

NEPHROS INC
Form POS AM
April 08, 2013

As filed with the Securities and Exchange Commission on April 8, 2013

Registration No. 333-169728

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D. C. 20549

POST-EFFECTIVE AMENDMENT NO. 5

TO

FORM S-1

REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

NEPHROS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

3841

13-3971809

*(State or Other Jurisdiction of (Primary Standard Industrial (I. R. S. Employer
Incorporation or Organization) Classification Code Number) 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)

John C. Houghton

President and Chief Executive Officer

Nephros, Inc.

41 Grand Avenue

River Edge, New Jersey 07661

(201) 343-5202

(Name, Address, Including Zip Code, and Telephone Number,

Including Area Code, of Agent for Service)

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Approximate date of commencement of proposed sale to the public: As promptly as practicable after this registration statement becomes effective and the satisfaction or waiver of certain other conditions described 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

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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 "

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

EXPLANATORY NOTE

This Post-Effective Amendment No. 5 to Form S-1 (this “Post-Effective Amendment”) is being filed pursuant to Section 10(a)(3) of the Securities Act of 1933, as amended, to update the Form S-1 Registration Statement (Registration No. 333-169728), which was previously declared effective by the Securities and Exchange Commission (“SEC”) on January 31, 2011, to include the audited consolidated financial statements and the notes thereto included in the Registrant’s Annual Report on Form 10-K for the fiscal year ended December 31, 2012 that have been filed with the SEC since the Post-Effective Amendment No. 3 to Form S-1 was declared effective by the SEC on April 5, 2012, and contains an updated prospectus relating to the offering and sale of the securities that were registered on Form S-1. As of the date of filing of this Post-Effective Amendment, no further offering will be made of the units registered on Form S-1. The rights offering was completed on March 10, 2011. Accordingly, this Post-Effective Amendment concerns only the exercise of the warrants underlying the units.

All applicable registration fees were paid at the time of the original filing of such Registration Statement on October 1, 2010.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the Post-Effective Amendment No. 5 to 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 APRIL 8, 2013

NEPHROS, INC.

Issuance of up to 2,981,898 Shares of Common Stock upon Exercise of Warrants

We previously sold 4,964,854 units, each unit consisting of one share of our common stock and a warrant to purchase 4,590,171 shares of our common stock (the “Units”). The warrants are exercisable for a five-year term following the issue date of the warrants, which was March 10, 2011, and have an exercise price of \$0.40 per share. This prospectus relates to the issuance of shares of common stock pursuant to the exercise of the warrants to purchase an aggregate of 2,981,898 shares of common stock.

All costs associated with this registration statement will be borne by us. Shares of our common stock are quoted on the OTC Bulletin Board under the ticker symbol “NEPH.” On February 20, 2013, the closing sales price for our common stock was \$1.00 per share. The shares of common stock issued upon the exercise of warrants will also be quoted on the OTC Bulletin Board under the same ticker symbol. Neither the warrants nor the subscription rights will be listed for trading on any stock exchange or market or quoted on the OTC Bulletin Board.

On March 10, 2011, we completed our rights offering and a private placement that together resulted in gross proceeds of approximately \$3.2 million. The aggregate net proceeds were approximately \$2.3 million, after deducting the estimated aggregate expenses of these transactions which approximated \$200,000, the repayment of the \$500,000 note, plus \$26,650 of accrued interest thereon, issued to Lambda Investors, LLC, the payment of an 8% sourcing/transaction fee of \$40,000 in respect of the note and an aggregate of \$100,000 for reimbursement of Lambda Investors’ legal fees incurred in connection with the loan and the rights offering.

After giving effect to the 1:20 reverse stock split on March 11, 2011, our stockholders subscribed for 4,964,854 units in the rights offering and we accepted all basic subscription rights and oversubscription privileges. The units were sold at a per unit purchase price of \$0.40. Gross proceeds to us from the sale of these units in the rights offering was approximately \$2.0 million. We issued an aggregate of 4,964,854 shares of our common stock and warrants to purchase an aggregate of approximately 4,590,171 shares of our common stock to stockholders who subscribed.

Simultaneously with the closing of the rights offering, Lambda Investors, LLC purchased in a private placement 3,009,711 units at the same per unit purchase price of \$0.40, pursuant to a purchase agreement between us and Lambda Investors. We issued to Lambda Investors an aggregate of 3,009,711 shares of common stock and warrants to purchase an aggregate of 2,782,579 shares of common stock. Of the \$3.2 million in gross proceeds from the rights offering and the private placement, we received approximately \$1.2 million in gross proceeds from the sale of units to Lambda Investors.

We effected a reverse stock split, in which every 20 shares of our common stock issued and outstanding immediately prior to the effective time, which was 5:00 p.m. on March 11, 2011, were converted into one share of common stock. Fractional shares were not issued and stockholders who otherwise would have been entitled to receive a fractional share as a result of the reverse stock split received an amount in cash equal to \$0.04 per pre-split share for such fractional interests. The number of shares of common stock issued and outstanding was reduced from approximately 201,300,000 pre-split to approximately 10,100,000 post-split. The reverse stock split was effected in connection with the rights offering and private placement.

The reverse stock split was approved by our stockholders at the annual meeting held on January 10, 2011. The number of shares of common stock subject to outstanding stock warrants and options, and the exercise prices and conversion ratios of those securities, were automatically proportionately adjusted for the 1-for-20 ratio provided for by the reverse stock split.

All of the share and per share amounts discussed in this Post-Effective Amendment have been adjusted to reflect the effect of this reverse split.

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

We do not intend to sell any more Units.

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 April , 2013.

NEPHROS, INC.

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ABOUT THIS PROSPECTUS

We refer to Nephros, Inc. and its consolidated subsidiary as “Nephros”, the “Company”, “we”, “our”, and “us”. This prospectus 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 years ended December 31, 2012 and 2011, 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 17. 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 and healthcare facilities for the production of ultrapure water and bicarbonate. Because our ultrafilters capture contaminants as small as 0.005 microns in size, they eliminate a wide variety of bacteria, viruses, fungi, parasites, and endotoxins harmful to humans.

All of our ultrafilters use proprietary hollow fiber technology. We believe the hollow fiber design allows our ultrafilters to be the only commercially available filters for healthcare applications that 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

By comparison, competitive filters on the market today are typically effective only to the 0.2 micron level and are prone to clog more quickly, thus reducing their useful lives.

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 (HD). In 2009, we began to extend our filtration technologies to meet the demand for liquid purification in other areas, in particular water purification.

Our Products

Presently, we offer seven types of ultrafilters for sale to customers in four markets:

Dialysis Centers – Water/Bicarbonate: Treatment of both water and bicarbonate for the production of ultrapure dialysate

Hospitals and Other Healthcare Facilities: Removal of infectious agents in drinking and bathing water, particularly in high risk patient areas

Military: Highly compact, individual water treatment devices used by soldiers to produce safe drinking water in the field

Dialysis Centers – Blood: Clearance of toxins from blood using an alternative method to HD in patients with chronic renal failure

We have designed our ultrafilters as either in-line products, filters that are incorporated into the existing plumbing of healthcare facilities, or point-of-use products, filters that can be easily installed onto a faucet or as a replacement shower head or can be used stand-alone to purify small quantities of water immediately prior to use.

Our Target Markets

Dialysis Centers – Water/Bicarbonate. To perform hemodialysis, all dialysis clinics have dedicated water purification systems to produce pure water and bicarbonate. Water and bicarbonate are essential ingredients for making dialysate, the liquid that removes waste material from the blood. Within the U.S., there are approximately 5,700 clinics with 100,000 dialysis machines providing over 50 million dialysis treatments to 370,000 patients annually.

Medicare is the main payor for dialysis treatment in the U.S. To be eligible for Medicare reimbursement, dialysis centers must meet the minimum standards for water and bicarbonate quality set by the Association for the Advancement of Medical Instrumentation (AAMI), the American National Standards Institute (ANSI) and the International Standards Organization (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 make patients healthier and reduce their dependence on erythropoietin (EPO), an expensive drug 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, cytokine levels within a patient stay low, thus reducing systemic inflammation. When inflammation is low, inflammatory morbidities are reduced and a patient's responsiveness to EPO is enhanced, consequently the overall need for the drug is reduced.

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

Hospitals and Other Healthcare Facilities. According to the United States Centers for Disease Control and Prevention (CDC), healthcare acquired infections (HAIs) annually account for 1.7 million infections, 99,000 deaths, and \$4.5 - \$6.5 billion in extra costs in U.S. hospitals. At the root of many HAIs are waterborne pathogens such as *Legionella* and *Pseudomonas* which can thrive in aging or complex plumbing systems often found in healthcare facilities. According to the CDC, 23% of *Legionella* infections originate in healthcare facilities and *Pseudomonas* infections account for 10% of all water-related HAIs. These pathogens are most harmful to patients in intensive care, neonatal, burn, cancer, and transplant units.

The Affordable Care Act (ACA) 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. The ACA encompasses HAIs and shifts the costs associated with their treatment back onto the healthcare provider. As a consequence, hospitals and other healthcare facilities are proactively implementing strategies to reduce the potential for HAIs.

Our ultrafilters are designed to reduce the risk of HAIs in the hospital/healthcare setting by treating water just prior to use. Our products can be used for reactive infection control. For example, during acute disease outbreaks (such as Legionnaires' disease), our ultrafilters have been used at hospitals and other healthcare facilities to quickly and efficiently assist in the control of such outbreaks. Our ultrafilters are also being used as a preventative measure in healthcare facilities, particularly in areas where high risk patients are being treated. Our point-of-use filters can be easily installed onto the end of faucets or as replacement shower heads.

The plastic casing of our hospital ultrafilters contains BACTiglas™. BACTiglas™ releases silver ions at the surface of the plastic casing such that they are imparted to anything that touches it. Silver ions (through chemical bonding with amino acids) result in the killing of the bacteria that remains on the surface of the plastic. This enables our hospital ultrafilters to be bacteriocidal to any touch contamination or any growth on the surface of the plastic in addition to their water treatment effect.

Military. 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 Environmental Protection Agency specified levels; thereby reducing the effects of acute debilitating illnesses to soldiers.

We offer our individual water treatment device (IWTD), which allows a soldier in the field to derive biologically safe water from any fresh water source. Our IWTD is available in both in-line and point-of-use configurations. Our IWTD is one of the few portable filters that have been validated by the military to meet the NSF Protocol P248 standard. It has also been approved by U.S. Army Public Health Command (USAPHC) and U.S. Army Test and Evaluation Command (ATEC) for deployment. To date, we have received purchase orders for approximately 2,000 IWTDs from individual units of the U.S. armed forces and could become more widely used by soldiers in the future.

In January 2013, the U.S. Army issued a request for proposal (RFP) relating to an IWTD, Nephros submitted its response to this RFP on February 25th. The U.S. Army may award several, one or no contracts as a result of this solicitation. The maximum quantity of all contracts combined is not to exceed 450,000 units or \$45,000,000 over a 3 year period. The RFP evaluation period may take up to 6 months before an award is made, if at all.

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 (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 (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 multiple 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 which is more patient-friendly, less resource-intensive, and can be used in conjunction with current HD machines. We refer to our approach as an on-line mid-dilution hemodiafiltration (mid-HDF) system and it consists of our OLpūr H2H Module and OLpūr MD220 Hemodiafilter. On April 30, 2012, we announced that we received clearance from the U.S. Food and Drug Administration to market the OLpūr H2H Module and OLpūr MD220 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. Like HD, on-line mid-HDF treatment is given to patients at least 3 times weekly for 3-4 hours per treatment. Our mid-HDF system is the only HDF system of its kind to be cleared by the FDA to date.

We are currently preparing our OLpūr H2H Modules and manufacturing our OLpūr MD220 Hemodiafilters in readiness for market release. We expect to place a mid-HDF system in a U.S. dialysis clinic in Q2. We have not begun to broadly market our mid-HDF system and plan to seek a commercialization partner in the U.S.

Immediate Need for Capital and Recent Loan from Lambda Investors LLC

As of December 31, 2012, we had cash and cash equivalents totaling approximately \$47,000 and tangible assets of approximately \$1,419,000.

Due to our dwindling cash position, on February 4, 2013, we issued a senior secured note to Lambda Investors LLC in the principal amount of \$1,300,000. We expect that the proceeds from the note will allow us to fund our operations only through May 2013. The terms of the Lambda Investors note are discussed in more detail under the heading “Business— Recent Developments— Recent Loan from Lambda Investors LLC and Rights Offering.”

As required under the terms of the note, we are conducting a rights offering to raise up to \$3,000,000 from our existing stockholders and warrant holders. If we complete the rights offering, we must repay the principal and accrued interest on the note as well as fees and expenses associated with the note with the proceeds from the rights offering. Other conditions to the closing of the rights offering are discussed under the heading “Business— Recent Developments— Recent Loan from Lambda Investors LLC and Rights Offering.”

As of the date of this prospectus, Lambda Investors is our largest stockholder and beneficially owns approximately 31% of our outstanding common stock and, on a fully-diluted basis, owns approximately 53% of our outstanding common stock. The warrants held by Lambda Investors have an exercise price of \$0.40 per share and certain warrants have full ratchet anti-dilution protection.

The shares beneficially owned by Lambda Investors may be deemed beneficially owned by Wexford Capital LP, which is the managing member of Lambda Investors. Arthur H. Amron, a director of Nephros, is a partner and general counsel of Wexford Capital. Paul Mieyal, a director of Nephros, is a vice president of Wexford Capital.

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 on our website, www.nephros.com, our annual reports, quarterly reports, proxy statements and other filings made with the SEC. The registration statement on Form S-1, of which this prospectus is a part, and its exhibits, as well as our other reports filed with the SEC, can be inspected and copied at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information about the operation of the public reference room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains a web site at www.sec.gov which contains our registration statement on Form S-1 and any amendments thereto and other reports, proxy and information statements and information regarding us that we file electronically with the SEC.

The Offering

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

Securities Offered	2,981,898 shares of common stock issuable upon exercise of the warrants issued in connection with the Units sold on March 10, 2011.
Exercise Price and Term of Warrants	The warrants have an exercise price of \$0.40 per share and are exercisable at any time prior to March 10, 2016. For a more complete description of the terms of the warrants, see “Description of Warrants.”
Use of Proceeds	The proceeds of this offering consist solely of the payment by warrant holders of the exercise price. We plan to use the net proceeds of this offering to further develop our products and for general working capital purposes. For a more complete description of our intended use of proceeds from this offering, see “Use of Proceeds.”
Risk Factors	The exercise of the warrants and the acquisition of our common stock involve substantial risks. See “Risk Factors” beginning on page 6 of this prospectus.
State Securities Law Matters	The issuance and exercise of warrants is subject to compliance with state securities laws and regulations. We reserve the right in some states to require stockholders, if they wish to participate, to state and agree upon exercise of their warrants that they are acquiring the shares for investment purposes only, and that they have no present intention to resell or transfer any shares acquired. This offering is not being made and our securities are not being offered in any jurisdiction where the offer is not permitted under applicable local laws. We have the right, in our sole discretion, to not effect registration or qualification of the shares underlying the warrants in any state or other jurisdiction, or take any other action required by any state or other jurisdiction to allow the offer to take place in that state or jurisdiction. If you reside in a state or other jurisdiction in which registration, qualification or other action is necessary with which we choose not to comply, you will not be eligible to participate in the offering.
Listing	The shares of our common stock issuable upon exercise of the warrants will be listed on the OTC Bulletin Board under the ticker symbol “NEPH.”

