 period;

our accounts receivable decreased by approximately \$224,000 during the 2015 period compared to approximately \$355,000 during the 2014 period; and

our accrued expenses increased by approximately \$90,000 in the 2015 period compared to a decrease of approximately \$172,000 in the 2014 period.

Net cash provided by financing activities for the three months ended March 31, 2015 of \$1,000 resulted from proceeds from the exercise of warrants.

Net cash provided by financing activities for the three months ended March 31, 2014 of \$517,000 resulted from proceeds of approximately \$2,016,000 resulting from the issuance of common stock in the 2014 rights offering and approximately \$1,000 of proceeds resulting from the exercise of warrants. These proceeds were offset by the payment of the November 2013 senior secured note of \$1,500,000.

Cash Flows for the Year Ended December 31, 2014 Compared to the Year Ended December 31, 2013

Net cash used in operating activities was approximately \$2,495,000 for the year ended December 31, 2014 compared to approximately \$3,583,000 for the year ended December 31, 2013. Although our net loss increased by approximately \$8,693,000 during the year ended December 31, 2014 compared to the year ended December 31, 2013, the primary reason for the decrease was due to the noncash impact of the change in fair value of the warrant liability. The warrant liability increase by approximately \$4,277,000 in the year ended December 31, 2014 compared to a decrease of approximately \$5,020,000 in the year ended December 31, 2013.

Excluding the impact of the change in the fair value of the warrant liability, the net decrease of approximately \$1,088,000 in cash used in operating activities during the year ended December 31, 2014 compared to the year ended December 31, 2013 are highlighted below:

during 2014, our deferred revenue decreased by approximately \$216,000 compared to a decrease of approximately \$711,000 during 2013 as a result of timing in recognition of revenue under the Bellco agreement; and

during 2013, license and supply fee payable decreased by \$1,318,000; and

during 2014, we recorded amortization of debt issuance costs of \$320,000, whereas amortization of debt issuance costs in 2013 was \$257,000.

Offsetting the above changes are the following items:

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during 2014, our stock-based compensation expense, a non-cash expense, decreased by approximately \$146,000 compared to 2013;

during 2014, we recorded an inventory reserve of approximately \$59,000 compared to approximately \$210,000, primarily a result of the product recall, in 2013;

during 2014, our accounts receivable decreased by approximately \$11,000 compared to a decrease of approximately \$820,000, primarily reflecting the collection of amounts related to the Bellco agreement., during 2013;

during 2014, our accounts payable and accrued expenses decreased by approximately \$112,000 in the aggregate compared to an increase of approximately \$98,000 during 2013; and

as a result of changes in foreign currency rates, during 2014, we recognized a gain on foreign currency transactions of approximately \$48,000 compared to a loss of approximately \$26,000 during 2013.

Net cash provided by investing activities for the year ended December 31, 2013 was approximately \$3,000 related to the sale of fully depreciated manufacturing equipment. There were no investing transactions in 2014.

Net cash provided by financing activities for the year ended December 31, 2014 of \$3,203,000, net of equity issuance costs of approximately \$276,000, resulted primarily from gross proceeds of \$5.1 million related to the issuance of common stock related to the March 2014 rights offering and December 2014 rights offering, gross proceeds from the issuance of the August 2014 senior secured note of \$1.75 million and approximately \$15,000 of proceeds resulting from the exercise of warrants. Net cash provided by financing activities was partially offset by the repayment of the \$1.75 million August 2014 senior secured note, repayment of the \$1.5 million November 2013 senior secured note and payment of financing costs of approximately \$178,000.

Net cash provided by financing activities for the year ended December 31, 2013 of \$4,120,000, net of equity issuance costs of approximately \$229,000, resulted primarily from gross proceeds of \$3.0 million related to the issuance of common stock related to the May 2013 rights offering, gross proceeds from the issuance of the February 2013 senior secured note and the November 2013 senior secured note of \$2.8 million and approximately \$248,000 of proceeds resulting from the exercise of warrants. Net cash provided by financing activities was partially offset by the repayment of the \$1.3 million February 2013 senior secured note and the payment of financing costs of \$399,000.

Contractual Obligations and Commercial Commitments

The following table summarizes our approximate minimum contractual obligations and commercial commitments as of December 31, 2014:

| | Payments Due in Period | | | | |
|--------------------------|------------------------|-----------|---------|-------|-------------|
| | Total | Within | Years | Years | More than 5 |
| | | 1 Year | 1-3 | 4-5 | Years |
| Leases | \$106,000 | \$104,000 | \$2,000 | \$ - | \$ - |
| Employment Contracts (1) | 175,000 | 175,000 | - | - | - |
| Total | \$281,000 | \$279,000 | \$2,000 | \$ - | \$ - |

Represents amount payable under severance agreement for John C. Houghton, effective January 4, 2015. See Note (1)15, Subsequent Events, to the consolidated financial statements for the year ended December 31, 2014 for further discussion.

No material changes occurred in the above table during the three months ended March 31, 2015. On April 15, 2015, the Company entered into a four-year employment agreement with Daron Evans, the President, CEO and Acting CFO, pursuant to which Mr. Evans will receive an annual base salary of \$240,000 per year. See Note 12 ,Subsequent Events, to the consolidated financial statements for the quarter ended March 31, 2015 for further discussion.

BUSINESS

Nephros is a commercial stage medical device company that develops and sells high performance liquid purification filters. Our filters, which we call ultrafilters, are primarily used in dialysis centers for the removal of biological contaminants from water, bicarbonate concentrate and/or blood. Because our ultrafilters capture contaminants as small as 0.005 microns in size, they minimize exposure to a wide variety of bacteria, viruses, fungi, parasites, and endotoxins.

Our ultrafilters use proprietary hollow fiber technology. We believe the hollow fiber design allows our ultrafilters to optimize the three elements critical to filter performance:

Filtration - as low as 0.005 microns

Flow rate - minimal disruption

Filter life - up to 12 months

We were founded in 1997 by healthcare professionals affiliated with Columbia University Medical Center/New York-Presbyterian Hospital to develop and commercialize an alternative method to hemodialysis, or HD. We have extended our filtration technologies to meet the demand for liquid purification in other areas, in particular water purification.

Our Products

Presently, we offer ultrafilters for sale to customers in five markets:

Hospitals and Other Healthcare Facilities: Filtration of water to be used for patient washing and drinking as an aid in infection control. The filters also produce water that is suitable for wound cleansing, cleaning of equipment used in medical procedures and washing of surgeons' hands.

· Dialysis Centers - Water/Bicarbonate: Filtration of water or bicarbonate concentrate used in hemodialysis devices.

Dialysis Centers - Blood: Treatment of patients with chronic renal failure using the OLpūr H2H Hemodiafiltration, or HDF, Module in conjunction with a UF controlled hemodialysis machine and its accessories, the H2H Module accessories, appropriately prepared water and ultrapure dialysate for hemodialysis and the OLpūr MD 220 Hemodiafilter.

Military and Outdoor Recreation: Highly compact, individual water purification devices used by soldiers and backpackers to produce drinking water in the field.

·Commercial Facilities: Filtration of water for washing and drinking including use in ice machines and soda fountains.

Our Target Markets

Hospitals and Other Healthcare Facilities. According to the American Hospital Association there are approximately 5,700 hospitals and 920,000 beds in the U.S. and the United States Centers for Disease Control and Prevention estimates that healthcare associated infections, or HAIs, annually account for 1.7 million infections and 99,000 deaths. HAIs affect patients in a hospital or other healthcare facility, and are not present or incubating at the time of admission. They also include infections acquired by patients in the hospital or facility but appearing after discharge, and occupational infections among staff. Many HAIs are waterborne bacteria and viruses that can thrive in aging or complex plumbing systems often found in healthcare facilities. The Affordable Care Act, which was passed in March 2010, puts in place comprehensive health insurance reforms that aim to lower costs and enhance quality of care. With its implementation, healthcare providers have substantial incentives to deliver better care or be forced to absorb the expenses associated with repeat medical procedures or complications like HAIs. As a consequence, hospitals and other healthcare facilities are proactively implementing strategies to reduce the potential for HAIs. Our ultrafilters are designed to aid in infection control in the hospital and healthcare setting by treating facility water at the point of delivery, for example, from sinks and showers.

