NEPHROS INC
Form S-1
May 22, 2018

As filed with the Securities and Exchange Commission on May 22, 2018

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D. C. 20549

FORM S-1

REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

NEPHROS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**3841**	**13-3971809**
(State or Other Jurisdiction of Incorporation or Organization)	*(Primary Standard Industrial Classification Code Number)*	*(I.R.S. Employer Identification No.)*

380 Lackawanna Place

South Orange, New Jersey 07079

(201) 343-5202

(Address, Including Zip Code, and Telephone Number,

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

Daron Evans
President and Chief Executive Officer
Nephros, Inc.
380 Lackawanna Place
South Orange, New Jersey 07079
(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: From time to time after the effective date of this registration statement, as shall be determined by the selling shareholders identified herein.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box. [X]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

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

Large accelerated filer [ ] Accelerated filer [ ]

Non-accelerated filer [ ] Smaller reporting company [X]
(Do not check if smaller reporting company) Emerging growth company [ ]

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided to Section 7(a)(2)(B) of the Securities Act. [ ]

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	**Proposed Maximum Offering Price Per Share(2)**	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common stock, $0.001 par value per share	6,540,669	$ 0.58	$3,793,588.02	$ 472.30
Total	6,540,669	$ 0.58	$3,793,588.02	$ 472.30

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

(2) Estimated solely for purposes of calculating the amount of the registration fee pursuant to Rule 457(c). The offering price per share and the aggregate offering price are based upon the average of the high and low prices of the registrant's common stock as reported on the OTCQB on May 15, 2018.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THIS REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SUCH SECTION 8(A), MAY DETERMINE.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the Registration Statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities or the solicitation of an offer to buy these securities in any state in which such offer, solicitation or sale is not permitted.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION, DATED MAY 22, 2018

NEPHROS, INC.

6,540,669 Shares of Common Stock

The selling stockholders identified beginning on page 20 of this prospectus are offering on a resale basis a total of 6,540,669 shares of our common stock. We will not receive any proceeds from the sale of these shares by the selling stockholders.

Shares of our common stock are quoted on the OTCQB Marketplace operated by the OTC Markets Group, Inc., or OTCQB, under the ticker symbol "NEPH." On , 2018, the closing sales price for our common stock was $ per share. The shares of common stock issued upon the exercise of warrants will also be quoted on the OTCQB under the same ticker symbol. The warrants are not listed for trading on any stock exchange or market or quoted on the OTCQB.

Investing in our common stock involves substantial risks. See "Risk Factors" beginning on page 8 of this prospectus to read about important factors you should consider before purchasing our common stock.

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

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 , 2018.

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

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

PROSPECTUS SUMMARY

This summary highlights information contained in other parts of this prospectus. Because it is a summary, it does not contain all of the information that is important to you. For a more complete understanding of our business, you should read this summary together with the more detailed information and financial statements as of and for the three months ended March 31, 2018 and 2017 and as of and for the years ended December 31, 2017 and 2016, and related notes appearing elsewhere in this prospectus. You should read this entire prospectus carefully, including the “Risk Factors” section beginning on page 8 and the “Special Note Regarding Forward-Looking Statements” section beginning on page 18. This prospectus contains important information that you should consider when making your investment decision.

About the Company

We are a commercial stage medical device and commercial products company that develops and sells high performance liquid purification filters and hemodiafiltration (“HDF”) systems. Our filters, which are generally classified as ultrafilters, are primarily used in hospitals for the prevention of infection from water-borne pathogens, such as legionella and pseudomonas, and in dialysis centers for the removal of biological contaminants from water and

bicarbonate concentrate. Because our ultrafilters capture contaminants as small as 0.005 microns in size, they minimize exposure to a wide variety of bacteria, viruses, fungi, parasites, and endotoxins.

Our OLpūr H2H Hemodiafiltration System, used in conjunction with a standard hemodialysis machine, is the only U.S. Food and Drug Administration ("FDA") 510(k) cleared medical device that enables nephrologists to provide hemodiafiltration treatment to patients with end stage renal disease ("ESRD"). Additionally, we sell hemodiafilters, which serve the same purpose as dialyzers in a hemodialysis treatment, and other disposables used in the hemodiafiltration treatment process.