Unless otherwise indicated, the information in this prospectus reflects a 1-for-20 reverse split of our common stock, which was effective on March 11, 2011.

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

Our independent registered public accounting firm, in its audit report related to our financial statements for the fiscal year ended December 31, 2012, 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 financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2012 expressing doubt as to our ability to continue as a going concern. The accompanying 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.

If we do not receive capital from the rights offering or from another source, we may be forced to cease operations.

We are in immediate need of capital. We expect that the \$1.3 million in proceeds from the senior secured note issued to Lambda Investors LLC will allow us to fund our operations through May 2013. If we do not successfully complete a rights offering by May 2013, we expect that we will not have sufficient resources to fund our operations and may be required to cease and wind down operations unless we can find another source of financing at such time, which we believe would be difficult and may not be possible on acceptable terms or at all.

Our secured note with Lambda Investors LLC affects our business operations and contains provisions which restrict our ability to execute certain strategic transactions

On February 4, 2013, we issued a senior secured note to Lambda Investors LLC in the principal amount of \$1.3 million. We expect that the proceeds from the note will allow us to fund our operations through May 2013. The note bears interest at the rate of 12% per annum and matures on August 4, 2013, at which time all principal and accrued interest will be due. If we do not pay principal and interest under the note when due, the interest rate increases to 16% per annum. The note is secured by a first priority lien on all of our property, including our intellectual property. In the event of a default, our outstanding indebtedness could become immediately due and payable and, if outstanding indebtedness is not immediately satisfied from cash resources, Lambda could realize on the collateral to secure such indebtedness. Currently, we do not have sufficient cash to satisfy the indebtedness.

As long as indebtedness remains outstanding under the senior secured note with Lambda Investors LLC, we will be subject to certain covenants which, among other items, restrict our ability to merge with another company, sell a material amount of our assets, incur any additional indebtedness, repay any existing indebtedness, or declare or pay any dividends in cash, property or securities. These restrictions significantly impact our future alternatives to enter into strategic transactions and limit our ability to obtain additional or other financing because our assets have been pledged as collateral for repayment of our indebtedness. We have agreed to prepay amounts due under the note with the cash proceeds from (a) a rights offering and an offering of a discounted exercise price to public warrant holders, each as further described in the note, (b) any other equity or debt financing, or (c) the issuance or incurrence of any other indebtedness or the sale of any assets outside the ordinary course of business, in each case prior to the maturity date. In addition, the net proceeds of any offering, financing, asset disposition or other external liquidity generating transaction would need to be first applied to our existing indebtedness which, while reducing our level of indebtedness, cannot be assured to be sufficient for our continuing cash requirements and cash needs.

In the event that we default under the senior secured note or we are unable to repay the indebtedness when it becomes due, Lambda could foreclose on all of our property and assets. If this were to occur, our stockholders could lose all or a portion of their investment in the Company.

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

We have not been profitable since our inception in 1997. As of December 31, 2012, we had an accumulated deficit of approximately \$97,530,000, primarily 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:

- the market acceptance 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; and
- our ability to continue to develop products and maintain a competitive advantage in our industry.

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

Our products are new to the market, and 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. If we fail to successfully commercialize our products, then we will not 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 and, 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 OLpur mid dilution hemodiafilter series product and our Dual Stage Ultrafilter (“DSU”). We have not yet obtained the CE mark for any of our other products. Recently, 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 yet begun to market these products 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.

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.

We cannot assure you that our medically approved products will be safe and we are required under applicable law to report any product-related deaths or serious injuries or product malfunctions that could result in deaths or serious injuries, and such reports 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 medically approved products will be safe. Under the Food, Drug and Cosmetic Act (FDCA), we are required to submit medical device reports, or MDRs, to the FDA to report device-related deaths, serious injuries and product malfunctions 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 gain market acceptance of our medically approved 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 medically approved 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. 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:

·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.

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. If we violate the FDC Act or other regulatory requirements at any time during or after the product development and/or approval process, 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.

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 16 granted U.S. patents will expire at various times from 2018 to 2026, assuming they are properly maintained.

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.

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. If violations of applicable requirements are noted during periodic inspections of the manufacturing

facilities of our manufacturers, 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;
- 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.

Our Common Stock currently does not meet all of the requirements for initial listing on a registered stock exchange. Our Common Stock is quoted on the OTC Bulletin Board. Trading in our Common Stock on the OTC Bulletin Board 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 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.

As previously disclosed, we expect to commence a rights offering in March 2013. Holders of our common stock and public warrants that choose not to fully exercise their basic subscription privilege will be diluted as a result of the rights offering if other shareholders and/or warrant holders fully exercise their basic subscription privilege, and such affected holders' voting and other rights will likewise be diluted.

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

In the two years ended December 31, 2012, our Common Stock has traded at prices ranging from a high of \$3.19 to a low of \$0.40 per share, after giving effect to the 1:20 reverse stock split effected on March 11, 2011. 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;
- 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 biotechnology 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.

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.

If we fail to maintain an effective system of internal controls over financial reporting, we may not be able to accurately report our financial results, which could have a material adverse effect on our business, financial condition and the market value of our securities.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports. If we cannot provide reliable financial reports, our reputation and operating results may be harmed. If management is unable to express a favorable opinion on the effectiveness of our internal controls, we could lose investor confidence in the accuracy and completeness of our financial reports. Any failure to achieve and maintain effective internal controls could have an adverse effect on our business, financial position and results of operations.

Our directors, executive officers and Lambda Investors LLC 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 December 31, 2012, our directors, executive officers and Lambda Investors LLC, our largest stockholder, beneficially owned approximately 31% of our outstanding Common Stock, representing approximately 55% on a fully-diluted basis. As previously disclosed, we expect to commence a rights offering in March 2013. Holders of our common stock and public warrants that choose not to fully exercise their basic subscription privilege will be diluted as a result of the rights offering if Lambda fully exercises its subscription privilege, and, consequently, such affected holders' voting and other rights will likewise be diluted. If our stockholders and/or warrant holders do not exercise their subscription privilege in full, and Lambda elects to purchase such shares in the rights offering by exercising an oversubscription right, Lambda would increase its ownership percentage and obtain greater voting power.

As a result of this ownership, Lambda Investors has the ability to exert significant influence over our policies and affairs, including the election of directors. Lambda Investors, 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 Investors, 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 Investors 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 Investors 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 rights offering.

The warrants are currently exercisable and will expire on March 10, 2016. The market price of our common stock may fall below the exercise price for these warrants prior to their expiration. Any warrants not exercised by their date of expiration will expire worthless and we will be under no further obligation to the holders of warrants.

If an effective registration is not in place and a current prospectus is not available when an investor desires to exercise warrants, such investor may be unable to exercise his, her or its warrants, causing such warrants to expire worthless.

We will not be obligated to issue shares of common stock upon exercise of warrants unless, at the time such holder seeks to exercise such warrant, we have a registration statement under the Securities Act in effect covering the shares of common stock issuable upon the exercise of the warrants and a current prospectus relating to the common stock. We intend to use our best efforts to keep a registration statement in effect covering shares of common stock issuable upon exercise of the warrants and to maintain a current prospectus relating to the common stock issuable upon exercise of the warrants until the expiration of the warrants. However, we cannot assure you that we will be able to do so, and if we do not maintain a current prospectus related to the common stock issuable upon exercise of the warrants, holders will be unable to exercise their warrants and we will not be required to settle any such warrant exercise. If the prospectus relating to the common stock issuable upon the exercise of the warrants is not current, the warrants held by public stockholders may have no value, we will have no obligation to settle the warrants for cash, the market for such warrants may be limited, such warrants may expire worthless and, as a result, an investor may have paid the full price solely for the shares of common stock included in the Units.

An investor will only be able to exercise a warrant if the issuance of common stock upon such exercise has been registered or qualified or is deemed exempt under the securities laws of the state of residence of the holder of the warrants.

No warrants will be exercisable and we will not be obligated to issue shares of common stock unless the shares of common stock issuable upon such exercise have been registered or qualified or deemed to be exempt under the securities laws of the state of residence of the holder of the warrants. Because the exemptions from qualification in certain states for resales of warrants and for issuances of common stock by the issuer upon exercise of a warrant may be different, a warrant may be held by a holder in a state where an exemption is not available for issuance of common stock upon an exercise and the holder will be precluded from exercise of the warrant. As a result, the warrants may be deprived of any value, the market for the warrants may be limited, the holders of the warrants may not be able to exercise their warrants and they may expire worthless if the common stock issuable upon such exercise is not qualified or exempt from qualification in the jurisdictions in which the holders of the warrants reside.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains certain “forward-looking statements.” Such statements include statements regarding the efficacy and intended use of our technologies under development, the timelines for bringing such products to market and the availability of funding sources for continued development of such products 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,” “aims,” “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;
- we may not be able to obtain funding if and when needed or on terms favorable to us in order to continue operations;
- a default under the terms of the secured note with Lambda Investors LLC would result in the lender foreclosing upon substantially all of our assets and could result in our inability to continue business operations;
- we may not be able to complete the contemplated rights offering which could result in our inability to continue business operations;
- even if we are able to complete the rights offering, we may not have sufficient capital to successfully implement our business plan;
- restrictions in the secured note and related security agreement which require the prior consent of the lender may restrict our ability to operate our business, sell the company or sell our assets;
- 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 and manufacturers;
- 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, 2012, 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 www.sec.gov. 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.

Any information contained in this prospectus relating to the contemplated rights offering previously disclosed on a Form 8-K filed on February 5, 2013 is preliminary in nature. The securities that are to be offered in the rights offering described therein may not be sold, nor may offers to buy be accepted, prior to the time the registration statement relating to the rights offering becomes effective. This communication shall not constitute an offer to sell or the solicitation of an offer to buy in the rights offering, nor shall there be any sale of the securities in the rights offering, in any state in which such offer, solicitation or sale would be unlawful prior to their registration or qualification under the securities laws of any such state.

USE OF PROCEEDS

We received proceeds from the offer and sale of the Units, net of discounts, commissions and expense, of approximately \$2,300,000. In the event of full exercise of all of the warrants, we will receive additional net proceeds of approximately \$1,836,068. The actual exercise of any of the warrants, however, is beyond our control and depends on a number of factors, including the market price of our common stock. There can be no assurance that any of the warrants will be exercised.

While we have no specific plan for the proceeds, we expect to use the net proceeds of this offering, if any, to further develop our products and for general working capital purposes. The principal reason for this offering is to provide shares of common stock issuable upon conversion of our outstanding warrants issued in connection with the offer and sale of the Units.

DETERMINATION OF OFFERING PRICE

The exercise price of \$0.40 was not based on any discount to the market price of our common stock. The exercise price is not necessarily related to our book value, net worth or any other established criteria of value and may or may not be considered the fair value of our common stock included in the warrants. We did not consult with any financial or other advisor in determining the exercise price. After the date of this prospectus, our common stock may trade at prices above or below the exercise price. You should not consider the exercise price as an indication of value of our company or our common stock. You should not assume or expect that our shares of common stock will trade at or above the exercise price in any given time period. The market price of our common stock may decline during or after this offering, and you may not be able to exercise or sell the shares of our common stock. You should obtain a current quote for our common stock before exercising and make your own assessment of our business and financial condition, our prospects for the future, and the terms of the warrants. On February 20, 2013, the closing sale price of our common stock on the OTC Bulletin Board was \$1.00 per share.

DILUTION

Our net tangible book value as of December 31, 2012 was approximately (\$595,000) or approximately (\$0.05) per share. Net tangible book value per share represents the amount of our total tangible assets, less our total liabilities divided by the number of outstanding shares of common stock. Dilution in net tangible book value per share represents the difference between the amount per share paid by the purchaser of shares of common stock upon the exercise of warrants and the net tangible book value per share of common stock immediately after the exercise of warrants.

After giving effect to the exercise of 3,306,399 warrants that remained outstanding at December 31, 2012 at an exercise price of \$0.40, which would have resulted in 3,057,190 common shares being issued, our pro forma net tangible book value as of December 31, 2012 would have been \$627,876 or \$0.04 per share. This represents an immediate increase in net tangible book value of \$0.09 per share to existing stockholders and an immediate dilution in net tangible book value of \$0.36 per share to warrants exercised from this offering.

The shares outstanding as of December 31, 2012 used to calculate the information in this section exclude:

- 2,294,714 shares issuable upon the exercise of stock options outstanding on December 31, 2012; and
- 14,679,971 shares issuable upon the exercise of warrants outstanding on December 31, 2012.

Unless otherwise indicated, the information in this prospectus reflects a 1-for-20 reverse split of our common stock, which was effective on March 11, 2011.

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 Over the Counter (OTC) Bulletin Board 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 OTC Bulletin Board for each quarter listed. All prices have been adjusted to reflect the effect of the reverse split effective March 11, 2011. 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, 2011	\$.53	\$.40
June 30, 2011	\$.98	\$.30
September 30, 2011	\$2.19	\$.70
December 31, 2011	\$1.90	\$.41
March 31, 2012	\$1.09	\$.44
June 30, 2012	\$3.19	\$.80
September 30, 2012	\$1.98	\$1.15
December 31, 2012	\$1.40	\$1.02

As of February 20, 2013, there were approximately 20 holders of record and approximately 1,000 beneficial holders of our common stock.

On February 20, 2013, the last reported sale price of our common stock on the OTC Bulletin Board was \$1.00 per share.

PLAN OF DISTRIBUTION

Pursuant to the terms of the warrants, the shares of common stock will be distributed to those warrant holders who surrender their warrant certificate with their subscription form, together with the payment of the exercise price, to our warrant agent, Continental Stock Transfer & Trust Company.

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, 2012. The following discussion should also be read in conjunction with the consolidated financial statements and notes included herein.

Going Concern

Our independent registered public accounting firm has included an explanatory paragraph in their report on our financial statements included in this prospectus which expressed doubt as to our ability to continue as a going concern. The accompanying 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 .