On June 30, 2014, we submitted to the FDA, for 510(k) clearance, the DSU-H and SSU-H Ultrafilters to filter EPA quality drinking water to remove microbiological contaminants and waterborne pathogens. On October 28, 2014, we announced that we received 510(k) clearance from the FDA to market our DSU-H and SSU-H Ultrafilters as medical devices for use in the hospital setting. The DSU-H and SSU-H Ultrafilters are intended to be used to filter EPA quality drinking water. The filters retain bacteria, viruses and endotoxin. By providing ultrapure water for patient washing and drinking, the filters aid in infection control. The filters also produce water that is suitable for wound cleansing, cleaning of equipment used in medical procedures and washing of a surgeon's hands. The filters are not intended to provide water that can be used as a substitute for United States Pharmacopeia sterile water.

We anticipate that the impact of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. proposed Standard 188, "Prevention of Legionellosis Associated with Building Water Systems", when adopted, will be positive for the point of delivery filtration market. We will be enhancing our efforts to support our distributors by developing and delivering focused sales training to their sales forces on the use of our filters to support an overall program of infection risk prevention, as well as by offering the services of our sales representatives to jointly call on potential hospital customers to serve as a product expert when needed.

Dialysis Centers - Water/Bicarbonate. To perform hemodialysis, all dialysis clinics have dedicated water purification systems to produce water and bicarbonate concentrate. Water and bicarbonate concentrate are essential ingredients for making dialysate, the liquid that removes waste material from the blood. Within the U.S., there are approximately 6,000 clinics with 100,000 dialysis machines providing over 50 million dialysis treatments to 400,000 patients annually.

Medicare is the main payer for dialysis treatment in the U.S. To be eligible for Medicare reimbursement, dialysis centers must meet the minimum standards for water and bicarbonate concentrate quality set by the Association for the Advancement of Medical Instrumentation, or AAMI, the American National Standards Institute, or ANSI and the International Standards Organization, or ISO. We anticipate that the stricter standards approved by these organizations in 2009 will be adopted by Medicare in the near future.

Published studies have shown that the use of ultrapure dialysate can reduce the overall need for erythropoietin stimulating agents, or ESAs, expensive drugs used in conjunction with HD. By reducing the level of dialysate contaminants, specifically cytokine-inducing substances that can pass into a patient's blood stream, the stimulation of inflammation-inducing cytokines is reduced, thus reducing systemic inflammation. When inflammation is low, inflammatory morbidities are reduced and a patient's responsiveness to erythropoietin is enhanced, consequently the overall need for ESAs is reduced.

We believe that our ultrafilters are attractive to dialysis centers because they exceed currently approved and newly proposed standards for water and bicarbonate concentrate purity, assist in achieving those standards and may help dialysis centers reduce costs associated with the amount of ESA required to treat a patient. Our in-line filters are easily

installed into the fluid circuits supplying water and bicarbonate concentrate just prior to entering each dialysis machine.

During March 2014 we signed a non-exclusive distributor agreement with Mar Cor Purification, a wholly-owned subsidiary of Cantel Medical Corp., to distribute our dialysis ultrafilters to U.S. and Canadian dialysis clinics. In July 2014, we received notification from Health Canada Therapeutic Products Directorate Medical Devices Bureau that we were successfully issued a license for our Single Stage Ultrafilter.

Dialysis Centers - Blood. The current standard of care in the U.S. for patients with chronic renal failure is HD, a process in which toxins are cleared via diffusion. Patients typically receive HD treatment at least 3 times weekly for 3-4 hours per treatment. HD is most effective in removing smaller, easily diffusible toxins. For patients with acute renal failure, the current standard of care in the U.S. is hemofiltration, or HF, a process where toxins are cleared via convection. HF offers a much better removal of larger sized toxins when compared to HD. However, HF treatment is performed on a daily basis, and typically takes 12-24 hours.

Hemodiafiltration, or HDF, is an alternative dialysis modality that combines the benefits of HD and HF into a single therapy by clearing toxins using both diffusion and convection. Though not widely used in the U.S., HDF is much more prevalent in Europe and is performed in approximately 16% of patients. Clinical experience and literature show the following clinical and patient benefits of HDF:

Enhanced clearance of middle and large molecular weight toxins

Improved survival - up to a 35% reduction in mortality risk

Reduction in the occurrence of dialysis-related amyloidosis

Reduction in inflammation

Reduction in medication such as EPO and phosphate binders

Improved patient quality of life

Reduction in number of hospitalizations and overall length of stay

However, like HF, HDF can be resource intensive and can require a significant amount of time to deliver one course of treatment.

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We have developed a modified approach to HDF that we believe is more patient-friendly, less resource-intensive, and can be used in conjunction with current HD machines. We refer to our approach as an online mid-dilution hemodiafiltration (mid-dilution HDF) system and it consists of our OLpūr H2H Module and OLpūr MD 220 Hemodiafilter. The OLpūr H2H HDF Module and OLpūr MD 220 Hemodiafilter are cleared by the FDA to market for use with a ultrafiltration controlled hemodialysis machine that provides ultrapure dialysate in accordance with current ANSI/AAMI/ISO standards, for the treatment of patients with chronic renal failure in the United States. Our on-line mid-dilution HDF system is the only on-line mid-dilution HDF system of its kind to be cleared by the FDA to date.

We completed preparation of our OLpūr H2H HDF Modules and have manufactured lots of our OLpūr MD220 Hemodiafilters, H2H Substitution filters and H2H water filters. We also finalized our service contract to support the commercialization of our system in the field. In May 2014, DaVita Healthcare Partners announced that it had commenced delivering and evaluating on-line mid-dilution hemodiafiltration treatments to select patients at DaVita's North Colorado Springs Clinic. In February 2015, we announced that, in the course of the evaluation, DaVita informed Nephros that they would require additional validation of the system. Nephros and DaVita agreed upon a protocol for the additional validation work which was completed in March. We have submitted the data report to DaVita, and have been informed that it is still under review. Upon confirmatory review of the additional validation work, it is anticipated that DaVita will continue its evaluation. In March 2015, we announced that the Renal Research Institute, a research division of Fresenius Medical Care, was conducting an ongoing evaluation of our hemodiafiltration system in its clinic. We also anticipate evaluating our on-line mid-dilution HDF system at other clinics throughout the U.S. with the intent of developing a better understanding of how our system best fits into the current clinical and economic ESRD treatment paradigm with the ultimate goals of improving the quality of life for the patient, reducing overall expenditure compared to other dialysis modalities, minimizing the impact on nurse work flow at the clinic, and demonstrating the phamacoeconomic benefit of the HDF technology to the U.S. healthcare system, as has been done in Europe with other HDF systems.

Military and Outdoor Recreation. Water is a key requirement for the soldier to be fully mission-capable. The need for water supplies and immediate on-site water purification is critical to enhance the ability to operate in any environment. Currently, the military is heavily reliant on the use of bottled water to support its soldiers in the field. Bottled water is not always available, is very costly to move, resource intensive, and prone to constant supply disruptions. Soldiers conducting operations in isolated and rugged terrain must be able to use available local water

sources when unable to resupply from bulk drinking water sources or bottled water. Therefore, the soldier needs the capability to purify water from indigenous water sources in the absence of available potable water. Soldiers must have the ability to remove microbiological contaminants in the water to levels specified by the Environmental Protection Agency, or EPA.

We developed our individual water treatment device, or IWTD, in both in-line (HydraGuard in-line) and point-of-use (HydraGuard Universal) configurations. Our IWTD allows a soldier in the field to derive drinking water from any fresh water source. This enables the soldier to remain hydrated which will maintain mission effectiveness and unit readiness, and extend mission reach. Our IWTD is one of the few portable filters that has been validated by the military to meet the NSF Protocol P248 standard. It has also been approved by U.S. Army Public Health Command and U.S. Army Test and Evaluation Command for deployment.