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. We have extended our filtration technologies to meet the demand for liquid purification in other areas, in particular water purification.

Our Products

Presently, we produce two core product lines: water ultrafiltration products and HDF systems. Water ultrafiltration is our primary near-term market opportunity, which we expect to continue to grow rapidly as we launch new products and further penetrate the market. HDF is a long-term investment that we expect to grow as we develop a second-generation system and as the U.S. dialysis market reimbursement environment migrates to full capitation.

Ultrafiltration Products

Our ultrafilters are used in both medical and non-medical applications. Like competing filters, they purify by passing liquids through the pores of polysulfone hollow fiber. Our filters' pores are significantly smaller than those of competing products, resulting in highly effective elimination of water-borne pathogens, including legionella bacteria (the cause of Legionnaires disease). Additionally, the fiber structure and pore density in our hollow fiber enables significantly higher flow rates than in other polysulfone hollow fiber.

During 2016 and 2017, we developed several ultrafilter cartridge products that are designed to fit directly into existing water filtration systems, eliminating the need for plumbing modifications during installation and replacement. These "plug and play" systems are an important part of our strategy to penetrate the water filtration market.

Our sales strategy is a combination of direct selling to end customers and indirect selling through value-added resellers ("VARs"). Leveraging VARs has enabled us to expand rapidly our access to target customers in the medical market without significant sales staff expansion. In addition, while we are currently focused in medical markets, the VARs that support these customers also support a wide variety of commercial and industrial customers. We believe that our VAR relationships will facilitate growth in filter sales outside of the medical industry.

Target Markets

Our ultrafiltration products currently target the following markets:

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

Dialysis Centers: Filtration of water or bicarbonate concentrate used in hemodialysis.

Commercial Facilities: Filtration of water for washing and drinking, including use in ice machines and soft drink dispensers.

Military and Outdoor Recreation: Individual water purification devices used by soldiers and backpackers to produce drinking water in the field, as well as filters customized to remote water processing systems.

Hospitals and Other Healthcare Facilities. According to the American Hospital Association, approximately 5,700 hospitals, with approximately 915,000 beds, treated over 35 million patients in the United States in 2013. The U.S. Centers for Disease Control and Prevention estimates that healthcare associated infections ("HAI") occurred in approximately 1 out of every 25 hospital patients, or about 1.4 million patients in 2013. HAIs affect patients in hospitals or other healthcare facilities, and are not present or incubating at the time of admission. They also include infections acquired by patients in the hospital or facility, but appearing after discharge, and occupational infections among staff. Many HAIs are caused by waterborne bacteria and viruses that can thrive in aging or complex plumbing systems often found in healthcare facilities.

The Affordable Care Act, passed in March 2010, puts in place comprehensive health insurance reforms that aim to lower costs and enhance quality of care. With its implementation, healthcare providers have substantial incentives to deliver better care or be forced to absorb the expenses associated with repeat medical procedures or complications like HAIs. As a consequence, hospitals and other healthcare facilities are proactively implementing strategies to reduce HAI potential. Our ultrafilters are designed to aid in infection control in the hospital and healthcare setting by treating facility water at the points of delivery, such as ice machines, sinks and showers.

In June 2017, the Center for Clinical Standards and Quality at the Centers for Medicare and Medicaid Services ("CMS") announced the addition of requirements for facilities to develop policies and procedures that inhibit the growth and spread of legionella and other opportunistic pathogens in building water systems. Going forward, CMS surveyors will review policies, procedures, and reports documenting water management implementation results to verify that facilities are compliant with these requirements. We believe that these CMS regulations may have a positive impact on the sale of our HAI-inhibiting ultrafilters.

We currently have FDA 510(k) clearance on the following portfolio of medical device products for use in the hospital setting to aid in infection control:

The DSU-H is an in-line, 0.005 micron ultrafilter that provides dual-stage protection from water borne pathogens. The DSU-H is primarily used to filter potable water feeding ice machines, sinks, and medical equipment, such as endoscope washers and surgical room humidifiers. The DSU-H has an up to 6 month product life when used in a hospital setting.

The SSU-H is an in-line, 0.005 micron ultrafilter that provides single-stage protection from water borne pathogens. The SSU-H is primarily used to filter potable water feeding sinks, showers and medical equipment. The SSU-H has an up to 3 month product life when used in a hospital setting.