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 and healthcare facilities for the production of ultrapure water and bicarbonate. Because our ultrafilters capture contaminants as small as 0.005 microns in size, they eliminate a wide variety of bacteria, viruses, fungi, parasites, and endotoxins harmful to humans.

All of our ultrafilters use proprietary hollow fiber technology. We believe the hollow fiber design allows our ultrafilters to be the only commercially available filters for healthcare applications that 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

By comparison, competitive filters on the market today are typically effective only to the 0.2 micron level and are prone to clog more quickly, thus reducing their useful lives.

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 (HD). In 2009, we began to extend our filtration technologies to meet the demand for liquid purification in other areas, in particular water purification.

We have not begun to broadly market our mid-HDF system and plan to seek a commercialization partner in the U.S.

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

In June 2011, the FASB issued ASU No. 2011-05, "Comprehensive Income (ASC Topic 220): Presentation of Comprehensive Income," ("ASU 2011-05") which amends current comprehensive income guidance. This accounting update eliminates the option to present the components of other comprehensive income as part of the statement of shareholders' equity. Instead, we must report comprehensive income in either a single continuous statement of comprehensive income which contains two sections, net income and other comprehensive income, or in two separate but consecutive statements. ASU 2011-05 will be effective for public companies during the interim and annual periods beginning after Dec. 15, 2011 with early adoption permitted. We adopted this guidance as of January 1, 2012 and since this relates to presentation only, the adoption of this guidance did not have any other effect on our consolidated financial statements.

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 our Annual Report on Form 10-K for the year ended December 31, 2012, 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 recognize the fixed license revenue under the Bellco license agreement on a straight line basis over the forty-two month expected obligation period which ends on December 31, 2014. Any difference between payments received and recognized revenue is reported as deferred revenue.

Deferred revenue on the accompanying December 31, 2012 consolidated balance sheet is approximately \$1,414,000 and is related to the Bellco license agreement. We have recognized approximately \$1,045,000 of revenue related to this license agreement to date and approximately \$680,000 for the twelve months ended December 31, 2012, resulting in \$1,414,000 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, 2014. This will result in expected recognized revenue of approximately \$707,000 in each of the years ended December 31, 2013 and 2014.

The final guaranteed fixed payment of approximately \$791,000 is due in January 2013 and is included in current trade receivables on the accompanying December 31, 2012 consolidated balance sheet.

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.

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 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 incurred by such service providers. The majority of our service providers invoice us monthly in arrears for 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 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.

The Fiscal Year Ended December 31, 2012 Compared to the Fiscal Year Ended December 31, 2011

Revenues

Total revenues for the year ended December 31, 2012 were approximately \$1,807,000 compared to approximately \$2,214,000 for the year ended December 31, 2011. Total revenues decreased approximately \$407,000, or 18% as a

result of decreases of approximately \$733,000 related to our MD filters in Europe, \$346,000 related to the Office of Naval Research, whose contract ended as of March 2012, and approximately \$33,000 related to the STERIS project. These decreases were partially offset by an increase of approximately \$315,000 related to the Bellco license agreement as well as a 63% increase in water filter sales, which increased from \$620,000 in 2011 to \$1,010,000 in 2012.

Revenues were not significantly impacted by inflation or changing prices for the years ended December 31, 2012 or 2011.

Cost of Goods Sold

Cost of goods sold was approximately \$737,000 for the year ended December 31, 2012 compared to approximately \$1,346,000 for the year ended December 31, 2011. The decrease of approximately \$609,000 or 45%, in cost of goods sold is primarily related to a \$583,000 reduction in cost of goods sold of our MD filters in Europe. Additional decreases include approximately \$208,000 related to the Office of Naval Research, approximately \$15,000 related to DSU sales for the year ended December 31, 2012 compared to the same period in 2011 and a decrease of approximately \$29,000 related to the STERIS project. These decreases were partially offset by an increase in cost of goods sold of approximately \$226,000 related to filters sold to the military during the year ended December 31, 2012, a 100% increase compared to the same period in 2011. Cost of goods sold includes increases in inventory reserves of approximately \$82,000 and \$218,000 for the years ended December 31, 2012 and 2011, respectively.

Research and Development

Research and development expenses were approximately \$632,000 and \$451,000 respectively, for the years ended December 31, 2012 and December 31, 2011. This increase of approximately \$181,000 or 40% is primarily due to an increase in research and development personnel related costs of approximately \$136,000 during the year ended December 31, 2012 compared to the year ended December 31, 2011.

Depreciation and Amortization Expense

Depreciation and amortization expense was approximately \$151,000 for the year ended December 31, 2012 compared to approximately \$91,000 for the year ended December 31, 2011, an increase of 66%. The increase of approximately \$60,000 is primarily due to amortization of approximately \$142,000 related to the asset recognized in conjunction with the License and Supply Agreement offset partially by several assets having been fully depreciated as of year-end 2011 resulting in no depreciation expense for those assets during the year ended December 31, 2012.

Selling, General and Administrative Expenses

Selling, general and administrative expenses were approximately \$3,620,000 for the year ended December 31, 2012 compared to approximately \$2,636,000 for the year ended December 31, 2011, an increase of \$984,000 or 37%. The increase is primarily due to \$489,000 of salary expense, an increase in legal expenses of approximately \$330,000, an increase in stock compensation expense of \$159,000, and \$171,000 of travel related expenses during the year ended December 31, 2012 compared to the year ended December 30, 2011. These increases were partially offset by a reduction in bonus expense of approximately \$165,000 for the year ended December 31, 2012 compared to the year ended December 31, 2011.

Interest Income

Interest income was approximately \$2,000 for the year ended December 31, 2012 compared to approximately \$4,000 for the year ended December 31, 2011. The decrease of \$2,000 reflects the impact of having less cash on hand in 2012 compared to 2011.

Interest Expense

Interest expense for the year ended December 31, 2012 was \$0 compared to \$12,000 for the year ended December 31, 2011. Interest expense for the year ended December 31, 2011 relates to interest accrued on the \$500,000 senior secured note issued to Lambda Investors LLC, which was paid in March 2011.

Amortization of Debt Issuance Costs

We account for debt issuance costs in accordance with ASC 835, which requires that these costs be reported in the balance sheet as deferred charges and amortized over the term of the associated debt. Amortization of debt issuance costs of \$0 and \$40,000 for the years ended December 31, 2012 and 2011, respectively, were associated with the senior secured note issued to Lambda Investors LLC. The note was paid in March 2011 and these capitalized costs were fully amortized by the first quarter of 2011.

Other Income/Expense

Other income in the amount of approximately \$69,000 for the year ended December 31, 2012 was primarily due to approximately \$55,000 arising from the sale of fully depreciated manufacturing equipment sold to Medica in October 2012. In addition, approximately \$18,000 was related to the write-offs of vendor invoices which are no longer due. Other income was partially offset by \$4,000 related to foreign currency losses on invoices paid to an international supplier.

Other expense in the amount of approximately \$2,000 for the year ended December 31, 2011 was due to foreign currency loss on invoices paid to an international supplier.

Off-Balance Sheet Arrangements

We did not engage in any off-balance sheet arrangements during the periods ended December 31, 2012 and December 31, 2011.

Liquidity and Capital Resources

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

- receipt of scheduled payments per the Bellco S.r.l. license agreement;
- 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:

- 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.

In response to liquidity issues experienced with our auction rate securities, and in order to facilitate greater liquidity in our short-term investments, on March 27, 2008, our board of directors adopted an Investment, Risk Management and Accounting Policy. Such policy limits the types of instruments or securities in which we may invest our excess funds in the future to: 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 March 10, 2011 we completed our rights offering and private placement that together resulted in gross proceeds of approximately \$3.2 million to us. Our stockholders subscribed for 4,964,854 units in the rights offering and we accepted all basic subscription rights and oversubscription privileges. The units were sold at a per unit purchase price of \$0.40. Gross proceeds from the sale of these units in the rights offering was approximately \$2.0 million. We issued an aggregate of 4,964,854 shares of common stock and warrants to purchase an aggregate of approximately 4,590,171 million shares of common stock to stockholders who subscribed.

Simultaneously with the closing of the rights offering, Lambda Investors, LLC purchased in a private placement 3,009,711 units at the same per unit purchase price of \$0.40, pursuant to a purchase agreement between us and Lambda Investors. We issued to Lambda Investors an aggregate of 3,009,711 shares of common stock and warrants to purchase an aggregate of 2,782,577 shares of common stock. We received approximately \$1.2 million in gross proceeds from its sale of units to Lambda Investors.

The aggregate net proceeds received by us from the rights offering and private placement were approximately \$2.3 million, after deducting the estimated aggregate expenses of these transactions, the repayment of the \$500,000 note, plus all accrued interest thereon, issued to Lambda Investors, LLC, the payment of an 8% sourcing/transaction fee (\$40,000) in respect of the note and an aggregate of \$100,000 for reimbursement of Lambda Investors' legal fees incurred in connection with the loan and the rights offering.

On March 11, 2011, we effected a reverse stock split, in which every 20 shares of our common stock issued and outstanding immediately prior to the effective time, which was 5:00 p.m. on March 11, 2011, were converted into one share of common stock. Fractional shares were not issued and stockholders who otherwise would have been entitled to receive a fractional share as a result of the reverse stock split received an amount in cash equal to \$0.04 per pre-split share for such fractional interests. The number of shares of common stock issued and outstanding was reduced from approximately 201,300,000 pre-split to approximately 10,100,000 post-split. The reverse stock split was effected in connection with the rights offering and private placement.

At December 31, 2012, we had an accumulated deficit of \$97,530,000, and we expect to incur additional losses in the foreseeable future at least until such time, if ever, that we are able to increase product sales or licensing revenue.

The Bellco license agreement provides us with payments of €500,000, €750,000, and €600,000 on July 1, 2011, January 15, 2012 and January 15, 2013, respectively and all payments have been received. Beginning on January 1, 2015 through and including December 31, 2016, 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 103,000 units sold, €4.50 per unit; thereafter, €4.00 per unit. Anticipated payments from this License Agreement will be a positive source of cash flow to us.

On April 23, 2012, we entered into a License and Supply Agreement (the “License and Supply Agreement”) with Medica, 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 (collectively, the “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 for the first three years, during the term of the License and Supply Agreement. In addition, we granted to Medica an exclusive license under our intellectual property to make the Filtration Products during the term of the License and Supply Agreement. In exchange for the rights granted, we have agreed to make minimum annual aggregate purchases from Medica of €300,000, €500,000 and €750,000 for the years 2012, 2013 and 2014, respectively. In the year ended December 31, 2012, our aggregate purchase commitments totaled approximately €585,000. For calendar years thereafter, annual minimum amounts will be mutually agreed upon between Medica and us. In exchange for the license, we paid Medica €1,100,000 in two installments: €500,000 on April 23, 2012 and €600,000 on February 4, 2013. The remaining €400,000 is to be paid by June 30, 2013. As part of the agreement, we have granted to Medica 300,000 options to purchase our common stock which will vest over the first three years of the agreement.

On February 4, 2013, the Company issued a senior secured note to Lambda Investors LLC in the principal amount of \$1.3 million. For a more detailed discussion of the terms of the senior secured note, see “Business - Recent Developments - Recent Loan from Lambda Investors LLC and Rights Offering”.

As of the date of this report, we expect that the proceeds from the note will allow us to fund our operations through May 2013. 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 the contemplated rights offering or through other means, we will be forced to curtail our planned activities and operations or cease operations entirely and you will lose all of your investment in our Company. There can be no assurance that we could raise sufficient capital on a timely basis or on satisfactory terms or at all.

Net cash used in operating activities was approximately \$1,547,000 for the year ended December 31, 2012 compared to approximately \$1,296,000 for the year ended December 31, 2011. The most significant items contributing to this net increase of approximately \$251,000 in cash used in operating activities during the year ended December 31, 2012 compared to the year ended December 31, 2011 are highlighted below:

- during 2012, our net loss increased by approximately \$902,000, compared to 2011;

- during 2012, we recorded an inventory reserve of \$82,000 compared to \$200,000 in 2011;

during 2012, we recorded amortization of debt issuance costs of \$0, whereas amortization of debt issuance costs in 2011 were \$40,000;

- during 2012, we recognized a gain on the sale of property and equipment of approximately \$55,000;

during 2012, our inventory increased by approximately \$147,000 compared to a decrease of approximately \$295,000 during 2011;

during 2012, our deferred revenue decreased by approximately \$680,000 compared to an increase of approximately \$2,061,000 during 2011; and

during 2012, our prepaid expenses and other assets decreased by approximately \$4,000 compared to \$76,000 in 2011.

Offsetting the above changes are the following items:

- during 2012, depreciation and amortization expense increased by approximately \$60,000, compared to 2011;

during 2012, our stock-based compensation expense, a non-cash expense, increased by approximately \$187,000 compared to 2011;

during 2012, our accounts receivable decreased by approximately \$1,006,000 compared to an increase of approximately \$832,000 during 2011;

- long-term receivable increased by approximately \$778,000 during 2011; and

during 2012, our accounts payable and accrued expenses increased by approximately \$904,000 in the aggregate compared to a decrease of approximately \$357,000 during 2011.

Net cash used in investing activities for the year ended December 31, 2012 was approximately \$612,000 related primarily to \$8,000 used for the purchase of equipment and \$659,000 for the purchase of intangible assets associated with the Medica License and Supply Agreement and partially offset by proceeds received of approximately \$55,000 related to the sale of property and equipment. There was no cash used or provided by investing activities during the year ended December 31, 2011.

Net cash provided by financing activities was approximately \$503,000 for the year ended December 31, 2012 as a result of the exercise of warrants. Net cash provided by financing activities of approximately \$2,723,000 for the year ended December 31, 2011 resulted from proceeds received related to the issuance of stock of approximately \$3,189,000 and from proceeds received related to the exercise of warrants of approximately \$174,000. For the year ended December 31, 2011, cash provided by financing activities was partially offset by the payment of debt of approximately \$500,000 and the payment of deferred financing costs of approximately \$140,000.

Contractual Obligations and Commercial Commitments

The following tables summarize our approximate minimum contractual obligations and commercial commitments as of December 31, 2012:

	Payments Due in Period				
	Total	Within 1 Year	Years 1 - 3	Years 4 - 5	More than 5 Years
Leases	\$ 113,000	\$ 99,000	\$ 14,000	\$ -	\$ -
Employment Contracts	1,402,000	550,000	852,000	-	-
Total	\$ 1,515,000	\$ 649,000	\$ 866,000	\$ -	\$ -

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 and healthcare facilities for the production of ultrapure water and bicarbonate. Because our ultrafilters capture contaminants as small as 0.005 microns in size, they eliminate a wide variety of bacteria, viruses, fungi, parasites, and endotoxins harmful to humans.