In May 2015, we entered into a Sublicense Agreement with CamelBak Products, LLC, or CamelBak. Under this Sublicense Agreement, we granted CamelBak an exclusive, non-transferable, worldwide (with the exception of Italy) sublicense and license, in each case solely to market, sell, distribute, import and export the HydraGuard individual water treatment devices. In exchange for the rights granted to CamelBak, CamelBak agreed to pay us a percentage of the gross profit on any sales made to a branch of the military, subject to certain exceptions, and to pay us a fixed per-unit fee for any other sales made. CamelBak is also required to meet or exceed certain minimum annual fees payable to us, and if such fees are not met or exceeded, we may convert the exclusive sublicense to a non-exclusive sublicense with respect to non-U.S. military sales. Additionally, we have the right to terminate the sublicense with respect to a specific geographic area if CamelBak enters into an agreement or otherwise obtains or develops the rights to market or sell a product that competes with the HydraGuard individual water treatment devices in such geographic area. If we do not terminate the sublicense in such situation, and the sales of the competing product in such geographic area exceed the sales of the HydraGuard individual water treatment devices in the same area during any full calendar year, we may convert the exclusive sublicense to a non-exclusive sublicense solely with respect to such geographic area.

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Commercial Facilities. In October 2013, we announced the voluntary recalls of our point of use, or POU, and DSU in-line ultrafilters used in hospital water treatment applications. As a result, we recalled all production lots of our POU filters, and also requested that customers remove and discard certain labeling/promotional materials for the products. In addition, for the DSU in-line ultrafilter, we also requested that customers remove and discard certain labeling/promotional materials for the product. These voluntary recalls did not affect our dialysis products. In March 2014, we requested termination of our product recall from the FDA. As of the date of this report, there has been no additional communication from the FDA regarding our request.

We have launched our new NanoGuard-D and NanoGuard-S in-line ultrafilters for the filtration of water which is to be used for non-medical drinking and washing in non-transient non-community water systems, or commercial facilities. The NanoGuard-D and NanoGuard-S trap particulates greater than 5nm in size and the water permeability (the ease at which water can pass through a membrane at a given pressure) of the membrane is higher than membranes with a similar pore size. This provides improved flow performance relative to the physical size of the filter. We anticipate that the filters will be used as a component of a facility water treatment system and also for filtering water to be used in ice machines and soda fountains.

With respect to public drinking water systems, EPA regulations make a distinction between community and non-community systems. A community water system supplies water to the same population year-round. It serves at least 25 people at their primary residences or at least 15 residences that are primary residences. Community water systems include those that supply municipalities, mobile home parks, and residential sub-divisions.

Non-community water systems are composed of transient and non-transient water systems:

Transient non-community water systems provide water to 25 or more people for at least 60 days/year; however, not to the same people and not on a regular basis, e.g. gas stations, campgrounds.

Non-transient non-community water systems regularly supply water to at least 25 of the same people at least six •months per year, but not year-round, e.g. office buildings, schools, hotels and factories which have their own water systems.

Corporate Information

We were incorporated under the laws of the State of Delaware in April 1997. Our principal executive offices are located at 41 Grand Avenue, River Edge, New Jersey, 07661, and our telephone number is (201) 343-5202. We also have an office in Dublin, Ireland. For more information about Nephros, please visit our website at www.nephros.com.

Going Concern

The accompanying consolidated financial statements have been prepared assuming that we will continue as a going concern. Our recurring losses and difficulty in generating sufficient cash flow to meet our obligations and sustain our operations raise substantial doubt about our ability to continue as a going concern. Our consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We have incurred significant losses in operations in each quarter since inception. In addition, we have not generated positive cash flow from operations for the three months ended March 31, 2015 or the year ended December 31, 2014. To become profitable, we must increase revenue substantially and achieve and maintain positive gross and operating margins. If we are not able to increase revenue and gross and operating margins sufficiently to achieve profitability, our results of operations and financial condition will be materially and adversely affected.

There can be no assurance that our future cash flow will be sufficient to meet our obligations and commitments. If we are unable to generate sufficient cash flow from operations in the future to service our commitments, we will be required to adopt alternatives, such as seeking to raise debt or equity capital, curtailing our planned activities or ceasing our operations. There can be no assurance that any such actions could be effected on a timely basis or on satisfactory terms or at all, or that these actions would enable us to continue to satisfy our capital requirements.

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Recent Developments

On May 12, 2015, we entered into a securities purchase agreement with various accredited investors pursuant to which we agreed to sell in a private placement a total of 1,834,299 units of our securities, each unit consisting of one share of our common stock and a five-year warrant to purchase one-half of one share of our common stock. The closing of the private placement occurred on May 19, 2015. The purchase price for each unit was \$0.67. The warrants are exercisable at a price of \$0.85 per warrant share. The sale of the shares and warrants resulted in aggregate gross proceeds of approximately \$1.23 million, before deducting expenses.

On May 25, 2015, we received a Notice of Allowance for U.S. Patent Application No. 13/888,645, "Method and Apparatus of Flush Pump Feature for Portable Liquid Purifying Filter." The Notice of Allowance covers claims relating to certain accessories used with our HydraGurad individual water purifier devices. The HydraGurad ultrafilter membrane provides a barrier to block sediment, bacteria, parasites, viruses & cysts from water filtered by the membrane. The flush pump apparatus, as described in the patent claims, provides a mechanism to provide real-time verification of filter integrity, to enable the user to clean the filter membrane while inside the filter casing, and to purge the filter for lighter storage or for protection against freeze-related damage in cold environments. The combination of our ultrafilter membrane and our flush pump apparatus enabled the HydraGuard to pass the NSF Protocol P248 for Military Operations Microbiological Water Purifiers.

Barring any unforeseen circumstances, we believe this patent should be valid until May 2033 given the patent filing occurred in May 2013. We licensed all intellectual property relating to the HydraGuard individual water purifier devices, including this patent, to Camelbak Products, LLC as part of a Sublicense Agreement on May 6, 2015. The Sublicense Agreement expires on December 31, 2022, unless terminated sooner in accordance with the terms of the agreement.

On May 28, 2015, we received a warning letter from the FDA resulting from an October 2014 inspection of our facility in River Edge, New Jersey. The warning letter alleges deficiencies relating to our compliance with the Quality System regulation and the Medical Device Reporting regulation. We take the matters identified in the warning letter seriously and are in the process of evaluating the corrective actions required to address the matters raised in the warning letter. We responded to the warning letter within 15 business days as requested by the FDA, and intend to work diligently and expeditiously to resolve the issues raised by the FDA. The warning letter does not restrict the manufacture, production or shipment of any of our products, nor require the withdrawal of any product from the marketplace.

Manufacturing and Suppliers

We do not, and do not intend to in the near future, manufacture any of our products and components. With regard to the OLpūr MD190 and MD220, on June 27, 2011, we entered into a license agreement, effective July 1, 2011, as amended by the first amendment dated February 19, 2014, with Bellco S.r.l., or Bellco, an Italy-based supplier of hemodialysis and intensive care products, for the manufacturing, marketing and sale of our patented mid-dilution dialysis filters (MD190, MD220), referred to herein as the Products. Under the agreement, as amended by the first amendment, we granted Bellco a license to manufacture, market and sell the Products under its own name, label and CE mark in Italy, France, Belgium, Spain, Canada, Denmark, Finland, Norway and Sweden on an exclusive basis, and to do the same on a non-exclusive basis in the United Kingdom, Greece, Brazil, China, Korea, Mexico and the Netherlands and, upon our written approval, other European countries where we do not sell the Products as well as non-European countries, all such countries herein referred to as the Territory.

In April 2012, we entered into a license and supply agreement with Medica S.p.A., an Italy-based medical product manufacturing company, for the marketing and sale of certain filtration products based upon Medica's proprietary Medisulfone ultrafiltration technology in conjunction with our filtration products, and to engage in an exclusive supply arrangement for the filtration products. Under the license and supply Agreement, Medica granted to us an exclusive license, with right of sublicense, to market, promote, distribute, offer for sale and sell the filtration products worldwide, excluding Italy, during the term of the agreement.

Sales and Marketing

Under the Bellco license agreement, as discussed above, we granted Bellco a license to manufacture, market and sell the Products under its own name, label and CE mark in the Territory. In addition, if requested by us, Bellco will be required to sell the Products to our distributors in the Territory.

Our New Jersey office oversees global sales and marketing activity of our ultrafilter products. We are in discussions with several medical products and filtration products suppliers to act as non-exclusive distributors of our ultrafilter products to medical and non-medical institutions. In May 2012, we signed a non-exclusive U.S. distributor agreement with Vantage. In July 2012, we signed non-exclusive U.S. distributor agreements with TQM and Ameriwater. During 2013 we signed a non-exclusive North American distributor agreement with Chem-aqua and Garratt-Callahan. In February 2014 we signed a non-exclusive North American distributor agreement with Mar Cor Purification. For each prospective market for our ultrafilter products, we are pursuing alliance opportunities for joint product development and distribution. Our ultrafilter manufacturer in Europe shares certain intellectual property rights with us for one of our Dual Stage Ultrafilter (DSU) designs.