The S100 is a point-of-use, 0.01 micron microfilter that provides protection from water borne pathogens. The S100 is primarily used to filter potable water feeding sinks and showers. The S100 has an up to 3 month product life when used in a hospital setting.

The HydraGuard™ and HydraGuard™ - Flush are 0.005 micron cartridge ultrafilters that provide single-stage protection from water borne pathogens. The HydraGuard™ ultrafilters are primarily used to filter potable water feeding ice machines and medical equipment, such as endoscope washers and surgical room humidifiers. The HydraGuard™ has an up to 6 month product life and the HydraGuard™ - Flush has an up to 12 month product life when used in a hospital setting.

We received FDA 510(k) clearance to market the HydraGuard™ in December 2016 and began shipping it in July 2017. We began shipping the HydraGuard™ - Flush in September 2017. The DSU, SSU, and S100 products were 510(k)-cleared in prior years.

The complete hospital infection control product line, including in-line, point-of-use, and cartridge filters, can be viewed on our website at http://www.nephros.com/infection-control/ . We are not including the information on our website as a part of, nor incorporating it by reference, into this prospectus.

Dialysis Centers - Water/Bicarbonate. To perform hemodialysis, all dialysis clinics have dedicated water purification systems to produce water and bicarbonate concentrate, two essential ingredients for making dialysate, the liquid that removes waste material from the blood. According to the American Journal of Kidney Diseases, there are approximately 6,300 dialysis clinics in the United States servicing approximately 430,000 patients annually. We estimate that there are over 100,000 hemodialysis machines in operation in the United States.

Medicare is the main payer for dialysis treatment in the United States. To be eligible for Medicare reimbursement, dialysis centers must meet the minimum standards for water and bicarbonate concentrate quality set by the Association for the Advancement of Medical Instrumentation ("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.

We currently have FDA 510(k) clearance on the following portfolio of medical device products for use in the dialysis setting to aid in bacteria, virus, and endotoxin retention:

The DSU-D, SSU-D and SSUmini are in-line, 0.005 micron ultrafilters that provide protection from bacteria, viruses, and endotoxins. All of these products have an up to 12 month product life in the dialysis setting, and are used to filter water following treatment with a reverse osmosis ("RO") system, and to filter bicarbonate concentrate. These ultrafilters are primarily used in the water lines and bicarbonate concentrate lines leading into dialysis machines, and as a polish filter for portable RO machines.

The EndoPur is a 0.005 micron cartridge ultrafilter that provides single-stage protection from bacteria, viruses, and endotoxins. The EndoPur has an up to 12 month product life in the dialysis setting, and is used to filter water following treatment with an RO system. More specifically, the EndoPur is used primarily to filter water in large RO systems designed to provide ultrapure water to an entire dialysis clinic. The EndoPur is available in 10", 20", and 30" configurations.

The EndoPur is a cartridge-based, "plug and play" market entry that requires no plumbing at installation or replacement. In March 2017, we received FDA 510(k) clearance to market the EndoPur filter. We began shipping the EndoPur 10" filter in July 2017 and the 20" and 30" versions in September 2017.

Commercial and Industrial Facilities. We currently market the following portfolio of proprietary products for use in the commercial, industrial, and food service settings:

The NanoGuard™-D is an in-line, 0.005 micron ultrafilter that provides dual-stage retention of any organic or inorganic particle larger than 15,000 Daltons. The NanoGuard™-D is primarily used to filter potable water feeding ice machines, sinks and equipment that requires or benefits from ultrafiltered water, and filters up to 10,000 gallons of potable water, depending upon the particle load.

The NanoGuard™-S is an in-line, 0.005 micron ultrafilter that provides single-stage retention of any organic or inorganic particle larger than 15,000 Daltons. The NanoGuard™-S is primarily used to filter potable water feeding ice machines, sinks, showers and equipment that requires or benefits from ultrafiltered water, and filters up to 3,000 gallons of potable water, depending upon the particle load.