All of our ultrafilters use proprietary hollow fiber technology. We believe the hollow fiber design allows our ultrafilters to be the only commercially available filters for healthcare applications that 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

By comparison, competitive filters on the market today are typically effective only to the 0.2 micron level and are prone to clog more quickly, thus reducing their useful lives.

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 (HD). In 2009, we began to extend our filtration technologies to meet the demand for liquid purification in other areas, in particular water purification.

Our Products

Presently, we offer seven types of ultrafilters for sale to customers in four markets:

Dialysis Centers – Water/Bicarbonate: Treatment of both water and bicarbonate for the production of ultrapure dialysate

Hospitals and Other Healthcare Facilities: Removal of infectious agents in drinking and bathing water, particularly in high risk patient areas

Military: Highly compact, individual water treatment devices used by soldiers to produce safe drinking water in the field

Dialysis Centers – Blood: Clearance of toxins from blood using an alternative method to HD in patients with chronic renal failure

We have designed our ultrafilters as either in-line products, filters that are incorporated into the existing plumbing of healthcare facilities, or point-of-use products, filters that can be easily installed onto a faucet or as a replacement shower head or can be used stand-alone to purify small quantities of water immediately prior to use.

Our Target Markets

Dialysis Centers – Water/Bicarbonate. To perform hemodialysis, all dialysis clinics have dedicated water purification systems to produce pure water and bicarbonate. Water and bicarbonate are essential ingredients for making dialysate, the liquid that removes waste material from the blood. Within the U.S., there are approximately 5,700 clinics with 100,000 dialysis machines providing over 50 million dialysis treatments to 370,000 patients annually.

Medicare is the main payor for dialysis treatment in the U.S. To be eligible for Medicare reimbursement, dialysis centers must meet the minimum standards for water and bicarbonate quality set by the Association for the Advancement of Medical Instrumentation (AAMI), the American National Standards Institute (ANSI) and the International Standards Organization (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 make patients healthier and reduce their dependence on erythropoietin (EPO), an expensive drug 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, cytokine levels within a patient stay low, thus reducing systemic inflammation. When inflammation is low, inflammatory morbidities are reduced and a patient's responsiveness to EPO is enhanced, consequently the overall need for the drug is reduced.

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

Hospitals and Other Healthcare Facilities. According to the United States Centers for Disease Control and Prevention (CDC), healthcare acquired infections (HAIs) annually account for 1.7 million infections, 99,000 deaths, and \$4.5 - \$6.5 billion in extra costs in U.S. hospitals. At the root of many HAIs are waterborne pathogens such as *Legionella*

and *Pseudomonas* which can thrive in aging or complex plumbing systems often found in healthcare facilities. According to the CDC, 23% of Legionella infections originate in healthcare facilities and Pseudomonas infections account for 10% of all water-related HAIs. These pathogens are most harmful to patients in intensive care, neonatal, burn, cancer, and transplant units.

The Affordable Care Act (ACA) 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. The ACA encompasses HAIs and shifts the costs associated with their treatment back onto the healthcare provider. As a consequence, hospitals and other healthcare facilities are proactively implementing strategies to reduce the potential for HAIs.

Our ultrafilters are designed to reduce the risk of HAIs in the hospital/healthcare setting by treating water just prior to use. Our products can be used for reactive infection control. For example, during acute disease outbreaks (such as Legionnaires' disease), our ultrafilters have been used at hospitals and other healthcare facilities to quickly and efficiently assist in the control of such outbreaks. Our ultrafilters are also being used as a preventative measure in healthcare facilities, particularly in areas where high risk patients are being treated. Our point-of-use filters can be easily installed onto the end of faucets or as replacement shower heads.

The plastic casing of our hospital ultrafilters contains BACTiglas™. BACTiglas™ releases silver ions at the surface of the plastic casing such that they are imparted to anything that touches it. Silver ions (through chemical bonding with amino acids) result in the killing of the bacteria that remains on the surface of the plastic. This enables our hospital ultrafilters to be bacteriocidal to any touch contamination or any growth on the surface of the plastic in addition to their water treatment effect.

Military. 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 Environmental Protection Agency specified levels; thereby reducing the effects of acute debilitating illnesses to soldiers.

We offer our individual water treatment device (IWTD), which allows a soldier in the field to derive biologically safe water from any fresh water source. Our IWTD is available in both in-line and point-of-use configurations. Our IWTD is one of the few portable filters that have been validated by the military to meet the NSF Protocol P248 standard. It has also been approved by U.S. Army Public Health Command (USAPHC) and U.S. Army Test and Evaluation Command (ATEC) for deployment. To date, we have received purchase orders for approximately 2,000 IWTDs from individual units of the U.S. armed forces and could become more widely used by soldiers in the future.

In January 2013, the U.S. Army issued a request for proposal (RFP) relating to an IWTD, Nephros submitted its response to this RFP on February 25th. The U.S. Army may award several, one or no contracts as a result of this solicitation. The maximum quantity of all contracts combined is not to exceed 450,000 units or \$45,000,000 over a 3 year period. The RFP evaluation period may take up to 6 months before an award is made, if at all.

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 (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 (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 multiple 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 which is more patient-friendly, less resource-intensive, and can be used in conjunction with current HD machines. We refer to our approach as an on-line mid-dilution hemodiafiltration (mid-HDF) system and it consists of our OLPūr H2H Module and OLPūr MD220 Hemodiafilter. On April 30, 2012, we announced that we received clearance from the U.S. Food and Drug Administration to market the OLPūr H2H Module and OLPūr MD220 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. Like HD, on-line mid-HDF treatment is given to patients at least 3 times weekly for 3-4 hours per treatment. Our mid-HDF system is the only HDF system of its kind to be cleared by the FDA to date.

We are currently preparing our OLPūr H2H Modules and manufacturing our OLPūr MD220 Hemodiafilters in readiness for market release. We expect to place a mid-HDF system in a U.S. dialysis clinic in Q2. We have not begun to broadly market our mid-HDF system and plan to seek a commercialization partner in the U.S.

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 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. For the years ended December 31, 2012 and 2011, we incurred net losses of \$3,262,000 and \$2,360,000, respectively. In addition, we have not generated positive cash flow from operations for the years ended December 31, 2012 and 2011. 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.

On February 4, 2013, we issued a senior secured note to Lambda Investors LLC in the principal amount of \$1.3 million. For a more detailed discussion of the terms of the senior secured note, see “— Recent Developments — Recent Loan from Lambda Investors LLC and Rights Offering.”

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 its planned activities or ceasing its 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 its capital requirements.

Recent Developments

Recent Loan from Lambda Investors LLC and Rights Offering

We have carefully considered our capital needs and the short time that our cash would allow us to continue operations. Given the imminent shortage of funds and our inability to complete any alternative financing within the necessary time, a special committee of our independent directors (none of whom are affiliated with Lambda Investors) requested that our largest investor, Lambda Investors LLC, loan us funds and propose a means for capitalizing our company.

On February 4, 2013, we issued a senior secured note to Lambda Investors LLC in the principal amount of \$1.3 million. We expect that the proceeds from the note will allow us to fund our operations through May 2013. The note bears interest at the rate of 12% per annum and matures on August 4, 2013, at which time all principal and accrued interest will be due. However, we have agreed to prepay amounts due under the note with the cash proceeds from (a) a rights offering and an offering of a discounted exercise price to public warrant holders, each as further described in the note, (b) any other equity or debt financing, or (c) the issuance or incurrence of any other indebtedness or the sale of any assets outside the ordinary course of business, in each case prior to the maturity date. If we do not pay principal and interest under the note when due, the interest rate increases to 16% per annum. In connection with the note, we have agreed to pay Lambda Investors an 8%, or \$104,000, sourcing/transaction fee. In addition, we will pay Lambda Investors' legal fees and other expenses incurred in connection with the note in the amount of \$50,000 as well as Lambda Investors' legal fees and other expenses incurred in connection with the rights offering in the amount of \$50,000. Those payments will be paid upon the completion of the rights offering or, if earlier, upon the maturity of the note. As additional consideration, we agreed to extend by one year the expiration date of all of Lambda's outstanding warrants to March 2017. In addition, we have undertaken to conduct a rights offering. All of our stockholders and warrant holders will be eligible to participate in the offering on a pro rata basis based upon their proportionate ownership of our common stock on a fully-diluted basis. During the period when the rights offering is open, we expect to offer to our public warrant holders holding the warrants issued at the close of the March 2011 rights offering a one-time right, at their option, to exercise such warrants for an exercise price of \$0.30 per share discounted from \$0.40 per share. In connection with the rights offering, on March 4, 2013, we filed a registration statement on Form S-1 with the Securities and Exchange Commission.

As required under the terms of the note, we are conducting the rights offering to raise up to \$3,000,000 from our existing stockholders and warrant holders. Lambda Investors has advised us that it intends to exercise its basic subscription privilege in full and to purchase any shares of common stock that are not subscribed for by our other stockholders in the rights offering, if any, subject to the following conditions being satisfied:

- the business, assets, financial condition, operations, results of operations and prospects of the Company are substantially as have been represented to Lambda Investors on February 4, 2013 in connection with the senior secured note and no change shall have occurred or is reasonably likely to occur solely with the passage of time that is or may be materially adverse to the Company; and
- the Company's compliance with its obligations under the note, security agreement and other transaction documents relating to the loan by Lambda Investors.

We are obligated to use proceeds from the rights offering to repay the \$1,300,000 loan from Lambda Investors, plus all accrued interest thereon, as well as an 8% sourcing/transaction fee (\$104,000) in respect of the loan and an aggregate of \$100,000 for reimbursement of Lambda Investors' legal fees incurred in connection with the loan and the rights offering. In connection with the February 2013 loan from Lambda Investors, we entered into a registration rights agreement with Lambda Investors whereby we are required to register with the SEC for resale the shares of our common stock purchased by Lambda Investors in the rights offering. See "Certain Relationships and Related Transactions" for a description of the registration rights agreement with Lambda Investors. A copy of the registration rights agreement with Lambda Investors has been filed as an exhibit to the registration statement relating to the rights offering.

As of December 31, 2012, Lambda Investors is our largest stockholder and beneficially owns approximately 31% of our outstanding common stock and, on a fully-diluted basis, owns approximately 53% of our outstanding common stock. The warrants held by Lambda Investors have an exercise price of \$0.40 per share and certain warrants have full ratchet anti-dilution protection. Lambda Investors has agreed that the Company could offer public warrant holders of the Company holding warrants issued at the close of the March 2011 rights offering a one-time right, at their option to exercise their warrants for an exercise price of \$0.30 per share discounted from \$0.40 per share, but such incentive discount would not be afforded to Lambda Investors. In connection with the proposed rights offering, we agreed to amend the terms of the existing warrants held by Lambda Investors to March 10, 2017 from March 10, 2016, and Lambda Investors agreed to waive its anti-dilution rights applicable to any of its existing warrants solely with respect to the one-time incentive discount offered to public warrant holders.

The shares beneficially owned by Lambda Investors may be deemed beneficially owned by Wexford Capital LP, which is the managing member of Lambda Investors. Arthur Amron, one of our directors, is a partner and general counsel of Wexford Capital and Paul A. Mieyal, another of our directors, is a vice president of Wexford Capital.

As a condition to making the loan, Lambda Investors required that we undertake a rights offering to raise additional funds to meet our ongoing financial requirements and to repay the loan. In its loan proposal, Lambda Investors specified a rights offering of 5,000,000 shares of our common stock, and that it be made at a subscription price of \$0.60 per share to encourage our other stockholders and warrant holders to participate. A special committee of our independent directors (none of whom are affiliated with Lambda Investors) approved the loan and the rights offering after carefully evaluating our imminent need for additional capital. The special committee considered alternative capital raising methods that could be available to us and analyzed, among other things, the low likelihood of effecting another form of financing, as well as the length of time necessary to complete any such alternative financings. It also considered the costs and expenses associated with alternative financings. The special committee also considered the dilution that would be caused by the rights offering as well as by alternative financings.

Medica License and Supply Agreement

On April 23, 2012, we entered into a strategic license and supply agreement with Medica S.p.A. for ultrafiltration products granting us global rights, with specific exceptions, to market products based on Medica's proprietary Medisulfone ultrafiltration technology. Under the terms of the agreement, Medica will provide an exclusive license to us for its ultrafiltration technology for the period April 23, 2012 to December 31, 2022. In exchange for the license, we paid Medica €1,100,000 in two installments: €500,000 on April 23, 2012 and €600,000 on February 4, 2013. The remaining €400,000 is to be paid by June 30, 2013. As part of the agreement, we have granted to Medica 300,000 options to purchase our common stock which will vest over the first three years of the agreement. For the period April 23, 2014 through December 31, 2022, we will pay Medica a royalty of 3% of net sales of filtration products related to the licensed technology.

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, with Bellco S.r.l., 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, 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 and Canada on an exclusive basis, and to do the same on a non-exclusive basis in the United Kingdom and Greece 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 exchange for the rights granted to it under the Bellco license agreement through December 31, 2014, Bellco agreed to pay us installment payments of €500,000, €750,000, €600,000 on July 1, 2011, January 15, 2012 and January 15, 2013, respectively, and all three payments have been received. Such installment payments, herein referred to as the Installment Payments, are Bellco's sole financial obligations through December 31, 2014. Beginning on January 1, 2015 through and including December 31, 2016, Bellco will pay to us a royalty based on the number of units of Products sold per year in the Territory as follows: for the first 103,000 units sold, Bellco will pay €4.50 per unit; thereafter, Bellco will pay €4.00 per unit. Bellco must meet minimum sales targets of 15,000 units in each quarter of 2015 and 2016. If Bellco fails to meet a quarterly minimum, the license in Italy, France, Belgium, Spain and Canada will, at our discretion, convert to a non-exclusive one. All sums payable under the agreement will be paid in Euros, as adjusted to account for currency exchange fluctuations between the Euro and the U.S. dollar that occur between July 1, 2011, the effective date of the agreement, and the date of payment.

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 water filter products. 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, Ameriwater and OLS. In February 2013, we announced the signing of a non-exclusive distributor agreement with Chem-Aqua, Inc. to distribute Nephros's innovative ultrafilters in North American healthcare facilities. Chem-Aqua is a global full service provider of water treatment programs and services. We believe that the addition of Nephros ultrafilters to Chem-Aqua's product line will enable them to offer a comprehensive multi-barrier approach for prevention of waterborne infection in the healthcare institutions they service. Chem-Aqua is now beginning launch efforts for our products, including scheduling training sessions and promoting ultrafilters to the hospital market.

For each prospective market for our water filter products, we continue to pursue alliance opportunities for joint product development and distribution. Our water filter 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 (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 (ATD) 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.