Research and Development

Our research and development efforts continue on several fronts directly related to our current product lines. We are also working on additional machine devices, next-generation user interface enhancements and other product enhancements.

We were awarded research contracts from the Office of Naval Research, or ONR, for development of a potable dual-stage military water purifying filter. The initial research contract was awarded in 2006 for approximately \$1 million and work was completed in August 2009. The second research contract was awarded in August 2009 and was an expansion of the 2006 ONR contract which is being performed as part of the Marine Corps Advanced Technology Demonstration project. The primary objective of this expanded research program is to select concepts and functional prototype filter/pump units which were developed during the first phase of the project, and further develop them into smaller field-testable devices that can be used for military evaluation purposes. An advantage of our ultrafilter is the removal of viruses which are not removed with commercially available off-the-shelf microfilter devices. Such devices generally rely on a secondary chemical disinfection step to make the water safe to drink. The expanded contract also includes research geared toward improving membrane performance, improving device durability, developing larger squad-level water purifier devices, and investigating desalination filter/pump devices for emergency-use purposes.

Major Customers

For the years ended December 31, 2014 and 2013, three customers accounted for 78% and 86%, respectively, of our revenues.

As of December 31, 2014 three customers accounted for 83% of our accounts receivable. As of December 31, 2013, two customers accounted for 97% of our accounts receivable.

Competition

With respect to the water filtration market, we expect to compete with companies that are well entrenched in the water filtration domain. These companies include Pall Corporation, which manufactures end-point water filtration systems, as well as 3M and Siemens. Our methods of competition in the water filtration domain include:

developing and marketing products that are designed to meet critical and specific customer needs more effectively than competitive devices;

- · offering unique attributes that illustrate our product reliability, "user-friendliness," and performance capabilities;
 - selling products to specific customer groups where our unique product attributes are mission-critical; and
 - pursuing alliance opportunities for joint product development and distribution.

The dialyzer and renal replacement therapy market is subject to intense competition. Accordingly, our future success will depend on our ability to meet the clinical needs of physicians and nephrologists, improve patient outcomes and remain cost-effective for payers.

We compete with other suppliers of End Stage Renal Disease, or ESRD, therapies, supplies and services. These suppliers include Fresenius Medical Care AG, and Baxter, currently two of the primary machine manufacturers in hemodialysis. At present, Fresenius Medical Care AG and Baxter also manufacture HDF machines.

The markets in which we sell our dialysis products are highly competitive. Our competitors in the sale of hemodialysis products include Baxter International Inc., Fresenius Medical Care AG, Asahi Kasei Medical Co. Ltd., B. Braun Melsungen AG, Nipro Medical Corporation Ltd., Nikkiso Co., Ltd., Terumo Medical Corporation and Toray Medical Co., Ltd.

Other competitive considerations include pharmacological and technological advances in preventing the progression of ESRD in high-risk patients such as those with diabetes and hypertension, technological developments by others in the area of dialysis, the development of new medications designed to reduce the incidence of kidney transplant rejection and progress in using kidneys harvested from genetically-engineered animals as a source of transplants.

We are not aware of any other companies using technology similar to ours in the treatment of ESRD. Our competition would increase, however, if companies that currently sell ESRD products, or new companies that enter the market, develop technology that is more efficient than ours. We believe that in order to become competitive in this market, we will need to develop and maintain competitive products and take and hold sufficient market share from our competitors. Therefore, we expect our methods of competing in the ESRD marketplace to include:

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continuing our efforts to develop, have manufactured and sell products which, when compared to existing products, perform more efficiently and are available at prices that are acceptable to the market;

• displaying our products and providing associated literature at major industry trade shows in the United States;

initiating discussions with dialysis clinic medical directors, as well as representatives of dialysis clinical chains, to develop interest in our products;

pursuing alliance opportunities in certain territories for distribution of our products and possible alternative manufacturing facilities; and

entering into license agreements similar to the Bellco S.r.l. agreement to expand market share.

Intellectual Property

Patents

We protect our technology and products through patents and patent applications. In addition to the United States, we also applied for patents in other jurisdictions, such as the European Patent Office, Canada and Japan, to the extent we deem appropriate. We have built a portfolio of patents and applications covering our products, including their hardware design and methods of hemodiafiltration.

We believe that our patent strategy will provide a competitive advantage in our target markets, but our patents may not be broad enough to cover our competitors' products and may be subject to invalidation claims. Our U.S. patents for the "Method and Apparatus for Efficient Hemodiafiltration" and for the "Dual-Stage Filtration Cartridge," have claims that cover the OLpur MDHDF filter series and the method of hemodiafiltration employed in the operation of the products. Technological developments in ESRD therapy could reduce the value of our intellectual property. Any such reduction could be rapid and unanticipated. We have issued patents on our water filtration products and applications in process to cover various applications in residential, commercial, and remote environments.

As of December 31, 2014, we have eighteen issued U.S. patents, one issued Eurasian patent, seven Mexican patents, four South Korean patents, three Russian patents, six Chinese patents, nine French patents, nine German patents, five Israeli patents, seven Italian patents, three Spanish patents, nine United Kingdom patents, fourteen Japanese patents, three Hong Kong patents, nine Canadian patents, one Australian patent, two patents in Brazil, one patent in Sweden and one patent in the Netherlands. Our issued U.S. patents expire between 2018 and 2027. In addition, we have three

pending U.S. patent applications, four pending patent applications in Canada, five pending patent applications in the European Patent Office, two pending patent applications in Brazil, one pending patent application in China, four pending patent applications in Israel, two pending patent applications in India and one pending patent application in South Korea. Our pending patent applications relate to a range of dialysis technologies, including cartridge configurations, cartridge assembly, substitution fluid systems, and methods to enhance toxin removal.

Trademarks

As of December 31, 2014, we secured registrations of the trademarks CENTRAPUR, H2H,OLpūr and the Arrows Logo in the European Union. Applications for these trademarks are pending registration in the United States. We also have applications for registration of a number of other marks pending in the United States Patent and Trademark Office.

Governmental Regulation

The research and development, manufacturing, promotion, marketing and distribution of our ESRD therapy products in the United States, Europe and other regions of the world are subject to regulation by numerous governmental authorities, including the FDA, the European Union and analogous agencies.

United States

The FDA regulates the manufacture and distribution of medical devices in the United States pursuant to the FDC Act. All of our ESRD therapy products are regulated in the United States as medical devices by the FDA under the FDC Act. Under the FDC Act, medical devices are classified in one of three classes, namely Class I, II or III, on the basis of the controls deemed necessary by the FDA to reasonably ensure their safety and effectiveness.

Class I devices are medical devices for which general controls are deemed sufficient to ensure their safety and •effectiveness. General controls include provisions related to (1) labeling, (2) producer registration, (3) defect notification, (4) records and reports and (5) quality service requirements, or QSR.

Class II devices are medical devices for which the general controls for the Class I devices are deemed not sufficient to ensure their safety and effectiveness and require special controls in addition to the general controls. Special controls include provisions related to (1) performance and design standards, (2) post-market surveillance, (3) patient registries and (4) the use of FDA guidelines.

Class III devices are the most regulated medical devices and are generally limited to devices that support or sustain human life or are of substantial importance in preventing impairment of human health or present a potential, unreasonable risk of illness or injury. Pre-market approval by the FDA is the required process of scientific review to ensure the safety and effectiveness of Class III devices.

Before a new medical device can be introduced to the market, FDA clearance of a pre-market notification under Section 510(k) of the FDC Act or FDA clearance of a pre-market approval, or PMA, application under Section 515 of the FDC Act must be obtained. A Section 510(k) clearance will be granted if the submitted information establishes that the proposed device is "substantially equivalent" to a legally marketed Class I or Class II medical device or to a Class III medical device for which the FDA has not called for pre-market approval under Section 515. The Section 510(k) pre-market clearance process is generally faster and simpler than the Section 515 pre-market approval process.