The NanoGuard™-E is a 0.005 micron ultrafilter cartridge that plugs into an Everpure® filter manifold and provides single-stage retention of any organic or inorganic particle larger than 15,000 Daltons. The NanoGuard™-E is primarily used to filter potable water feeding ice machines, beverage dispensers, and other equipment that requires or benefits from ultrafiltered water, and filters up to 10,000 gallons of potable water, depending upon the particle load.

The NanoGuard™-C is a 0.005 micron cartridge ultrafilter that fits with most 10”, 20”, 30” and 40” cartridge housings and provides single-stage retention of any organic or inorganic particle larger than 15,000 Daltons. The NanoGuard™-C is primarily used to filter potable water feeding ice machines and equipment that requires or benefits from ultrafiltered water, and filters up to 10,000 gallons of potable water per 10” of length, depending upon the particle load.

The NanoGuard™-F is a 0.005 micron flushable cartridge ultrafilter, available in 10” or 20” sizes and provides single-stage retention of any organic or inorganic particle larger than 15,000 Daltons. The NanoGuard™-F is primarily used to filter potable water feeding ice machines, sinks and equipment that requires or benefits from ultrafiltered water. The NanoGuard™-F has an up to 12 month product life and can filter up to 2.5 gallons per minute per 10” length, depending upon the particle load.

In April 2017, we announced a partnership with WorldWater & Solar Technology to provide ultrafiltration capabilities to their drinking water systems. This partnership centers on our NanoGuard™-F product line. This partnership is in the early stages of market roll-out.

In the fourth quarter of 2017, we released a lead filtration system that addresses both soluble and particulate lead in potable water, with the ability to treat up to 9,000 gallons of water between filter change-outs. This system is in the early stages of market roll-out.

Military and Outdoor Recreation. We developed our individual water treatment device ("IWTD") in both in-line and point-of-use configurations. Our IWTD allows a soldier in the field to derive drinking water from any freshwater source. This enables the soldier to remain hydrated, to help maintain mission effectiveness and unit readiness, and to extend mission reach. Our IWTD has been validated by the military to meet the NSF Protocol P248 standard. It has also been approved by the U.S. Army Public Health Command and the U.S. Army Test and Evaluation Command for deployment.

In May 2015, we entered into a Sublicense Agreement with CamelBak Products, LLC ("CamelBak"). Under this Sublicense Agreement, we granted CamelBak an exclusive, non-transferable, worldwide (with the exception of Italy) sublicense and license, in each case solely to market, sell, distribute, import and export the IWTD. In exchange for the rights granted to CamelBak, CamelBak agreed, through December 31, 2022, to pay us a percentage of the gross profit on any sales made to a branch of the U.S. military, subject to certain exceptions, and to pay us a fixed per-unit fee for any other sales made. CamelBak is also required to meet or exceed certain minimum annual fees payable to us, and, if such fees are not met or exceeded, we may convert the exclusive sublicense to a non-exclusive sublicense with respect to non-U.S. military sales. During the years ended December 31, 2017 and December 31, 2016, Camelbak met its minimum fee payments, and we recognized royalty revenue of $25,000 and $10,000, respectively, related to this Sublicense Agreement.

HDF Systems

The current standard of care in the United States for patients with chronic renal failure is hemodialysis ("HD"), a process in which toxins are cleared via diffusion. Patients typically receive HD treatments 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 United States 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 more challenging for patients, as it is performed on a daily basis, and typically takes 12-24 hours per treatment.

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 United States, HDF is prevalent in Europe and is performed for a growing number of patients. Clinical experience and literature show the following clinical and patient benefits of HDF:

- Enhanced clearance of middle and large molecular weight toxins.
- Improved survival - up to a 35% reduction in mortality risk
- Reduction in the occurrence of dialysis-related amyloidosis
- Reduction in inflammation
- Reduction in medication such as EPO and phosphate binders
- Improved patient quality of life
- Reduction in number of hospitalizations and overall length of stay

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

We originally developed a medical device that enabled a standard HD machine to perform HDF. We refer to our approach as an on-line mid-dilution hemodiafiltration ("mid-dilution HDF") system. Our original solution included a OLpūr H2H Hemodiafiltration Module ("H2H Module"), a OLpūr MD 220 Hemodiafilter ("HDF Filter") and a H2H Substitution Filter ("Dialysate Filter").