Approximately \$317,000 and \$463,000 has been billed to the projects during the years ended December 31, 2012 and 2011, respectively. Approximately \$900,000 of revenue has been recognized on the initial research contract which concluded in August 2009. Approximately \$1,800,000 has been recognized on the second research contract awarded in August 2009. This research contract project ended in March 2012.

In March 2010, we entered into a development agreement with STERIS Corporation to jointly develop filtration-based products for medical device applications. We received an initial payment upon entering into the agreement of \$40,000 and were eligible to receive additional payments upon successful completion of product development milestones. During 2010, we completed the initial milestone under the joint collaboration agreement with STERIS Corporation and further milestones under the agreement during the first three quarters of 2011. Completion of these milestones resulted in aggregate payments to us of \$100,000 during 2010, of which approximately \$67,000 was recognized in 2010 and approximately \$33,000 was recognized in 2011. The remaining milestones, when completed, will result in additional payments of \$60,000.

Major Customers

For the years ended December 31, 2012 and 2011, four customers accounted for 79% and 83%, respectively, of the Company's sales. In addition, as of December 31, 2012 and 2011, those four customers accounted for 88% and 89%, respectively, of the Company's 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 ESRD therapies, supplies and services. These suppliers include Fresenius Medical Care AG, and Gambro AB, currently two of the primary machine manufacturers in hemodialysis. At present, Fresenius Medical Care AG and Gambro AB 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 Gambro AB, 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:

- 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, 2012, 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 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, 2012, we secured registrations of the trademarks CENTRAPUR, H2H, OLpur 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 June 30, 2010, we received a final decision letter from the FDA for our 510(k) submission which stated that the FDA could not reach a substantial equivalence determination for our hemodiafiltration (HDF) system. On August 11, 2011, Nephros filed a new 510(k) application with the FDA for clearance of the Company’s hemodiafiltration (HDF) system for end-stage renal disease. On April 30, 2012, the Company announced that it received 510(k) clearance from the FDA to market the OLpür H2H Module and OLpür MD220 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.

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

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.

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 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. ("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 OLpur MD220 Hemodiafilter and our DSU, respectively for marketing in Canada. Other than the CE marking and Canadian approval of our OLpur 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, reimbursement decision-making included, 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 kidney dialysis 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 \$5 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, 2012, we employed a total of 10 employees, 6 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 12 total employees and consultants, 4 are employed in a sales/marketing/customer support capacity, 4 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, 2012 with a monthly cost of approximately \$8,399. We use our 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 our facilities to house our accounting, operations and customer service departments. We believe this space 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 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 five 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.

Class I Directors - Term Expiring 2015

Name	Age (as of 2/26/13)	Director Since	Business Experience For Last Five Years
Arthur H. Amron	56	2007	Arthur H. 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.

Name	Age (as of 2/26/13)	Director Since	Business Experience For Last Five Years
James S. Scibetta	47	2007	James S. Scibetta has served as a director of our company since November 2007 and as Chairman of our Board since September 2008. Since August 2008, Mr. Scibetta has been the Chief Financial Officer of Pacira Pharmaceuticals, Inc., a specialty pharmaceutical company. Prior to that, Mr. Scibetta was Chief Financial Officer of Bioenvision, Inc., a biopharmaceutical company, from December 2006 until its acquisition by Genzyme, Inc. in October 2007. From September 2001 to November 2006, Mr. Scibetta was Executive Vice President and Chief Financial Officer of Merrimack Pharmaceuticals, Inc., and he was a member of the Board of Directors of Merrimack from April 1998 to March 2004. Mr. Scibetta formerly served as a senior investment banker at Shattuck Hammond Partners, LLC and PaineWebber Inc., providing capital acquisition, mergers and acquisitions, and strategic advisory services to healthcare companies. Mr. Scibetta holds a B.S. in Physics from Wake Forest University, and an M.B.A. in Finance from the University of Michigan. He completed executive education studies in the Harvard Business School Leadership & Strategy in Pharmaceuticals and Biotechnology program. Among other experience, qualifications, attributes and skills, Mr. Scibetta's extensive management experience in the pharmaceutical industry, as well as his investment banking 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 2013

Name	Age (as of 2/26/13)	Director Since	Business Experience For Last Five Years
Paul A. Mieyal	43	2007	Paul A. Mieyal has served as a director of our company since September 2007. 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 is also a director of Nile Therapeutics, Inc., which is a publicly traded company. 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. Dr. Mieyal served as acting Chief Executive Officer from April 6, 2010 until April 20, 2012. 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.

Name	Age (as of 2/26/13)	Director Since	Business Experience For Last Five Years
John C. Houghton	49	2012	<p>Mr. Houghton has over 25 years of commercialization experience in the pharmaceutical and medical device fields. He has direct experience in building out global commercial organizations including marketing, sales, sales operations, customer service, business analytics and new product development and has also been directly responsible for successfully licensing products and leading joint ventures and partnerships. Mr. Houghton most recently served as President and CEO of CorMedix Inc. (NYSE-Amex: CRMD), a pharmaceutical company focused on therapeutic products for the treatment of cardio-renal disease. While President and CEO, Mr. Houghton led the acquisition of the company's product candidates and the completion of its initial public offering. Prior to assuming the role of President and CEO, he was the Chief Business Officer for CorMedix. Before joining CorMedix, Mr. Houghton established the global sales and marketing infrastructure for the Biotech division of Stryker Corp. (NYSE: SYK). Prior to Stryker, he worked with Aventis (NYSE: SNY) and predecessor companies for more than 14 years. During his time at Aventis he led the global marketing of Nasacort, served as commercial lead on the Aventis-Millennium inflammation collaboration, and functioned as the global new products commercialization head for respiratory, inflammation, cardiovascular, and metabolism products. Mr. Houghton received his B.Sc. from Liverpool John Moores University, United Kingdom. Mr. Houghton's extensive experience in leadership roles in connection with sales and marketing in the pharmaceutical and medical device fields, as well as his management 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.</p>

Class III Director - Term Expiring 2014

Name	Age (as of 2/26/13)	Director Since	Business Experience For Last Five Years
Lawrence J. Centella	71	2001	Lawrence J. Centella has served as a director of our company since January 2001. 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 Hospital, 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.

Board of Director Meetings

The business of our company is under the general oversight of the Board of Directors as provided by the laws of Delaware and our bylaws. During the fiscal year ended December 31, 2012, the Board of Directors held two meetings and took action by unanimous written consent in lieu of a meeting four times. Each person who was a director during 2012 attended at least 75% of the Board of Directors meetings and the meetings of the committees on which he served.

Each of our directors is encouraged to be present at the annual meeting of our stockholders absent exigent circumstances that prevents his attendance. Where a director is unable to attend the annual meeting in person but is able to do so by electronic conferencing, we will arrange for the director's participation by means where the director can hear, and be heard by, those present at the meeting. One of our then four directors attended the 2012 annual meeting.

Selection of Nominees for the Board of Directors

The entire Board is responsible for nominating members for election to the Board and for filling vacancies on the Board that might occur between annual meetings of the stockholders. The Board is also responsible for identifying, screening, and recommending candidates for prospective Board membership. When formulating its membership recommendations, the Board also considers any qualified candidate for an open Board position timely submitted by our stockholders in accordance with our established procedures.

The Board will evaluate and recommend candidates for membership on the Board consistent with criteria, including: personal qualities and characteristics, accomplishments, and reputation in the business community; financial, regulatory, and business experience; current knowledge and contacts in the industry in which we do business; ability and willingness to commit adequate time to Board and committee matters; fit of the individual's skills with those of other directors and potential directors in building a Board that is effective and responsive to our needs; independence; and any other factors the Board deems relevant, including diversity of viewpoints, background, experience, and other demographics. In addition, prior to nominating an existing director for re-election, the Board will consider and review an existing director's Board and committee attendance and performance; length of Board service; experience, skills, and contributions that the existing director brings to the Board; and independence.

To identify nominees, the Board will rely on personal contacts as well as its knowledge of persons in our industry. We have not previously used an independent search firm to identify nominees.

The Board will consider stockholder recommendations of candidates when the recommendations are properly submitted. Stockholder recommendations should be submitted to us under the procedures discussed in “Procedures For Security Holder Submission of Nominating Recommendations” which is available on our website at www.nephros.com, by clicking on the Investor Relations link, then the Corporate Governance link. Written notice of any nomination must be timely delivered to Nephros, Inc., 41 Grand Avenue, River Edge, New Jersey 07661, Attention: Board of Directors, c/o Chief Financial Officer.

The Board uses a variety of methods for identifying and evaluating non-incumbent candidates for director. The Board regularly assesses the appropriate size and composition of the Board, the needs of the Board and the respective committees of the Board as well as the qualifications of candidates in light of these needs. The Board will solicit recommendations for nominees from persons that the Board believes are likely to be familiar with qualified candidates, including members of the Board, our management or a professional search firm. The evaluation of these candidates may be based solely upon information provided to the Board or may also include discussions with persons familiar with the candidate, an interview of the candidate or other actions the Board deems appropriate, including the use of third parties to review candidates.

Director Independence

Our Board of Directors has determined that all of the directors are “independent” within the meaning of the Nasdaq independence standards other than Mr. Houghton.

Committees

Our Board of Directors has established an Audit Committee and a Compensation Committee. These committees are each governed by a specific charter, each of which is available on our website at www.nephros.com, by clicking on the Investor Relations link, and then the Corporate Governance link. All members of these committees are independent directors.

The Board of Directors does not currently have a Nominating and Corporate Governance Committee given that the entire Board participates in discussions and decisions regarding identifying qualified individuals to become Board members, determining the composition of the Board and its committees, in monitoring a process to assess Board

effectiveness and developing and implementing corporate procedures and policies.

Audit Committee

The Audit Committee is composed of James S. Scibetta (Chairman) and Lawrence J. Centella, neither of whom is our employee and each of whom has been determined by the Board of Directors to be independent under the Nasdaq listing standards. The purpose of the Audit Committee is to (i) oversee accounting, auditing, and financial reporting processes; (ii) assess the integrity of our financial statements; (iii) ensure that our internal controls and procedures are designed to promote compliance with accounting standards and applicable laws and regulations; and (iv) appoint and evaluate the qualifications and independence of our independent registered public accounting firm. The Audit Committee held four meetings in 2012.

The Board of Directors has determined that all Audit Committee members are financially literate under the current listing standards of Nasdaq. The Board also determined that Mr. Scibetta qualifies as an “audit committee financial expert” as defined by the Securities and Exchange Commission, or SEC, rules adopted pursuant to the Sarbanes-Oxley Act of 2002 based on his extensive experience previously outlined.

Compensation Committee

The Compensation Committee is composed of directors Lawrence J. Centella (Chairman) and Paul A. Mieval. Neither gentleman is our employee; however, Dr. Mieval served as acting Chief Executive Officer from April 6, 2010 until April 20, 2012. The purpose of the Compensation Committee is (i) to assist the Board in discharging its responsibilities with respect to compensation of our executive officers and directors, (ii) to evaluate the performance of our executive officers, (iii) to assist the Board in developing succession plans for executive officers, and (iv) to administer our stock and incentive compensation plans and recommend changes in such plans to the Board as needed. The Compensation Committee establishes the compensation of senior executives on an annual basis. The Compensation Committee held two meetings in 2012.

The Compensation Committee reviews and approves, on an annual basis, the corporate goals and objectives with respect to the compensation of the company's executive officers. The Compensation Committee evaluates, at least once a year, our executive officers' performance in light of these established goals and objectives, and, based upon these evaluations, recommends to the full Board the annual compensation of such executive officers, including salary, bonus, incentive, and equity compensation. In reviewing and recommending the compensation of the executive officers, the Compensation Committee may consider the compensation awarded to officers of similarly situated companies, the company's performance, the individuals' performance, compensation given to the company's executive officers in past years or any other fact that the Compensation Committee deems appropriate. The Chief Executive Officer participates in the discussions and processes concerning the compensation of Mr. Kochanski, but not his own compensation. The Compensation Committee also reviews and recommends to the full Board appropriate director compensation programs for service as directors and committee members. The Compensation Committee has the authority to delegate any of its responsibilities to subcommittees as the Committee may deem appropriate.

Lawrence J. Centella and Paul Mieyal served as members of our Compensation Committee during all of 2012. Neither of these individuals was at any time during 2012 or at any other time an officer or employee of our company. Dr. Mieyal served as our acting Chief Executive Officer until April 20, 2012 but he received no employee compensation or employee benefits from the company. No interlocking relationship exists between any member of our Compensation Committee and any member of any other company's board of directors or compensation committee.

Board Leadership Structure and Oversight of Risk

The Board of Directors is responsible for providing oversight of the affairs of our company. Our Board leadership structure currently consists of different persons serving the roles of Chairman of the Board and Chief Executive Officer. The Chairman of the Board, among other responsibilities, works with the Chief Executive Officer and the Board to prepare Board meeting agendas and schedules, acts as liaison to other members of the Board, and, in conjunction with our Chief Executive Officer, presides at Board meetings.

We believe that the current Board leadership structure is an appropriate structure for the company and its stockholders at this time. This structure allows the Chief Executive Officer to focus his energy on strategy and management of the company and the Board to focus on oversight of strategic planning and risk management of the company.

As explained above, our Board of Directors has two committees—the Audit Committee and the Compensation Committee. Our Audit Committee is responsible for overseeing certain accounting related aspects of the company's risk management processes while our full Board of Directors focuses on overall risk management. The Audit Committee and the full Board of Directors focus on what they believe to be the most significant risks facing the company and the company's general risk management strategy, and also attempt to ensure, together with the Chief Executive Officer, that risks undertaken by the company are consistent with the Board's appetite for risk. While the Board of Directors oversees the company's risk management, company management is responsible for day-to-day risk

management processes. We believe this division of responsibilities at the present time is an appropriate approach for addressing the risks facing our company and that our Board leadership structure supports this approach. We can offer no assurance that this structure, or any other structure, will be effective in all circumstances.

Stockholder Communication with the Board

Stockholders may communicate with the Board of Directors, members of particular committees or to individual directors, by sending a letter to such persons in care of our Chief Financial Officer at our principal executive offices. The Chief Financial Officer has the authority to disregard any inappropriate communications or to take other appropriate actions with respect to any inappropriate communications. If deemed an appropriate communication, the Chief Financial Officer will submit the correspondence to the Chairman of the Board or to any committee or specific director to whom the correspondence is directed. Procedures for sending communications to the Board of Directors can be found on our website at www.nephros.com, by clicking on the Investor Relations link, then the Corporate Governance link. Please note that all such communications must be accompanied by a statement of the type and amount of our securities that the person holds; any special interest, meaning an interest that is not derived from the proponent's capacity as a stockholder, of the person in the subject matter of the communication; and the address, telephone number and e-mail address, if any, of the person submitting the communication.