For any devices cleared through the Section 510(k) process, modifications or enhancements that could significantly affect the safety or effectiveness of the device or that constitute a major change to the intended use of the device will require a new Section 510(k) pre-market notification submission. Accordingly, if we do obtain Section 510(k) pre-market clearance for any of our ESRD therapy and DSU products, we will need to submit another Section 510(k) pre-market notification if we significantly affect that product's safety or effectiveness through subsequent modifications or enhancements.

On July 1, 2009, we received FDA clearance of the DSU to be used to filter biological contaminants from water and bicarbonate concentrate used in hemodialysis procedures.

On August 11, 2011, we filed a 510(k) application with the FDA for clearance of our hemodiafiltration system for end-stage renal disease. On April 30, 2012, we announced that 510(k) clearance was received from the FDA to market the OLpūr H2H Module and OLpūr MD 220 Hemodiafilter for use with a UF controlled hemodialysis machine that provides ultrapure dialysate in accordance with current ANSI/AAMI/ISO standards, for the treatment of patients with chronic renal failure in the United States.

On October 28, 2014, we announced that we received 510(k) clearance from the FDA to market our DSU-H and SSU-H Ultrafilters as medical devices for use in the hospital setting. The DSU-H and SSU-H Ultrafilters are intended to be used to filter EPA quality drinking water. The filters retain bacteria, viruses and endotoxin. By providing ultrapure water for patient washing and drinking, the filters aid in infection control. The filters also produce water that is suitable for wound cleansing, cleaning of equipment used in medical procedures and washing of a surgeon's hands. The filters are not intended to provide water that can be used as a substitute for USP sterile water.

The FDC Act requires that medical devices be manufactured in accordance with the FDA's current QSR regulations which require, among other things, that:

• the design and manufacturing processes be regulated and controlled by the use of written procedures;

the ability to produce medical devices which meet the manufacturer's specifications be validated by extensive and detailed testing of every aspect of the process;

any deficiencies in the manufacturing process or in the products produced be investigated;

detailed records be kept and a corrective and preventative action plan be in place; and

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manufacturing facilities be subject to FDA inspection on a periodic basis to monitor compliance with QSR regulations.

If violations of the applicable QSR regulations are noted during FDA inspections of our manufacturing facilities or the manufacturing facilities of our contract manufacturers, there may be a material adverse effect on our ability to produce and sell our products.

On May 28, 2015, we received a warning letter from the FDA resulting from an October 2014 inspection of our facility in River Edge, New Jersey. The warning letter alleges deficiencies relating to our compliance with the Quality System regulation and the Medical Device Reporting regulation. We take the matters identified in the warning letter seriously and are in the process of evaluating the corrective actions required to address the matters raised in the warning letter. We responded to the warning letter within 15 business days as requested by the FDA, and intend to work diligently and expeditiously to resolve the issues raised by the FDA. The warning letter does not restrict the manufacture, production or shipment of any of our products, nor require the withdrawal of any product from the marketplace. However, failure to promptly address the issues raised in the warning letter to the FDA's satisfaction or to comply with U.S. medical device regulatory requirements in general could result in regulatory action being initiated by the FDA. These actions could include, among other things, delays in approval of any FDA applications, product seizures, injunctions and civil monetary penalties. Any such actions could disrupt our ongoing business and operations and potentially have a material adverse impact on our financial condition and operating results

In addition to the requirements described above, the FDC Act requires that:

all medical device manufacturers and distributors register with the FDA annually and provide the FDA with a list of those medical devices which they distribute commercially;

information be provided to the FDA on death or serious injuries alleged to have been associated with the use of the \cdot products, as well as product malfunctions that would likely cause or contribute to death or serious injury if the malfunction were to recur; and

certain medical devices not cleared with the FDA for marketing in the United States meet specific requirements before they are exported.

European Union

The European Union began to harmonize national regulations comprehensively for the control of medical devices in member nations in 1993, when it adopted its Medical Devices Directive 93/42/EEC. The European Union directive

applies to both the manufacturer's quality assurance system and the product's technical design and discusses the various ways to obtain approval of a device (dependent on device classification), how to properly CE Mark a device and how to place a device on the market.

The regulatory approach necessary to demonstrate to the European Union that the organization has the ability to provide medical devices and related services that consistently meet customer requirements and regulatory requirements applicable to medical devices requires the certification of a full quality management system by a notified body. Initially, we engaged TÜV Rheinland of North America, Inc., or TÜV Rheinland, as the notified body to assist us in obtaining certification to the International Organization for Standardization, or ISO, 13485/2003 standard, which demonstrates the presence of a quality management system that can be used by an organization for design and development, production, installation and servicing of medical devices and the design, development and provision of related services.

European Union requirements for products are set forth in harmonized European Union standards and include conformity to safety requirements, physical and biological properties, construction and environmental properties, and information supplied by the manufacturer. A company demonstrates conformity to these requirements, with respect to a product, by pre-clinical tests, biocompatibility tests, qualification of products and packaging, risk analysis and well-conducted clinical investigations approved by ethics committees.

Once a manufacturer's full quality management system is determined to be in compliance with ISO 13485/2003 and other statutory requirements, and the manufacturer's products conform to harmonized European standards, the notified body will recommend and document such conformity. The manufacturer will receive a CE marking and ISO certifications, and then may place a CE mark on the relevant products. The CE mark, which stands for Conformité Européenne, demonstrates compliance with the relevant European Union requirements. Products subject to these provisions that do not bear the CE mark cannot be imported to, or sold or distributed within, the European Union.

In July 2003, we received a certification from TÜV Rheinland that our quality management system conforms to the requirements of the European Community. At the same time, TÜV Rheinland approved our use of the CE marking with respect to the design and production of high permeability hemodialyzer products for ESRD therapy. In April 2010, we changed our notified body from TÜV Rheinland to BSI America, Inc. and expanded our scope to include design and development and production of water filters.

Under the Bellco license agreement, as discussed above, we granted Bellco a license to manufacture, market and sell the Products under its own name, label and CE mark in the Territory. In addition, if requested by us, Bellco will be required to sell the Products to our distributors in the Territory.

Regulatory Authorities in Regions Outside of the United States and the European Union

We also plan to sell our ESRD therapy products in foreign markets outside the United States which are not part of the European Union. Requirements pertaining to medical devices vary widely from country to country, ranging from no health regulations to detailed submissions such as those required by the FDA. We believe the extent and complexity of regulations for medical devices such as those produced by us are increasing worldwide. We anticipate that this trend will continue and that the cost and time required to obtain approval to market in any given country will increase, with no assurance that such approval will be obtained. Our ability to export into other countries may require compliance with ISO 13485, which is analogous to compliance with the FDA's QSR requirements. In November 2007 and May 2011, the Therapeutic Products Directorate of Health Canada, the Canadian health regulatory agency, approved our OLpūr MD220 Hemodiafilter and our DSU, respectively, for marketing in Canada. Other than the CE marking and Canadian approval of our OLpūr MD220 Hemodiafilter and DSU products, we have not obtained any regulatory approvals to sell any of our products and there is no assurance that any such clearance or certification will be issued.

Reimbursement

In both domestic markets and markets outside of the United States, sales of our ESRD therapy products will depend in part, on the availability of reimbursement from third-party payers. In the United States, ESRD providers are reimbursed through Medicare, Medicaid and private insurers. In countries other than the United States, ESRD

providers are also reimbursed through governmental and private insurers. In countries other than the United States, the pricing and profitability of our products generally will be subject to government controls. Despite the continually expanding influence of the European Union, national healthcare systems in its member nations, including reimbursement decision-making, are neither regulated nor integrated at the European Union level. Each country has its own system, often closely protected by its corresponding national government.

Product Liability and Insurance

The production, marketing and sale of our products have an inherent risk of liability in the event of product failure or claim of harm caused by product operation. We have acquired product liability insurance for our products in the amount of \$2 million. A successful claim in excess of our insurance coverage could materially deplete our assets. Moreover, any claim against us could generate negative publicity, which could decrease the demand for our products, our ability to generate revenues and our profitability.

Some of our existing and potential agreements with manufacturers of our products and components of our products do or may require us (1) to obtain product liability insurance or (2) to indemnify manufacturers against liabilities resulting from the sale of our products. If we are not able to maintain adequate product liability insurance, we will be in breach of these agreements, which could materially adversely affect our ability to produce our products. Even if we are able to obtain and maintain product liability insurance, if a successful claim in excess of our insurance coverage is made, then we may have to indemnify some or all of our manufacturers for their losses, which could materially deplete our assets.