Our H2H Module attaches to a standard HD machine to perform on-line HDF therapy. The HD machine controls and monitors the basic treatment functions, as it would normally when providing HD therapy. The H2H Module is a free-standing, movable device that is placed next to either side of an HD machine. The H2H Module connects to the clinic's water supply, drain, and electricity.

The H2H Module utilizes the HDF Filter, and is very similar to a typical hollow fiber dialyzer assembled with a single hollow fiber bundle made with a high-flux (or high-permeability) membrane. The fiber bundle is separated into two discrete, but serially connected, blood paths. Dialysate flows in one direction that is counter-current to blood flow in Stage 1 and co-current to blood flow in Stage 2.

In addition to the HDF Filter, the H2H Module also utilizes a Dialysate Filter during patient treatment. The Dialysate Filter is a hollow fiber, ultrafilter device that consists of two sequential (redundant) ultrafiltration stages in a single housing. During on-line HDF with the H2H Module, fresh dialysate is redirected by the H2H Module's hydraulic (substitution) pump and passed through this dual-stage ultrafilter before being infused as substitution fluid into the extracorporeal circuit. Providing ultrapure dialysate is crucial for the success of on-line HDF treatment.

Our original HDF system conformed with current ANSI/AAMI/ISO standards and was cleared by the FDA for the treatment of patients with chronic renal failure in 2012. To date, our HDF System is the only HDF system cleared by the FDA.

Over the last four years, DaVita Healthcare Partners, the Renal Research Institute (a research division of Fresenius Medical Care), and Vanderbilt University conducted post-market evaluations of our hemodiafiltration system in their clinics. We gathered direct feedback from these evaluations to develop a better understanding of how our system best fits into the current clinical and economic ESRD treatment paradigm. The ultimate goal of the evaluations was to better understand the potential for HDF, in the U.S. clinical setting, to (a) improve the quality of life for the patient, (b) reduce overall expenditure compared to other dialysis modalities, (c) minimize the impact on nurse work flow at the clinic, and (d) demonstrate the pharmacoeconomic benefit of the HDF technology to the U.S. healthcare system, as has been done in Europe with other HDF systems. The last evaluation was concluded at Vanderbilt in the first quarter of 2018. When practical, we will work with Vanderbilt to publish observational findings.

Leveraging the learnings from our evaluations, we have initiated the development of the 2nd generation HDF system. We believe that the 2nd generation system, as currently designed, incorporates new features that could enable us to better manufacture at scale, to reduce the per treatment cost of performing HDF, and to better align with current work flow practices, versus our 1st generation HDF system. We filed a provisional patent on our new system design in June 2017. We are funding the 2nd generation HDF system as cash flow is available, and have announced plans to form a new subsidiary, Specialty Renal Products, Inc., to drive the development of this 2nd generation HDF system.

At March 31, 2018, we had an accumulated deficit of approximately $122,257,000 and we expect to incur additional operating losses over the next several quarters. On April 10, 2018, we completed a private placement transaction whereby we sold 6,540,669 shares of our common stock for aggregate net proceeds of approximately $2.9 million. This private placement is discussed in further detail on page 19 of this prospectus. We believe that our cash and cash equivalents, together with the proceeds from this private placement, will be sufficient to fund our current operating plan through at least the next twelve months.

Corporate Information

We were incorporated under the laws of the State of Delaware in April 1997. Our principal executive offices are located at 380 Lackawanna Place, South Orange, NJ 07079, and our telephone number is (201) 343-5202. We also have an office in Dublin, Ireland. For more information about Nephros, please visit our website at *www.nephros.com*.

Where You Can Find More Information

We make available free of charge on our website (http://www.nephros.com) our Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, as soon as

reasonably practicable after such material is electronically filed with or furnished to the SEC. We provide electronic or paper copies of filings free of charge upon request. The public may read and copy any materials filed with the SEC at the SEC's Public Reference Room at 100 F Street N.E. Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers that file with the SEC at http://www.sec.gov.