Code of Business Conduct and Code of Ethics

During the fiscal year ended December 31, 2004, we adopted a Code of Ethics and Business Conduct, which was amended and restated on April 2, 2007, for our employees, officers and directors that complies with SEC regulations. The Code of Ethics is available free of charge on our website at *www.nephros.com*, by clicking on the Investor Relations link, then the Corporate Governance link. We intend to timely disclose any amendments to, or waivers from, our code of ethics and business conduct that are required to be publicly disclosed pursuant to rules of the SEC by filing such amendment or waiver with the SEC.

Executive Officer

The following table sets forth certain information concerning our non-director executive officer as of December 31, 2012:

Name	Age (as of 2/26/13)	Position with Nephros and Business Experience for Last Five Years
Gerald J. Kochanski	59	Gerald J. Kochanski has served as our Chief Financial Officer since April 2008 and served as our acting Chief Executive Officer from March 31 through April 5, 2010. Prior to joining us, Mr. Kochanski served as the Financial Services Director of Lordi Consulting LLC, a national consulting firm, from February 2007 through February 2008. From October 2004 until December 2006, Mr. Kochanski was the Chief Financial Officer of American Water Enterprises, Inc., a business unit of a privately owned company in the water and wastewater treatment industry. From November 1998 through September 2004, Mr. Kochanski was the Chief Financial Officer of Scanvec Amiable Ltd., a publicly traded provider of software to the signmaking, digital printing and engraving industries. Mr. Kochanski is a Certified Public Accountant and received his B.S. in Accounting and his M.B.A. in Finance from La Salle University, where he also serves as an adjunct School of Business faculty member.

From April 6, 2010 until April 20, 2012, Paul A. Mieyal, a member of the Board of Directors, served as the acting Chief Executive Officer. Upon the appointment of John C. Houghton, effective April 20, 2012, Paul A. Mieyal resigned as acting Chief Executive Officer, but remains as a member of the Board of Directors of the Company. Dr. Mieyal is a Vice President of Wexford Capital LP, the managing member of Lambda Investors LLC, which, as of December 31, 2012, beneficially owned approximately 31% of our outstanding Common Stock, representing approximately 53% on a fully-diluted basis.

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 2012, all of our officers, directors and 10% stockholders complied with applicable Section 16(a) filing requirements except as follows: Each of Messrs. Amron, Mieyal, Kochanski, Centella, Scibetta and Houghton did not timely file one Form 4 reporting a grant of stock options by the Board, and Mr. Houghton also did not timely file a Form 3 to report that he did not beneficially own any Company securities at the time of his appointment as President and Chief Executive Officer.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

There have been no changes in or disagreements with our accountants during 2012 or 2011.

EXECUTIVE COMPENSATION

The following table sets forth all compensation earned in the fiscal years ended December 31, 2012 and 2011 by our Named Executive Officers.

Summary Compensation Table

Name and Principal Position	Year	Salary (\$)	Bonus(1) (\$)	Option Awards (2) (\$)	All Other Compensation (3) (\$)	Total
John C. Houghton (5) President and Chief Executive Officer	2012	242,756	—	\$1,125,267	\$ 20,674	\$1,388,697
Gerald J. Kochanski Chief Financial Officer	2012	\$202,027	\$40,038	\$14,761	\$ 23,200	\$280,026
	2011	\$198,734	\$38,872	\$110,000	\$ 22,587	\$370,193
Paul A. Mieyal Acting Chief Executive Officer (4)	2012	—	—	\$7,307	\$ 14,800	\$22,107
	2011			\$13,982	\$ 14,800	\$28,782

(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 2012 and 2011.

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

(3) See table below for details on "All Other Compensation."

Dr. Mieyal served as our acting Chief Executive Officer from April 6, 2010 until April 20, 2012. Upon the appointment of John C. Houghton, effective April 20, 2012, Dr. Mieyal resigned as acting Chief Executive Officer, but will remain as a member of the Board of Directors. Dr. Mieyal received no compensation for his services, except in his capacity as a director of our company, which compensation is disclosed in the columns titled "Option Awards," and "All Other Compensation" included in this table.

(5) Mr. Houghton was appointed President and Chief Executive Officer effective April 20, 2012.

All Other Compensation

Name	Year	Matching 401K Plan Contribution	Health Insurance Paid by Company	Life Insurance Paid by the Company	Consulting Fees	Director Fees	Company Paid Transportation Expense	Total Other Compensation	
John C. Houghton	2012	\$ 9,710	\$ 9,564	\$ 1,400	—	—	—	\$ 20,674	
Gerald J. Kochanski	2012	\$ 8,220	\$ 9,536	\$ 5,444	—	—	—	\$ 23,200	
	2011	\$ 9,504	\$ 7,930	\$ 5,153	—	—	—	\$ 22,587	
Paul A. Mieyal	2012	—	—	—	—	\$14,800(1)	—	\$ 14,800	(1)
	2011	—	—	—	—	\$14,800(1)	—	\$ 14,800	(1)

(1) At the request of Dr. Mieyal, the director fees were paid directly to Wexford Capital LP.

Option Holdings and Fiscal Year-End Option Values

The following table shows information concerning unexercised options outstanding as of December 31, 2012 for our named executive officers (after giving effect to the 1:20 reverse stock split effected on March 11, 2011).

Outstanding Equity Awards at Fiscal Year-End 2012

Name	Grant Date (1)	Option Awards (2)		Option Exercise Price (\$)	Option Expiration Date
		Number of Securities Underlying Unexercised Options (#) Exercisable (2)	Number of Securities Underlying Unexercised Options (#) Unexercisable (2)		
John C. Houghton	April 20, 2012	126,563	548,438	\$ 0.95	4/20/22
John C. Houghton	July 3, 2012	62,166	269,384	\$ 1.89	7/3/22
Gerald J. Kochanski	April 1, 2008	12,500	-0-	\$ 15.00	4/1/18
Gerald J. Kochanski	Jan 6, 2009	938	312	\$ 2.60	1/6/19
Gerald J. Kochanski	Dec 31, 2009	2,834	945	\$ 15.40	12/31/19
Gerald J. Kochanski	Mar 24, 2011	150,000	100,000	\$ 0.51	3/24/21
Gerald J. Kochanski	Feb 16, 2012	-0-	20,000	\$ 0.83	2/16/22
Paul A. Mieyal(3)	Nov 30, 2007	750	-0-	\$ 16.00	11/30/17
Paul A. Mieyal(3)	Jan 8, 2010	1,000	-0-	\$ 19.00	1/8/20
Paul A. Mieyal(3)	Mar 24, 2011	19,200	12,800	\$ 0.51	3/24/14
Paul A. Mieyal (3)	Feb 16, 2012	3,334	6,666	\$ 0.83	2/16/22

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

(2) Stock options became exercisable in accordance with the vesting schedule below:

Grant Date Vesting

John C. Houghton *April 20, 2012 Grant:* 14,063 vest monthly until March 20, 2016.

John C. Houghton *July 3, 2012 Grant:* 6,907 vest monthly until March 20, 2016.

Gerald J. Kochanski *January 6, 2009 Grant:* 312 vest on January 6, 2013.

Gerald J. Kochanski *December 31, 2009 Grant:* 944.5 vest on December 31, 2013.

Gerald J. Kochanski *March 24, 2011 Grant:* 50,000 vest on each of March 24, 2013 and March 24, 2014.

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Gerald J. Kochanski *February 16, 2012 Grant: 5,000 vest on each of February 16, 2013, February 16, 2014, February 16, 2015 and February 16, 2016.*

Paul A. Mieyal *March 24, 2011 Grant: 6,400 vest on each of March 24, 2013 and March 24, 2013.*

Paul A. Mieyal *February 16, 2012 Grant: 3,333 vest on each of February 16, 2013 and February 16, 2014.*

(3) At the request of Dr. Mieyal, the options were granted in the name of Wexford Capital LP.

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. John C. Houghton

On April 20, 2012, the Company entered into an Employment Agreement, effective as of April 20, 2012, with Mr. Houghton ("Employment Agreement"). The Employment Agreement has a term of four years, ending on April 20, 2016. The Employment Agreement provides that Mr. Houghton's annual base salary will be \$350,000. Mr. Houghton will be eligible to receive a target discretionary bonus of 30% of annual base salary, as determined by the Company. 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 will be appropriately prorated for such annual period. The targets for each subsequent annual period will be mutually agreed upon at the beginning of each calendar year between Mr. Houghton and the Compensation Committee.

Upon execution of the Employment Agreement, the Company granted Mr. Houghton options to purchase 675,000 shares of the Company's common stock pursuant to the Company's 2004 Stock Incentive Plan (the "Plan"). In addition, the Company was required to grant Mr. Houghton options to purchase an additional 331,550 shares of the Company's 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 Employment Agreement provides that upon the occurrence of a change in control (as defined in the Employment Agreement), all of Mr. Houghton's unvested stock options will vest and become exercisable immediately and, unless all such options are cashed-out in the change in control transaction, shall 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 is terminated in connection with such change in control transaction.

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

In the event that Mr. Houghton's employment is terminated by reason of Mr. Houghton's death, or by reason of Mr. Houghton's resignation or retirement (as to which at least two (2) weeks notice is required), then the Company will 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, the Company determines that Mr. Houghton has 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, the Company may terminate his employment hereunder for "disability". In that event, the Company will pay the earned but unpaid base salary for services rendered through such date of termination. Any and all unvested stock options shall be cancelled as of the date of termination. During any period that Mr. Houghton fails to perform his duties as a result of incapacity due to physical or mental illness, he will continue to receive compensation and benefits provided by the Employment Agreement until his employment is terminated; provided, however, that the amount of compensation and benefits received during such period will be reduced by the aggregate amounts, if any, payable under disability benefit plans and programs of the Company or under the Social Security disability insurance program. Additionally, the vesting of stock options will 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 will automatically be cancelled and forfeited as of the date of termination.

In the event that Mr. Houghton's employment is terminated by the Company 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 shall 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 shall remain exercisable for ninety 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 the Company will 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 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 the Company's normal payroll policies; provided that if Mr. Houghton continues to be employed in any capacity by a successor entity following a change in control, the severance pay that would otherwise be payable shall be reduced by the amount of base compensation and guaranteed bonus (if any) Mr. Houghton receives in such capacity during or attributable to the severance term. Payment of any severance benefits are subject to the execution by Mr. Houghton of a general release and an agreement to continue to be bound by certain provisions of the Employment Agreement relating to, among others, non-competition, non-solicitation and confidentiality.

Mr. Houghton is also subject to non-competition, non-solicitation and confidentiality covenants during the term of his employment.

Agreement with Mr. Gerald J. Kochanski

Mr. Kochanski began serving as our Chief Financial Officer on April 28, 2008, pursuant to an employment agreement dated as of April 1, 2008. Mr. Kochanski's initial annual base salary is \$185,000. For the first year of Mr. Kochanski's employment, we paid him a non-accountable commuting allowance of \$10,000. In addition, we agreed to pay up to \$10,000 of Mr. Kochanski's moving costs. Mr. Kochanski may be awarded a bonus based on performance. In 2011, Mr. Kochanski was awarded a bonus of \$38,872. Pursuant to the employment agreement, we granted Mr. Kochanski an option to purchase 12,500 shares of our common stock under our 2004 Stock Incentive Plan. The option vested in three equal annual installments of 3,125 shares on each of March 31, 2009, March 31, 2010, and March 31, 2011. The option to purchase the remaining 3,125 shares vests on March 31, 2012 provided that he remains employed by us at such time, and provided further that such options shall become exercisable in full immediately upon the occurrence of a change in control (as defined in our 2004 Stock Incentive Plan).

Mr. Kochanski's agreement provides that upon termination by us for cause or disability (as such terms are defined in the agreement) or by Mr. Kochanski for any reason other than his exercise of the change of control termination option (as defined in the agreement), then we shall pay him only his accrued but unpaid base salary and bonuses for services rendered through the date of termination, his unvested options shall immediately be cancelled and forfeited and his vested options shall remain exercisable for 90 days after such termination. If Mr. Kochanski's employment is terminated by his death or by his voluntary resignation or retirement other than upon his exercise of the change of control termination option, then we shall pay him his accrued but unpaid base salary for services rendered through the

date of termination and any bonuses due and payable through such date of termination and those that become due and payable within 90 days after such date. If we terminate Mr. Kochanski's employment for any other reason, then, provided he continues to abide by certain confidentiality and non-compete provisions of his agreement and executes a release, he shall be entitled to: (1) any accrued but unpaid base salary for services rendered through the date of termination; and (2) the continued payment of his base salary, in the amount as of the date of termination, for a period of six months subsequent to the termination date or until the end of the remaining term of the agreement if sooner.

Upon any sale of all or substantially all of our business or assets, whether direct or indirect, by purchase, merger, consolidation or otherwise, Mr. Kochanski shall have a period of time in which to discuss, negotiate and confer with any successor entity regarding the terms and conditions of his continued employment. If Mr. Kochanski, acting reasonably, is unable to timely reach an agreement through good faith negotiations with such successor, then he may elect to terminate his employment with us and receive any accrued but unpaid salary for services rendered through the date of termination and the continued payment of his salary, in the amount as of the date of termination, for a period of six months. All unvested options that would have vested during the shorter of (a) the subsequent six months or (b) the remainder of the term would also immediately become vested.

The agreement defines "cause" as (1) conviction of any crime (whether or not involving us) constituting a felony in the jurisdiction involved; (2) engaging in any act which, in each case, subjects, or if generally known would subject, us to public ridicule or embarrassment; (3) gross neglect or misconduct in the performance of the employee's duties under the agreement; or (4) material breach of any provision of the agreement by the employee; provided, however, that with respect to clauses (3) or (4), the employee must have received written notice from us setting forth the alleged act or failure to act constituting "cause", and the employee shall not have cured such act or refusal to act within 10 business days of his actual receipt of notice.

The agreement defines “disability” as our determination that, because of the employee’s incapacity due to physical or mental illness, the employee has failed to perform his duties under the agreement on a full time basis for either (1) 120 days within any 365-day period, or (2) 90 consecutive days.

On March 28, 2011, we entered into an employment agreement, to be effective on April 1, 2011, with Mr. Kochanski. The new employment agreement replaces the current agreement and is substantially similar to the prior agreement with the following material changes: Mr. Kochanski’s base annual salary was increased to \$200,192, an increase of \$15,192; and in the event that Mr. Kochanski’s employment is either terminated by us for other than “cause” (as defined in the agreement), then (i) all of his unvested stock options that would have vested during the shorter of (a) the subsequent six months or (b) the remainder of the term, shall immediately become vested.