Employees

As of December 31, 2014, we employed a total of 8 employees, 7 of whom were full time and 1 who is employed on a part-time basis. We also have engaged 2 consultants on an ongoing basis. Of the 10 total employees and consultants, 3 are employed in a sales/marketing/customer support capacity, 3 in general and administrative and 4 in research and development.

Properties

Our U.S. facilities are located at 41 Grand Avenue, River Edge, New Jersey, 07661 and consist of approximately 4,688 square feet of space. The term of the rental agreement is for one year commencing December 1, 2014 with a monthly cost of approximately \$8,800. We use these facilities to house our corporate headquarters and research facilities.

Our facilities in Europe are currently located at A5 Clonlara Avenue, Baldonnell Business Park, Dublin, Ireland, and consist of approximately 500 square feet of space. The lease agreement was entered into on July 1, 2010. The lease term is renewable for 6 month terms with a 2 month notice to discontinue, on a rolling basis. Our monthly cost is 500 Euro (approximately \$700).

We use these facilities to house our accounting, operations and customer service departments.

We believe our current facilities will be adequate to meet our needs. We do not own any real property for use in our operations or otherwise.

Legal Proceedings

There are no currently pending legal proceedings and, as far as we are aware, no governmental authority is contemplating any proceeding to which we are a party or to which any of our properties is subject.

Available Information

We make available free of charge on our website (http://www.nephros.com) our Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. We provide electronic or paper copies of filings free of charge upon request. The public may read and copy any materials filed with the SEC at the SEC's Public Reference Room at 100 F Street N.E. Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers that file with the SEC at http://www.sec.gov.

MANAGEMENT

Director Classes

Our Board of Directors is currently composed of six directors. Our Board of Directors is divided into three classes. Each year, one class is elected to serve for three years. The business address for each director for matters regarding our company is 41 Grand Avenue, River Edge, New Jersey 07661.

In connection with our September 2007 financing, we entered into an investor rights agreement with the 2007 investors pursuant to which we agreed to take such corporate actions as may be required, among other things, to entitle Lambda Investors (i) to nominate two individuals having reasonably appropriate experience and background to our Board to serve as directors until their respective successor(s) are elected and qualified, (ii) to nominate each successor to the Lambda Investors nominees, provided that any successor shall have reasonably appropriate experience and background, and (iii) to direct the removal from the Board of any director nominated under the foregoing clauses (i) or (ii). Under the investor rights agreement, we are required to convene meetings of the Board of Directors at least once every three months. If we fail to do so, a Lambda Investors director will be empowered to convene such meeting.

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Class I Director — Term Expiring 2015

| | Age | Director | | | | | |
|----------------------|--------------------|-------------------|--|--|--|--|--|
| Name | (as of 5/31/15) | Director Since | Business Experience For Last Five Years | | | | |
| Arthur H. Amron | 58 | 2007 | Mr. Amron has served as a director of our company since September 2007. Mr. Amron is a Partner of Wexford Capital LP, an SEC-registered investment advisor and serves as its General Counsel. Mr. Amron also actively participates in various private equity transactions, particularly in the bankruptcy and restructuring areas, and has served on the boards and creditors' committees of a number of public and private companies in which Wexford has held investments. Mr. Amron has also served as a director of Rhino GP LLC, which is the general partner of Rhino Resource Partners LP, a publicly traded master limited partnership (NYSE - RNO), since October 2010. From 1991 to 1994, Mr. Amron was an Associate at Schulte Roth & Zabel LLP, specializing in corporate and bankruptcy law, and from 1984 to 1991, Mr. Amron was an Associate at Debevoise & Plimpton LLP specializing in corporate litigation and bankruptcy law. Mr. Amron holds a J.D. from Harvard University, a B.A. in Political Theory from Colgate University and is a member of the New York Bar. Among other experience, qualifications, attributes and skills, Mr. Amron's legal training and experience in the capital markets, as well as his experience serving on boards of directors of other public companies, led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure. | | | | |
| | Age | Director | | | | | |
| Name | (as of 5/31/15) | Since | Business Experience For Last Five Years | | | | |
| Matthew Rosenberg | 34 | 2014 | Dr. Rosenberg has served as a director of our company since May 2014. Dr. Rosenberg is an accomplished professional with extensive healthcare public policy experience. He is the Founder and President of Opake as well as an active angel investor. Dr. Rosenberg was formerly at McKinsey & Company, a global management consulting firm, where he focused on the Healthcare Systems and Services Practice. Dr. Rosenberg specializes in driving impact for payors and providers through strategic, organizational and operational improvements, including managed care contracting, alternative reimbursement designs, and clinical operations improvement. Dr. Rosenberg received his A.B. in Economics from Harvard University and his M.D. from Yale University School of Medicine. Among other experience, qualifications, attributes and skills, Dr. Rosenberg's medical background and healthcare policy experience led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure. | | | | |

Class II Directors — Term Expiring 2016

| | Age | | Business Experience For Last Five Years | | | | |
|-------------------|--------------------|-------------------|---|--|--|--|--|
| Name | (as of 5/31/15) | Director Since | | | | | |
| Paul A. Mieyal | 44 | 2007 | Dr. Mieyal has served as a director of our company since September 2007 and served as our Acting President, Acting Chief Executive Officer, Acting Chief Financial Officer and Acting Secretary from January 4, 2015 until April 15, 2015. Dr. Mieyal also previously served as our Acting Chief Executive Officer from April 6, 2010 until April 20, 2012.Dr. Mieyal has been a Vice President of Wexford Capital LP since October 2006. From January 2000 through September 2006, he was Vice President in charge of healthcare investments for Wechsler & Co., Inc., a private investment firm and registered broker-dealer. Dr. Mieyal was a director of Nile Therapeutics, Inc., a publicly traded company, from September 2007 through November 2013. Dr. Mieyal received his Ph.D. in Pharmacology from New York Medical College, a B.A. in Chemistry and Psychology from Case Western Reserve University, and is a Chartered Financial Analyst. Among other experience, qualifications, attributes and skills, Dr. Mieyal's pharmacology and chemistry education, his experience in investment banking in the healthcare industry, as well as his experience serving on boards of directors of other public companies, led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure. | | | | |

| | Age | D' | | | | |
|-------------------|--------------------|-------------------|---|--|--|--|
| Name | (as of 5/31/15) | Director Since | Business Experience For Last Five Years | | | |
| Malcolm Persen | 61 | 2015 | Mr. Persen has served as a director of our Company since May 2015 and is currently the President of Resolute Performance Contracting, a solar construction firm that he founded in 2011. Previously, from 2009 through 2011, he was the Executive Vice President at Ironco Enterprises, a renewable energy contracting organization. From 2004 through 2008, Mr. Persen served as the Chief Financial Officer for Radyne Corporation, a NASDAQ-traded manufacturer and distributor of satellite and telecommunications equipment. While at Radyne, he was part of the management team that tripled revenues and sold the firm, resulting in a 100% return for shareholders. Earlier, Mr. Persen was employed as Group Financial Officer for Avnet, Inc., a global distributor of electronic components and computer systems. Other experience included assignments with consultancies Arthur D. Little and Mercer Management Consulting. In addition, Mr. Persen lectured in finance at the University of Arizona from 2010 to 2013 and at Boston College from 1988 to 1999. Mr. Persen currently serves on the Board of Valutek, a supplier of cleanroom supplies through direct and distribution channels. Mr. Persen holds a BA in Political Economics from The Colorado College, and an MBA from The Amos Tuck School of Business at Dartmouth College. Among other experience, qualifications, attributes and skills, Mr. Persen's extensive financial background led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure. | | | |