The Offering

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

Securities Offered	6,540,669 shares of common stock.
Use of Proceeds	We will receive none of the proceeds from the sale of the shares by the selling stockholders.
Risk Factors	The acquisition of our common stock involves substantial risks. See “Risk Factors” beginning on page 8 of this prospectus.
OTCQB Symbol	NEPH

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

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

As of March 31, 2018, we had an accumulated deficit of approximately $122,257,000 as a result of historical operating losses. While we believe that the revenues following the launch of our new products will help us achieve profitability, there can be no guarantee of this. We may continue to incur additional losses in the future depending on the timing and marketplace acceptance of our products and as a result of operating expenses being higher than our gross margin from product sales. 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.

If we violate any provisions of the FDCA 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 U.S. Food, Drug and Cosmetic Act, or the FDCA, 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 FDCA or other regulatory requirements (either with respect to our POU or DSU ultrafilters or otherwise) at any time during or after the product development and/or approval process, 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.

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

We cannot assure you that our products will prove to be safe or that there will not be product-related deaths or serious injuries or product malfunctions, which could trigger recalls, class action lawsuits and other events that could cause us to incur significant expenses, limit our ability to market our products and generate revenues from such products or cause us reputational harm. Under the FDCA, we are required to submit medical device reports ("MDRs") to the FDA to report device-related deaths, serious injuries and malfunctions of medically approved products that could result in death or serious injury if they were to recur. Depending on their significance, MDRs could trigger events that could cause us to incur expenses and may also limit our ability to generate revenues from such products, such as the following:

- information contained in the MDRs could trigger FDA regulatory actions such as inspections, recalls and patient/physician notifications;
- because the reports are publicly available, MDRs could become the basis for private lawsuits, including class actions; and
- if we fail to submit a required MDR to the FDA, the FDA could take enforcement action against us.

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

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

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

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

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

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

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

- such products will be safe for use;
- such products will be effective;
- such products will be cost-effective;
- we will be able to demonstrate product safety, efficacy and cost-effectiveness;

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

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

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

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

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

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

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

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

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

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

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

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

Our business strategy depends in part on our ability to get our products into the market as quickly as possible. We have obtained a Conformité Européene ("CE") mark, which demonstrates compliance with the relevant European Union requirements and is a regulatory prerequisite for selling our products in the European Union and certain other countries that recognize CE marking (collectively, "European Community"), for our OLpūr MD 220 Hemodiafilter and our DSU. We have not yet obtained the CE mark for any of our other products. On April 30, 2012, we announced that we received clearance from the FDA to market our OLpūr MD220 Hemodiafilter and OLpūr H2H Module for use with a hemodialysis machine that provides ultrapure dialysate in accordance with current ANSI/AAMI/ISO standards, for the treatment of chronic renal failure patients. We have not begun to broadly market these products and are actively seeking a commercialization partner in the United States.

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.

Over time, 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.

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.

The recently passed Tax Cuts and Jobs Act of 2017 may have a material impact on our financial condition and results of operations.

The Tax Cuts and Jobs Act of 2017 (the "Tax Act") was signed into law on December 22, 2017. The Tax Act made numerous changes to U.S. federal corporate tax law and is expected to reduce our effective tax rate for fiscal year 2018 and future periods. Effective January 1, 2018, the Tax Act lowers the U.S. corporate tax rate from 35% to 21% and prompts various other changes to U.S. federal corporate tax law. We are currently assessing the impact the Tax Act will have on our deferred tax assets or other areas with our professional advisors and until our analysis is complete, the full impact the Tax Act will have on us in future periods is uncertain and may adversely affect our financial condition and results of operations.

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 12 granted U.S. patents will expire at various times from 2018 to 2027, 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 regulations, which include requirements for good manufacturing practices. 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 MD HDF 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.

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

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

Risks Related to Our Common Stock

There currently is a limited trading market for our common stock and stockholders may have difficulty in selling our common stock.

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

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

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

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

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

During the two years ended March 31, 2018, our common stock has traded at prices ranging from a high of $0.65 to a low of $0.18 per share. Due to the lack of an active trading market for our common stock, you should expect the prices at which our common stock might trade to continue to be highly volatile. The expected volatile price of our stock will make it difficult to predict the value of your investment, to sell your shares at a profit at any given time, or to plan purchases and sales in advance. A variety of other factors might also affect the market price of our common stock. These include, but are not limited to:

- achievement or rejection of regulatory approvals by our competitors or us;
- publicity regarding actual or potential clinical or regulatory results relating to products under development by our competitors or us;
- delays or failures in initiating, completing or analyzing clinical trials or the unsatisfactory design or results of these trials;
- announcements of technological innovations or new commercial products by our competitors or us;
- developments concerning proprietary rights, including patents;
- regulatory developments in the United States and foreign countries;
- economic or other crises and other external factors;
- period-to-period fluctuations in our results of operations;
- threatened or actual litigation;
- changes in financial estimates by securities analysts; and
- sales of our common stock.