Change in Control Payments

If the change in control payments called for in the agreements for Messrs. Houghton and Kochanski had been triggered on December 31, 2012, we would have been obligated to make the following payments:

Name	Cash Payment Per Month (# of months paid)	Number of Options that Would Vest (Market Value) (1)
John C. Houghton	\$ 29,167 (3 mos.)	\$ 131,625 (-0-)
Gerald Kochanski	\$ 16,833 (6 mos.)	\$ 75,200 (-0-)

The market value equals the difference between \$1.19, the fair market value of the shares that could be acquired (1) based on the closing sale price per share of our common stock on the Over-the-Counter Bulletin Board on December 31, 2012 and the exercise prices for the underlying stock options.

2004 Stock Incentive Plan

The 2004 Stock Incentive Plan provides that if there is a change in control, unless the agreement granting an award provides otherwise, all awards under the 2004 Stock Incentive Plan will become vested and exercisable as of the effective date of the change in control. As defined in the 2004 Stock Incentive Plan, a change in control means the occurrence of any of the following events: (i) any “person,” including a “group,” as such terms are defined in sections

13(d) and 14(d) of the Exchange Act and the rules promulgated thereunder, becomes the beneficial owner, directly or indirectly, whether by purchase or acquisition or agreement to act in concert or otherwise, of more than 50% of the outstanding shares of our common stock; (ii) our complete liquidation; (iii) the sale of all or substantially all of our assets; or (iv) a majority of the members of our Board of Directors are elected to the Board without having previously been nominated and approved by a majority of the members of the Board incumbent on the day immediately preceding such election.

Non-Qualified Stock Option Agreement with John C. Houghton

On July 3, 2012, the Company granted Mr. Houghton an option to purchase 331,550 shares of common stock of the Company (the "Option"), under a Non-qualified Stock Option Agreement, dated July 3, 2012, between Mr. Houghton and the Company, in connection with his appointment as the President and Chief Executive Officer. The terms of this non-qualified stock option agreement are substantially similar to the terms of the 2004 Stock Incentive Plan. The options granted to Mr. Houghton pursuant to this agreement vest in equal monthly installments over four years commencing on April 20, 2012, the date Mr. Houghton was appointed; provided that Mr. Houghton remains employed by the Company at such time.

401(k) Plan

The company has established a 401(k) deferred contribution retirement plan (the "401(k) Plan") which covers all employees. The 401(k) Plan provides for voluntary employee contributions of up to 15% of annual earnings, as defined. As of January 1, 2004, the company began matching 100% of the first 3% and 50% of the next 2% of employee earnings to the 401(k) Plan. The company contributed and expensed \$49,000 and \$28,000 in 2012 and 2011, respectively.

Director Compensation

In fiscal year 2012, our directors received a \$10,000 annual retainer, \$1,200 per meeting for each quarterly Board meeting attended and reimbursement for expenses incurred in connection with serving on our Board of Directors. The Chairman of the Board receives an annual retainer of \$20,000 and \$1,500 per meeting for each quarterly Board meeting attended. The chairperson of our Audit Committee is paid a \$5,000 annual retainer and \$500 per meeting for meetings of the Audit Committee, with a maximum of eight meetings per year.

We grant each non-employee director who first joins our Board, immediately upon such director's joining our Board, options to purchase 1,000 shares of our common stock in respect of such first year of service at an exercise price per share equal to the fair market value price per share of our common stock on the date of grant. We also grant annually to each non-employee director options to purchase 500 shares of our common stock (625 shares to the Chairman of the Board, effective in 2009) at an exercise price per share equal to the fair market value price per share of our common stock on the grant date, although inadvertently we did not grant these options in 2008 and 2009, and subsequently granted them in January 2010 with an exercise price of \$19.00 per share. These non-employee director options vest in three equal installments on each of the date of grant and the first and second anniversaries thereof.

As a result of the shareholders' rights offering that was completed on March 10, 2011 and the 1:20 reverse stock-split that was effected as of March 11, 2011, the company's closing market price per share was \$.60 on March 11, 2011. All of the outstanding options at March 11, 2011 had an exercise price in excess of \$.60. On March 24, 2011, the company granted its non-employee directors options to purchase 184,000 common shares in the aggregate at an exercise price per share equal to the fair market value price per share on that date, which was \$0.51 per share. These non-employee director options vested forty percent (40%) on the date of grant and twenty percent (20%) vest equally on the following three anniversaries thereof.

Our executive officers do not receive additional compensation for service as directors if any of them so serve.

The following table shows the compensation earned by each of our non-employee directors for the year ended December 31, 2012, other than Dr. Mieyal, whose compensation information is presented in the Summary Compensation table above.

Non-Employee Director Compensation in Fiscal Year 2012

Name	Fees Earned or Paid in Cash	Option Awards (1) (\$)	Total (\$)
Arthur H. Amron (5)	\$ 14,800	\$ 7,307 (2)	\$ 28,880

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Lawrence J. Centella	\$ 14,800	\$ 7,307 (3)	\$41,200
James S. Scibetta	\$ 33,000	\$ 9,133 (4)	\$59,400

The amount reported is the aggregate grant date fair value of the options granted, computed in accordance with (1)FASB ASC Topic 718. The assumptions used in determining the grant date fair values of these awards are set forth in Note 2 of these consolidated financial statements.

(2)Options granted for services rendered by Mr. Amron totaled 43,750 options at December 31, 2012.

(3)Options granted for services rendered by Mr. Centella totaled 72,750 options at December 31, 2012.

(4)Options granted for services rendered by Mr. Scibetta totaled 75,625 options at December 31, 2012.

(5)At the request of Mr. Amron, his options and director fees were directed to Wexford Capital LP.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

On March 10, 2011 the company completed its rights offering and a private placement that together resulted in gross proceeds of approximately \$3.2 million. The aggregate net proceeds were approximately \$2.3 million, after deducting the estimated aggregate expenses of these transactions which approximated \$200,000, the repayment of the \$500,000 note, plus \$26,650 of accrued interest thereon, issued to Lambda Investors, the payment of an 8% sourcing/transaction fee \$40,000 in respect of the note and an aggregate of \$100,000 for reimbursement of Lambda Investors' legal fees incurred in connection with the loan and the rights offering.

Simultaneously with the closing of the rights offering, Lambda Investors purchased in a private placement 3,009,711 units at the same per unit purchase price of \$0.40, pursuant to a purchase agreement between the company and Lambda Investors. The company issued to Lambda Investors an aggregate of 3,009,711 shares of common stock and warrants to purchase an aggregate of 2,782,577 shares of common stock. Of the \$3.2 million in gross proceeds from the rights offering and the private placement, the company received approximately \$1.2 million in gross proceeds from the sale of units to Lambda Investors. Net proceeds, after deducting the aggregate of \$666,650 in payments due Lambda Investors discussed above, were approximately \$537,000.

Following the closing of the rights offering, and after giving effect to anti-dilution provisions in existing warrants to purchase shares of our common stock that the rights offering triggered, Lambda Investors surrendered for cancellation warrants to purchase a number of shares equal to the total number of shares underlying warrants issued as part of the units sold in the rights offering and under the purchase agreement with Lambda Investors. The term of the remaining Lambda Investors warrants was extended so that the warrants expire at the same time as the warrants issued in the rights offering, which have a five-year term.

On February 4, 2013, we issued a senior secured note to Lambda Investors LLC in the principal amount of \$1.3 million. We expect that the proceeds from the note will allow us to fund our operations through May 2013. The note bears interest at the rate of 12% per annum and matures on August 4, 2013, at which time all principal and accrued interest will be due. However, we have agreed to prepay amounts due under the note with the cash proceeds from (a) a rights offering and an offering of a discounted exercise price to public warrant holders, each as further described in the note, (b) any other equity or debt financing, or (c) the issuance or incurrence of any other indebtedness or the sale of any assets outside the ordinary course of business, in each case prior to the maturity date. If we do not pay principal and interest under the note when due, the interest rate increases to 16% per annum. We may prepay the note without penalty at any time. The note is secured by a first priority lien on all of our property, including our intellectual property. As long as indebtedness remains outstanding under the note, we will be subject to certain covenants which, among other things, restrict our ability to merge with another company, sell a material amount of our assets, incur any additional indebtedness, repay any existing indebtedness, or declare or pay any dividends in cash, property or securities. In connection with the note, we have agreed to pay Lambda Investors an 8%, or \$104,000, sourcing/transaction fee. In addition, we will pay Lambda Investors' legal fees and other expenses incurred in connection with the note in the amount of \$50,000 as well as Lambda Investors' legal fees and other expenses incurred in connection with the rights offering in the amount of \$50,000. Those payments will be paid upon the completion of the rights offering or, if earlier, upon the maturity of the note. As additional consideration, the Company agreed to extend by one year the expiration date of all of Lambda's outstanding warrants to March 2017. In addition, we have undertaken to conduct a \$3 million rights offering of common stock. During the period when the rights offering is open, we expect to offer to our public warrant holders holding the warrants issued at the close of the March 2011 rights offering a one-time right, at their option, to exercise such warrants for an exercise price of \$0.30 per share discounted from \$0.40 per share. We expect to commence the offering in March 2013 following the filing of its Annual Report on Form 10-K. In connection with the offering, Nephros will file a registration statement on Form S-1, as may be amended, with the Securities and Exchange Commission.

As of December 31, 2012, Lambda Investors is our largest stockholder and beneficially owns approximately 31% of our outstanding common stock and, on a fully-diluted basis, owns approximately 53% of our outstanding common

stock. The warrants held by Lambda Investors have an exercise price of \$0.40 per share and certain warrants have full ratchet anti-dilution protection. In connection with the proposed rights offering, we agreed to amend the terms of the existing warrants held by Lambda Investors to March 10, 2017, and Lambda Investors agreed to waive its anti-dilution rights applicable to any of its existing warrants solely with respect to the one-time incentive discount offered to public warrant holders.

The shares beneficially owned by Lambda Investors may be deemed beneficially owned by Wexford Capital LP, which is the managing member of Lambda Investors. Arthur H. Amron, a director of Nephros, is a partner and general counsel of Wexford Capital. Paul Mieyal, a director of Nephros, is a vice president of Wexford Capital. During 2012, at the request of Messrs. Amron and Mieyal, fees and options in the aggregate amount of approximately \$57,760 earned in respect of services they rendered to the company were directed to Wexford Capital LP.

All share amounts and related prices have been adjusted to give effect to the 1:20 reverse stock split effected on March 11, 2011.

In connection with the February 2013 loan from Lambda Investors, we entered into a registration rights agreement with Lambda Investors pursuant to which we will file a registration statement on Form S-1 covering the resale by Lambda Investors of the common stock underlying shares sold to Lambda Investors. Under this registration rights agreement, we will pay all of the expenses, including reasonable legal fees, of Lambda Investors in connection with such registration statement and resale of shares by Lambda Investors under such registration statement, which may be in an underwritten public offering. We will be obligated to use our reasonable best efforts to keep such registration statement continuously effective until such time as all the securities registered on such registration statement have been sold or are eligible for sale without restriction under the applicable securities laws.

**SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT
AND RELATED STOCKHOLDER MATTERS**

Securities Authorized for Issuance under Equity Compensation Plans

The following table provides information as of December 31, 2012 (adjusted to give effect to the reverse stock split effected on March 11, 2011) about compensation plans under which shares of our common stock may be issued to employees, consultants or members of our Board of Directors upon exercise of options or warrants under all of our existing equity compensation plans. Our existing equity compensation plans consist of our Amended and Restated Nephros 2000 Equity Incentive Plan and our Nephros, Inc. 2004 Stock Incentive Plan (together, our “Stock Option Plans”) in which all of our employees and directors are eligible to participate. Our Stock Option Plans were approved by our stockholders.

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrant and rights	(b) Weighted-average exercise price of outstanding options, warrant and rights	(c) Number of securities remaining available for issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by our stockholders:			
Stock Option Plans	1,643,164	\$ 0.67	339,904
Equity compensation plans not approved by our stockholders (1):			
None	—	\$ 0.87	—
All Plans	1,974,714		339,904

On July 3, 2012, the Company granted Mr. Houghton an option to purchase 331,550 shares of common stock of the Company, under the Non-qualified Stock Option Agreement, dated July 3, 2012, between Mr. Houghton and (1) the Company, in connection with his appointment as the President and Chief Executive Officer. These options vests in equal monthly installments over four years commencing on April 20, 2012, the date Mr. Houghton was appointed; provided that Mr. Houghton remains employed by the Company at such time.

Security Ownership of Certain Beneficial Owners

The following table sets forth the beneficial ownership of our common stock as of February 20, 2013, by (i) each person known to us to own beneficially more than five percent (5%) of our common stock, based on such persons' or entities' filings with the SEC as of that date; (ii) each director, director nominee and executive officer; and (iii) all directors, director nominees and executive officers as a group:

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percentage of Class (1)	
Lambda Investors LLC(2)	15,317,943	53.0	%
Southpaw Asset Management LP(3)	1,003,496	3.5	%
Arthur H. Amron(4)	34,017	*	
Lawrence J. Centella(5)	72,684	*	
John C. Houghton (6)	272,607	*	
Gerald J. Kochanski(7)	221,584	*	
Paul A. Mieyal(8)	34,017	*	
James S. Scibetta(9)	59,459	*	
All executive officers and directors as a group(4) – (9)	694,368	2.4	

*Represents less than 1% of the outstanding shares of our common stock.

Applicable percentage ownership is based on 12,025,116 shares of common stock outstanding as of February 20, 2013, after giving effect to the 1:20 reverse stock split effected March 11, 2011, together with applicable options and warrants for each stockholder. Beneficial ownership is determined in accordance with the rules of the SEC, (1) based on factors including voting and investment power with respect to shares. Common stock subject to options and warrants exercisable on or within 60 days after February 20, 2013 are deemed outstanding for the purpose of computing the percentage ownership of the person holding those options or warrants, but not for computing the percentage ownership of any other person.

(2) Based in part on information provided in Schedule 13D/A filed on February 13, 2013. The shares beneficially owned by Lambda Investors may be deemed beneficially owned by Wexford Capital LP, which is the managing member of Lambda Investors, Wexford GP LLC, which is the General Partner of Wexford Capital LP, by Charles E. Davidson in his capacity as Chairman and managing member of Wexford Capital LP and by Joseph M. Jacobs in his capacity as President and managing member of Wexford Capital LP. The address of each of Lambda Investors LLC, Wexford Capital LP, Mr. Davidson and Mr. Jacobs is c/o Wexford Capital LP, 411 West Putnam Avenue, Greenwich, CT 06830. Each of Wexford Capital LP, Wexford GP LLC, Mr. Davidson and Mr. Jacobs disclaims beneficial ownership of the shares of Common Stock owned by Lambda Investors except, in the case of Mr. Davidson and Mr. Jacobs, to the extent of their respective interests in each member of Lambda Investors. Includes 11,589,151 shares issuable upon exercise of warrants held by Lambda Investors having an exercise price

of \$0.40 per share. Lambda Investors is controlled by Wexford Capital LP. Arthur H. Amron, one of our directors, is a Partner and General Counsel of Wexford Capital LP. Paul A. Mieyal, our acting Chief Executive Officer and one of our directors, is a Vice President of Wexford Capital LP.