Class III Directors — Term Expiring 2017

| | Age | D: (| Business Experience For Last Five Years | | | | |
|----------------|--------------------|-------------------|---|--|--|--|--|
| Name | (as of 5/31/15) | Director Since | | | | | |
| Daron Evans | 41 | 2013 | Mr. Evans is currently our President, Chief Executive Officer and Acting Chief Financial Officer. He previously served as the Chairman of our Board of Directors from January 4, 2015 through April 15, 2015. Mr. Evans is a life sciences executive with over 20 years of financial leadership and operational experience. Mr. Evans is currently Managing Director of PoC Capital, LLC, and a Director of Zumbro Discovery, an early stage company developing a novel therapy for resistant hypertension. Mr. Evans was most recently Chief Financial Officer of Nile Therapeutics, Inc., from 2007 until its merger with Capricor, Inc. in November 2013. From 2006 to 2007, he was Director of Business Assessment for Vistakon, a division of Johnson & Johnson Corp. From 2004 to 2006, he was Associate Director of Portfolio Management & Business Analytics at Scios, Inc. after its acquisition by Johnson & Johnson Corp. Mr. Evans was a co-founder of Applied Neuronal Network Dynamics, Inc. and served as its President from 2002 to 2004. From 1995 to 2002, Mr. Evans served in various roles at consulting firms Arthur D. Little and Booz Allen & Hamilton. Mr. Evans is the author of four U.S. patents. Mr. Evans received his Bachelor of Science in Chemical Engineering from Rice University, his Master of | | | | |

Science in Biomedical Engineering from a joint program at the University of Texas at Arlington and Southwestern Medical School and his MBA from the Fuqua School of Business at Duke University. Among other experience, qualifications, attributes and skills, Mr. Evans's extensive operational and business development experience led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure.

| | Age | D' | | | | |
|----------------------------|--------------------|-------------------|--|--|--|--|
| Name | (as of 5/31/15) | Director Since | Business Experience For Last Five Years | | | |
| Lawrence J. Centella | 74 | 2001 | Mr. Centella has served as a director of our company since January 2001 and currently serves as the Chairman of our Board of Directors. Mr. Centella serves as President of Renal Patient Services, LLC, a company that owns and operates dialysis centers, and has served in such capacity since June 1998. From 1997 to 1998, Mr. Centella served as Executive Vice President and Chief Operating Officer of Gambro Healthcare, Inc., an integrated dialysis company that manufactured dialysis equipment, supplied dialysis equipment and operated dialysis clinics. From 1993 to 1997, Mr. Centella served as President and Chief Executive Officer of Gambro Healthcare Patient Services, Inc. (formerly REN Corporation). Prior to that, Mr. Centella served as President of COBE Renal Care, Inc., Gambro Hospal, Inc., LADA International, Inc. and Gambro, Inc. Mr. Centella is also the founder of LADA International, Inc. Mr. Centella received a B.S. from DePaul University. Among other experience, qualifications, attributes and skills, Mr. Centella's extensive experience in managing companies engaged in the business of dialysis centers and equipment, led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure. | | | |

Director Independence

Our Board of Directors has determined that all of the current directors are "independent" within the meaning of the Nasdaq independence standard, other than Mr. Evans, who currently serves as the Company's President, CEO and Acting CFO, and Mr. Mieyal, who served as the Company's Acting President, Acting Chief Executive Officer, Acting Chief Financial Officer and Acting Secretary from January 4, 2015 until April 15, 2015.

Executive Officer

We currently have no executive officers other than Daron Evans, who serves as our President, Chief Executive Officer and Acting Chief Financial Officer.

On January 4, 2015, John C. Houghton separated from service with the Company as President, Chief Executive Officer and Acting Chief Financial Officer of the Company. Mr. Houghton also resigned as a member of the Board effective January 4, 2015. From January 4, 2015 through April 15, 2015, Paul A. Mieyal, a member of the Board of Directors, served as the Acting President, Chief Executive Officer and Chief Financial Officer.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act requires our officers and directors, and persons who own more than 10% of a registered class of our equity securities, to file reports of ownership on Form 3 and changes in ownership on Form 4 or Form 5 with the SEC. Officers, directors and 10% stockholders are also required by SEC rules to furnish us with copies of all such forms that they file. Based solely on a review of the copies of such forms received by us, or written representations from reporting persons, we believe that during fiscal year 2014, all of our officers, directors and 10% stockholders complied with applicable Section 16(a) filing requirements except as follows: (i) each of Messrs. Amron, Mieyal, and Centella did not timely file one Form 4 reporting a grant of stock options and restricted stock by the Board and (ii) Mr. Evans did not timely file one Form 4 related to shares issued to Mr. Evans upon exercise of nontransferable subscription rights in the March 2014 rights offering.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

There have been no disagreements with our accountants during 2014 or 2013 reportable pursuant to this requirement.

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EXECUTIVE COMPENSATION

The following table sets forth all compensation earned in the fiscal years ended December 31, 2014 and 2013 by our Named Executive Officers.

Summary Compensation Table

| Name and Principal Position | Year | Salary (\$) | Bonus (\$) ⁽¹⁾ | Stock Awards (\$) ⁽²⁾ | Option Awards (\$) ⁽²⁾ | All Other Compensation (\$) ⁽³⁾ | n Total |
|--|------|----------------|------------------------------|--|---|--|-----------|
| John C. Houghton ⁽⁴⁾ | 2014 | \$350,000 | - | - | \$10,500 | \$ 37,784 | \$398,284 |
| President, Chief Executive Officer and Acting Chief Financial Officer | 2013 | \$350,000 | - | \$47,040 | \$23,625 | \$ 31,652 | \$452,317 |

(1) The amounts in this column reflect decisions approved by our Compensation Committee and are based on an analysis of the executive's contribution to our company during fiscal years 2014 and 2013.

The amount reported is the aggregate grant date fair value of the options granted, computed in accordance with (2)FASB ASC Topic 718. The assumptions used in determining the grant date fair values of the option awards are set forth in Note 2 of the consolidated financial statements set forth elsewhere in this Annual Report.

(3)

See table below for details on "All Other Compensation."

Mr. Houghton was appointed President and Chief Executive Officer effective April 20, 2012. On August 9, 2013, (4)
(4) Financial Officer and Principal Financial and Accounting Officer. Mr. Houghton separated from service with the Company effective January 4, 2015.

All Other Compensation

| | Motohing | Health | Life | |
|------------------|----------------------------|-----------|-------------|--------------|
| Name | Matching Year 401K Plan | Insurance | Insurance | Total Other |
| Name | Contribution | Paid by | Paid by the | Compensation |
| | Contribution | Company | Company | |
| John C. Houghton | 2014 \$ 14,000 | \$ 20,520 | \$ 3,264 | \$ 37,784 |

2013 \$ 14,000 \$ 15,732 \$ 1,920 \$ 31,652

Option and Restricted Stock Holdings and Fiscal Year-End Option and Restricted Stock Values

The following table shows information concerning unexercised options and unvested restricted stock awards outstanding as of December 31, 2014 for our named executive officers.

Outstanding Equity Awards at Fiscal Year-End 2014

| Name | Grant Date ⁽¹⁾ | Securities Underlyin Unexercise Options (# | Number of | Option Exercise Price (\$) | Option Expiration Date ⁽³⁾ |
|------------------|---------------------------|---|-----------|----------------------------------|---|
| John C. Houghton | April 20, 2012 | 464,063 | 210,938 | \$ 0.95 | 4/20/22 |
| John C. Houghton | July 3, 2012 | 227,941 | 331,550 | \$ 1.89 | 7/3/22 |
| John C. Houghton | May 23, 2013 | 9,375 | 28,125 | \$ 0.71 | 5/23/23 |
| John C. Houghton | February 5, 2014 | - | 35,000 | \$ 0.71 | 5/23/23 |

(1) For better understanding of this table, we have included an additional column showing the grant date of stock options.

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(2) As of December 31, 2014, stock options became exercisable in accordance with the vesting schedule below:

| Grantee | Grant Date | Vesting |
|------------------|------------------|--|
| John C. Houghton | April 20, 2012 | 14,063 vest monthly until March 20, 2016 |
| John C. Houghton | July 3, 2012 | 6,907 vest monthly until March 20, 2016 |
| John C. Houghton | May 23, 2013 | 9,375 vest annually until May 23, 2017 |
| John C. Houghton | February 5, 2014 | 8,750 vest annually until February 5, 2018 |

Effective January 4, 2015, in connection with the separation from service of John C. Houghton from all of his positions with the Company, all unvested options were forfeited. The total unvested and forfeited options equaled 605,613.

(3) Effective January 4, 2015, in connection with the separation from service of John C. Houghton from all of his positions with the Company, the expiration date for all options was accelerated to April 4, 2015.