Based in part on information provided in Schedule 13D/A filed on January 9, 2013. The shares beneficially owned by Southpaw Asset Management LP may be deemed beneficially owned by Southpaw Holdings LLC, which is the General Partner of Southpaw Asset Management LP, and by each of Kevin Wyman and Howard Golden, who are principals of Southpaw Holdings LLC, and Southpaw Credit Opportunity Master Fund LP, of which Southpaw Asset Management LP is the investment manager. The address of each of Southpaw Asset Management LP, (3) Southpaw Holdings LLC, Kevin Wyman, Howard Golden, and Southpaw Credit Opportunity Master Fund LP, is 2 Greenwich Office Park, Greenwich, CT 06831. Each of Southpaw Asset Management LP, Southpaw Holdings LLC, Kevin Wyman and Howard Golden disclaims beneficial ownership of 483,254 shares of common stock and 520,242 shares issuable upon the exercise of warrants beneficially owned by Southpaw Credit Opportunity Master Fund LP having an exercise price of \$0.40.

Mr. Amron's address is c/o Wexford Capital LP, 411 West Putnam Avenue, Greenwich, CT 06830. The shares (4) identified as being beneficially owned by Mr. Amron consist of 34,017 shares issuable upon exercise of options granted under the 2004 Stock Incentive Plan. Does not include 9,733 shares issuable upon the exercise of options which have been granted under our Stock Option Plans but will not vest within 60 days of February 20, 2013.

Mr. Centella's address is the company address: 41 Grand Avenue, River Edge, New Jersey 07661. The shares (5) identified as being beneficially owned by Mr. Centella include 57,417 shares issuable upon exercise of options granted under the 2004 Stock Incentive Plan. Does not include 15,333 shares issuable upon the exercise of options which have been granted under our Stock Option Plans but will not vest within 60 days of February 20, 2013.

Mr. Houghton's address is the company address: 41 Grand Avenue, River Edge, New Jersey 07661. The shares (6) identified as being beneficially owned by Mr. Houghton consist of 272,607 shares issuable upon exercise of options granted under the 2004 Stock Incentive Plan. Does not include 733,943 shares issuable upon the exercise of options which have been granted under our Stock Option Plans but will not vest within 60 days of February 20, 2013.

Mr. Kochanski's address is the company address: 41 Grand Avenue, River Edge, New Jersey 07661. The shares (7) identified as being beneficially owned by Mr. Kochanski consist of 221,584 shares issuable upon exercise of options granted under the 2004 Stock Incentive Plan. Does not include 65,945 shares issuable upon the exercise of options which have been granted under our Stock Option Plans but will not vest within 60 days of February 20, 2013.

Dr. Mieyal's address is c/o Wexford Capital LP, 411 West Putnam Avenue, Greenwich, CT 06830. The shares (8) identified as being beneficially owned by Dr. Mieyal consist of 34,017 shares issuable upon exercise of options granted under the 2004 Stock Incentive Plan. Does not include 9,733 shares issuable upon the exercise of options which have been granted under our Stock Option Plans but will not vest within 60 days of February 20, 2013.

Mr. Scibetta's address is the company address: 41 Grand Avenue, River Edge, New Jersey 07661. The shares (9) identified as being beneficially owned by Mr. Scibetta consist of 59,459 shares issuable upon exercise of options granted under the 2004 Stock Incentive Plan. Does not include 16,167 shares issuable upon the exercise of options which have been granted under our Stock Option Plans but will not vest within 60 days of February 20, 2013.

DESCRIPTION OF COMMON STOCK

Our authorized capital stock consists of 90,000,000 shares of common stock, par value \$0.001 per share, and 5,000,000 shares of preferred stock, par value \$0.001 per share. As of February 20, 2013, there were 12,025,116 shares of common stock outstanding and no shares of preferred stock outstanding. All amounts are reported on a post reverse stock split basis.

To effect the rights offering we needed to increase the number of authorized shares of our common stock. Accordingly, we sought and received the approval of our stockholders at our annual meeting of stockholders held on January 10, 2011, to amend our certificate of incorporation to increase the authorized shares of our capital stock from 95,000,000 to 905,000,000 shares and the authorized shares of our common stock from 90,000,000 to 900,000,000 shares. We filed a certificate of amendment to our certificate of incorporation providing for such share increase immediately prior to the closing of the rights offering. Immediately after completion of the rights offering, we effected a 1-for-20 reverse stock split of our outstanding shares of common stock and decreased the authorized shares of our capital stock from 905,000,000 to 95,000,000 shares and the authorized shares of our common stock from 900,000,000 to 90,000,000 shares. We received stockholder approval of such amendment at our annual meeting of stockholders held on January 10, 2011.

Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders and do not have cumulative voting rights. Accordingly, holders of a majority of the shares of our common stock entitled to vote in any election of directors may elect all of the directors standing for election. Apart from preferences that may be applicable to any holders of preferred stock outstanding at the time, holders of our common stock are entitled to receive dividends, if any, ratably as may be declared from time to time by the Board out of funds legally available therefor. Upon our liquidation, dissolution or winding up, the holders of our common stock are entitled to receive ratably our net assets available after the payment of all liabilities and liquidation preferences on any outstanding preferred stock. Holders of our common stock have no preemptive, subscription, redemption or conversion rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock which we may designate and issue in the future.

DESCRIPTION OF WARRANTS

This prospectus relates to the shares of our common stock issuable upon the exercise, if any, of the warrants issued to the investors in this offering.

The warrants have an exercise price of \$0.40 per share of our common stock and are exercisable at the option of the holder at any time after the closing date of this offering, through and including the date that is the five year anniversary of the initial exercise date. During the period when the contemplated rights offering is open, we currently expect to offer to holders of the warrants a one-time right, at their option, to exercise such warrants for an exercise price of \$0.30 per share discounted from \$0.40 per share. Notwithstanding the foregoing, no warrants will be exercisable and we will not be obligated to issue any shares issuable upon the exercise of such warrants unless (i) at the time the holder thereof seeks to exercise such warrant, we have a registration statement under the Securities Act in effect covering the shares issuable upon the exercise of such warrant and a current prospectus relating to our common stock, and (ii) the shares issuable upon such exercise have been registered or qualified or deemed to be exempt from registration under the securities laws of the state of residence of the holder of the warrant. The warrants may be exercised only for full shares of common stock, and may not be exercised on a “cashless” basis. We will not issue fractional shares of common stock or cash in lieu of fractional shares of common stock. Warrant holders do not have any voting or other rights as a stockholder of our company.

If we (i) pay a dividend or make a distribution on our common stock in shares of common stock, other securities, cash or any other property, (ii) subdivide our outstanding shares of common stock into a greater number of shares, (iii) combine or reverse-split our outstanding shares of common stock into a smaller number of shares, or (iv) engage in certain pro-rata repurchases of common stock, then the per share warrant price and the number of warrant shares will be proportionately decreased and increased, respectively, in the case of a subdivision, distribution or stock dividend, or proportionately increased and decreased, respectively, in the case of a combination or reverse stock split. The aggregate warrant price payable for the then total number of warrant shares available for exercise under the warrant will remain the same.

If we effect any capital reorganization or reclassification, or any consolidation or merger, or any sale, transfer or other disposition of all or substantially all of our property, assets or shares to which we are a party, the holder of the warrant will have the right to receive on the exercise of the 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 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 warrants by the surviving party to such transaction.

No market exists for the warrants. We do not intend to list the warrants offered hereby on any securities exchange or automated quotation system.

In the rights offering, Nephros sold 4,964,864 units at \$0.40 per unit for gross proceeds of approximately \$2.0 million, resulting in the issuance of 4,964,864 shares of common stock and warrants to purchase an aggregate of 4,590,171 shares of common stock. The warrants expire on March 10, 2016 and have an exercise price of \$0.40 per share. All amounts are reported on a post reverse stock split basis.

On March 10, 2011, based on the completion of the rights offering Lambda Investors LLC, Nephros' largest stockholder, purchased in a private placement 3,009,711 units at a per unit purchase price of \$0.40 for aggregate gross proceeds of approximately \$1.2 million, pursuant to a purchase agreement between Nephros and Lambda Investors LLC. Each unit consisted of one share of common stock and a warrant to purchase 0.924532845 shares of common stock at an exercise price of \$0.40 per share for a period of five years following the issue date of the warrant, resulting in Lambda Investors LLC acquiring 3,009,711 shares of common stock and a warrant to purchase 2,782,577 shares of common stock. All amounts are reported on a post reverse stock split basis.

As of the 2011 rights offering record date, warrants to purchase 409,591 shares of our common stock were outstanding. Upon completion of the rights offering, warrants to purchase 375,961 shares had full-ratchet anti-dilution provisions and they became exercisable for an aggregate of 9,482,659 shares at an exercise price of \$0.40 per share. After giving effect to these anti-dilution provisions, Lambda Investors' surrendered for cancellation warrants to purchase 808,966 shares of our common stock, which equaled the number of shares underlying warrants issued as part of the Units in the Rights Offering. The remaining 33,629 warrants have no full-ratchet anti-dilution provision and they are exercisable at \$22.40 per share. All amounts are reported on a post reverse stock split basis.

As of February 20, 2013, there are warrants to purchase 2,981,898 shares at an exercise price of \$0.40 with expiration dates in 2016, warrants to purchase 11,589,152 shares at an exercise price of \$0.40 with expiration dates in 2017, and warrants to purchase 33,629 shares at an exercise price of \$22.40 that expire in 2014.

See "Certain Relationships and Related Transactions" for a description of registration rights with respect to shares of common stock issuable upon exercise of Lambda Investors warrants.

LEGAL MATTERS

The legality of the securities offered hereby have been passed upon for us by Wyrick Robbins Yates & Ponton, LLP, Raleigh, North Carolina.

EXPERTS

Our financial statements at and for the years ended December 31, 2012 and 2011 included in this prospectus have been audited by Rothstein Kass, an independent registered public accounting firm, as stated in their report, which report includes an explanatory paragraph related to the Company's ability to continue as a going concern. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as

experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference room located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our SEC filings are also available to the public free of charge at the SEC's website at www.sec.gov and on our website at www.nephros.com.

DISCLOSURE OF SEC POSITION ON INDEMNIFICATION FOR SECURITIES LAW VIOLATIONS

Our Fourth Amended and Restated Certificate of Incorporation, as amended, provides for indemnification of directors and officers of the Registrant to the fullest extent permitted by the Delaware General Corporation Law, or DGCL. We have obtained liability insurance for each director and officer for certain losses arising from claims or charges made against them while acting in their capacities as directors or officers of the registrant. Our Second Amended and Restated By-Laws provide for indemnification of our officers, directors and others who become a party to an action on our behalf by us to the fullest extent not prohibited under the DGCL. However, insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons pursuant to the foregoing provisions or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment of expenses incurred or paid by a director, officer or controlling person in a successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to the court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of

Nephros, Inc.

We have audited the accompanying consolidated balance sheets of Nephros, Inc. and Subsidiary (collectively, “the Company”) as of December 31, 2012 and 2011, and the related consolidated statements of operations, changes in stockholders’ equity (deficit) and cash flows in the two year period ended December 31, 2012. These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Nephros, Inc. and Subsidiary as of December 31, 2012 and 2011, and the results of their operations and their cash flows in the two year period ended December 31, 2012, in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has incurred negative cash flow from operations and net losses since inception. These conditions, among others, raise substantial doubt about its ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 2. The accompanying consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Rothstein Kass

Roseland, New Jersey

March 4, 2013

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NEPHROS, INC. AND SUBSIDIARY

CONSOLIDATED BALANCE SHEETS

(In Thousands, Except Share Amounts)

	December 31, 2012	December 31, 2011
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 47	\$ 1,669
Accounts receivable	935	1,170
Inventory, less allowances of \$269 at December 31, 2012 and \$218 at December 31, 2011	312	247
Prepaid expenses and other current assets	109	113
Total current assets	1,403	3,199
Property and equipment, net	16	17
Long-term receivable	-	778
Other assets, net of accumulated amortization	2,109	-
Total assets	\$ 3,528	\$ 3,994
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,070	\$ 284
License and supply agreement fee payable	1,318	-
Accrued expenses	321	195
Deferred revenue, current portion	707	698
Total current liabilities	3,416	1,177
Long-term portion of deferred revenue	707	1,396
Total liabilities	4,123	2,573
Commitments and Contingencies (Note 10)		
Stockholders' equity (deficit):		
Preferred stock, \$.001 par value; 5,000,000 shares authorized at December 31, 2012 and 2011; no shares issued and outstanding at December 31, 2012 and 2011.	-	-
Common stock, \$.001 par value; 90,000,000 shares authorized at December 31, 2012 and 2011; 11,949,824 and 10,501,477 shares issued and outstanding at December 31, 2012 and December 31, 2011, respectively.	12	10
Additional paid-in capital	96,847	95,630
Accumulated other comprehensive income	76	49
Accumulated deficit	(97,530)	(94,268)
Total stockholders' equity (deficit)	(595)	1,421

Total liabilities and stockholders' equity (deficit)	\$ 3,528	\$ 3,994
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The accompanying notes are an integral part of these consolidated financial statements.

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NEPHROS, INC. AND SUBSIDIARY**CONSOLIDATED STATEMENTS OF OPERATIONS****(In Thousands, Except Share and Per Share Amounts)**

	Years Ended December 31,	
	2012	2011
Net revenue:		
Product revenues	\$ 1,127	\$ 1,849
Licensing revenues	680	365
Total net revenues	1,807	2,214
Cost of goods sold	737	1,346
Gross margin	1,070	868
Operating expenses:		
Research and development	632	451
Depreciation and amortization	151	91
Selling, general and administrative	3,620	2,636
Total operating expenses	4,403	3,178
Loss from operations	(3,333)	(2,310)
Interest income	2	4
Interest expense	-	(12)
Amortization of debt issuance costs	-	(40)
Other income (expense)	69	(2)
Net loss	(3,262)	(2,360)
Other comprehensive income, foreign currency translation adjustments	27	27
Total comprehensive loss	(3,235)	(2,333)
Net loss per common share, basic and diluted	\$(0.29)	\$(0.27)
Weighted average common shares outstanding, basic and diluted	11,223,878	8,644,962

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

NEPHROS, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY

(In Thousands, Except Share Amounts)

	Additional	Accumulated
Common Stock	Paid-in	Other