Advisory Vote on Executive Compensation

Our Board of Directors recognizes the fundamental interest our stockholders have in the compensation of our executive officers. At the Company's 2014 Annual Meeting, our stockholders approved with approximately 98% of the votes cast, on an advisory basis, in favor of the compensation of the Company's named executive officers as disclosed in the compensation tables and related narrative disclosure in the proxy statement for the 2014 Annual Meeting. Based on the results of such advisory vote and our review of our compensation policies and decisions, we believe that our existing compensation policies and decisions are consistent with our compensation philosophy and objectives disclosed in the compensation tables and related narrative disclosure and adequately align the interests of our named executive officers with the long term goals of the Company. In addition, based on a separate advisory vote of our stockholders at the Company's 2014 Annual Meeting relating to the frequency of the advisory vote on the compensation of the Company's stockholders indicated their approval of the Board's recommendation to hold a non-binding advisory vote on the Company's executive compensation once every two years.

Employment and Change in Control Agreements

We have used employment agreements as a means to attract and retain executive officers. These are more fully discussed below. We believe that these agreements provide our executive officers with the assurance that their employment is a long-term arrangement and provide us with the assurance that the officers' services will be available to us for the foreseeable future.

Agreement with Mr. Daron Evans

The terms of Mr. Evans' employment with the Company are set forth in an Employment Agreement dated as of April 15, 2015, or the Evans Employment Agreement. The Evans Employment Agreement provides for a four-year term expiring on April 14, 2019, unless sooner terminated by either party. Pursuant to the Evans Employment Agreement, Mr. Evans will receive an initial annualized base salary of \$240,000 and will be eligible to receive an annual performance bonus of up to 30% of his annualized base salary. At such time that the Company's common stock is approved for listing on the NASDAQ Stock Market, New York Stock Exchange or such other national securities exchange approved by the Board and begins trading on such exchange, the Board may review and adjust Executive's base salary to a market competitive level. In addition, Mr. Evans was granted a 10-year stock option to purchase an aggregate of 2,184,193 shares of the Company's common stock pursuant to the Company's 2015 Equity Incentive Plan. The option is exercisable at a price of \$0.60 per share, which represents the closing sale price of the Company's common stock on the Effective Date. Mr. Evans right to purchase the shares vests, subject to his continued employment, as follows:

35% of the shares subject to the option vest in 16 equal quarterly installments over 4 years, commencing June 30, 2015;

15% of the shares subject to the option will vest upon approval of listing of the Company's common stock on the \cdot NASDAQ Stock Market, New York Stock Exchange or such other national securities exchange approved by the Board;

10% of the shares subject to the option will vest, if ever, on the February 1st following the Company's first completed fiscal year in which annual revenue exceeds \$3,000,000;

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20% of the shares subject to the option will vest, if ever, on the February 1st following the Company's first completed fiscal year in which annual revenue exceeds \$6,000,000; and

20% of the shares subject to the option will vest, if ever, on the February 1st following the Company's first completed fiscal year in which annual revenue exceeds \$10,000,000.

The Evans Employment Agreement provides that if the Company terminates Mr. Evans without "Cause," or if he resigns for "Good Reason" (each as defined in the Evans Employment Agreement), then he shall be entitled to: (i) continuation of his base salary for a period of three months if such termination occurs prior to the first anniversary of April 15, 2015, or if such termination occurs following the first anniversary of April 15, 2015, continuation of his base salary for a period of the expiration of the term of the Evans Employment Agreement, if sooner).

Agreement with Mr. John C. Houghton

Mr. Houghton's employment with the Company ended January 4, 2015. In connection with his separation from employment with the Company, Mr. Houghton entered into a Separation Agreement and General Release. Pursuant to this agreement, Mr. Houghton is entitled to six months severance (equal to six months of his then-current base salary, or a total of \$175,000 and is permitted to exercise his vested unexpired stock options for ninety days following January 4, 2015. During the severance term, Mr. Houghton will be subject to customary non-competition, non-solicitation and confidentiality restrictions.

On April 20, 2012, we entered into an Employment Agreement, or the Houghton Employment Agreement, effective as of April 20, 2012, with Mr. Houghton. The Houghton Employment Agreement had a term of four years, ending on April 20, 2016. The Employment Agreement provided that Mr. Houghton's annual base salary would be \$350,000. Mr. Houghton was eligible to receive a target discretionary bonus of 30% of annual base salary, as determined by us. The targets with respect to the bonus for the year ending December 31, 2012 were mutually agreed upon between Mr. Houghton and the Compensation Committee of the Board within 60 days following April 20, 2012 and such bonus was appropriately prorated for such annual period. The targets for each subsequent annual period were to be mutually agreed upon at the beginning of each calendar year between Mr. Houghton and the Compensation Committee.

Upon execution of the Houghton Employment Agreement, we granted Mr. Houghton options to purchase 675,000 shares of our common stock pursuant to our 2004 Stock Incentive Plan. In addition, we were required to grant Mr. Houghton options to purchase an additional 331,550 shares of our common stock. The Employment Agreement further provided that, subject to Mr. Houghton meeting and maintaining the director eligibility requirements of the Board, Mr. Houghton would be nominated for election as a director at each stockholders meeting during his employment at which his term as a director would otherwise expire.

The Houghton Employment Agreement provides that upon the occurrence of a change in control (as defined in the Houghton Employment Agreement), all of Mr. Houghton's unvested stock options would vest and become exercisable immediately and, unless all such options were cashed-out in the change in control transaction, would remain exercisable for a period of not less than 360 days (or the expiration of the stock option term, if sooner), regardless of whether Mr. Houghton's employment was terminated in connection with such change in control transaction.

In the event that Mr. Houghton's employment was terminated by us for "cause" (as defined in the Houghton Employment Agreement), then we would pay the earned but unpaid base salary for services rendered through the date of termination and any and all unvested stock options would automatically be cancelled and forfeited by Mr. Houghton as of the date of termination.

In the event that Mr. Houghton's employment was terminated by reason of Mr. Houghton's death, or by reason of Mr. Houghton's resignation or retirement (as to which at least two weeks notice is required), then we would pay to Mr. Houghton only the earned but unpaid base salary for services rendered through the date of termination. Any and all unvested stock options will automatically be cancelled and forfeited as of the date of Mr. Houghton's death, resignation or retirement.

If, as a result of Mr. Houghton's incapacity due to physical or mental illness, we determined that Mr. Houghton had failed to perform his duties on a full time basis for either ninety (90) days within any three hundred sixty-five (365) day period or sixty (60) consecutive days, we could terminate his employment hereunder for "disability". In that event, we would pay the earned but unpaid base salary for services rendered through such date of termination. Any and all unvested stock options would be cancelled as of the date of termination. During any period that Mr. Houghton failed to perform his duties as a result of incapacity due to physical or mental illness, he would continue to receive compensation and benefits provided by the Employment Agreement until his employment was terminated; provided, however, that the amount of compensation and benefits received during such period would be reduced by the aggregate amounts, if any, payable under our disability benefit plans and programs or under the Social Security disability insurance program. Additionally, the vesting of stock options would be tolled during such period and in the event of a termination of the Employment Agreement as a result of disability, any and all unvested stock options would automatically be cancelled and forfeited as of the date of termination.

In the event that Mr. Houghton's employment was terminated by us prior to the expiration of the term of the Employment Agreement for any reason other than as described above or by Mr. Houghton for "good reason" (as defined in the Employment Agreement) any and all unvested stock options would automatically be cancelled and forfeited by Mr. Houghton as of the date of such termination (except as provided in a change in control), vested stock options would remain exercisable for ninety (90) days after the date of such termination or the expiration of the stock option term, if sooner (except as otherwise provided in the event of a change in control), and we would pay to Mr. Houghton any earned but unpaid base salary for services rendered through the date of termination and continuing payments of severance pay (less applicable withholding taxes) at a rate equal to his base salary rate, as then in effect, for a period equal to three (3) months (or, when Mr. Houghton has been employed for at least one (1) year, a period equal to six (6) months), to be paid periodically in accordance with our normal payroll policies; provided that if Mr. Houghton continued to be employed in any capacity by a successor entity following a change in control, the severance pay that would otherwise be payable would be reduced by the amount of base compensation and guaranteed bonus (if any) Mr. Houghton received in such capacity during or attributable to the severance term. Payment of any severance benefits would be subject to the execution by Mr. Houghton of a gene