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

In addition, the stock market in general, and the market for medical technology companies in particular, has experienced extreme price and volume fluctuations in recent years that might have been unrelated or disproportionate to the operating performance of individual companies. These broad market and industry factors might seriously harm the market price of our common stock, regardless of our operating performance. Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of

a company's securities. This litigation, if instituted against us, could result in very substantial costs, divert our management's attention and resources and harm our business, operating results and financial condition.

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

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

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

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

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

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

- authorizing our board of directors to issue "blank check" preferred stock without stockholder approval;
- providing for a classified board of directors with staggered, three-year terms;
- prohibiting us from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder unless certain provisions are met;
- prohibiting cumulative voting in the election of directors;
- limiting the persons who may call special meetings of stockholders; and
- establishing advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

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

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

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

could lose all of their investment.

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

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

As of May 15, 2018, Lambda, our largest stockholder, beneficially owned approximately 50% of our outstanding common stock. As a result of this ownership, Lambda has the ability to exert significant influence over our policies and affairs, including the election of directors. Lambda, whether acting alone or acting with other stockholders, could have the power to elect all of our directors and to control the vote on substantially all other corporate matters without the approval of other stockholders. Furthermore, such concentration of voting power could enable Lambda, whether acting alone or acting with other stockholders, to delay or prevent another party from taking control of our company even where such change of control transaction might be desirable to other stockholders. The interests of Lambda in any matter put before the stockholders may differ from those of any other stockholder.

Future sales of our common stock could cause the market price of our common stock to decline.

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

Shares eligible for future sale may adversely affect the market.

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

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this prospectus constitute “forward-looking statements”. Such statements include statements regarding the efficacy and intended use of our technologies under development, the timelines and strategy for bringing such products to market, the availability of funding sources for continued development of such products, and our ability to continue as a going concern and other statements that are not historical facts, including statements which may be preceded by the words “intends,” “may,” “will,” “plans,” “expects,” “anticipates,” “projects,” “predicts,” “estimates,” “believes,” “hopes,” “potential” or similar words. Forward-looking statements are not guarantees of future performance, are based on certain assumptions and are subject to various known and unknown risks and uncertainties, many of which are beyond our control. Actual results may differ materially from the expectations contained in the forward-looking statements. Factors that may cause such differences include, but are not limited to, the risks that:

- we face significant challenges in obtaining market acceptance of our products, which could adversely affect our potential sales and revenues;
- product-related deaths or serious injuries or product malfunctions could trigger recalls, class action lawsuits and other events that could cause us to incur expenses and may also limit our ability to generate revenues from such products;
- we face potential liability associated with the production, marketing and sale of our products and the expense of defending against claims of product liability could materially deplete our assets and generate negative publicity which could impair our reputation;
- to the extent our products or marketing materials are found to violate any provisions of the FDCA or any other statutes or regulations then we could be subject to enforcement actions by the FDA or other governmental agencies;
- we may not be able to obtain funding if and when needed or on terms favorable to us in order to continue operations;
- we may not have sufficient capital to successfully implement our business plan;
- we may not be able to effectively market our products;
- we may not be able to sell our water filtration products or chronic renal failure therapy products at competitive prices or profitably;
- we may encounter problems with our suppliers, manufacturers and distributors;
- we may encounter unanticipated internal control deficiencies or weaknesses or ineffective disclosure controls and procedures;
- we may not obtain appropriate or necessary regulatory approvals to achieve our business plan;
- products that appeared promising to us in research or clinical trials may not demonstrate anticipated efficacy, safety or cost savings in subsequent pre-clinical or clinical trials;

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

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

More detailed information about us 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, 2017, 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.

DESCRIPTION OF 2018 PRIVATE PLACEMENT

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

On April 10, 2018, we entered into a stock purchase agreement, referred to as the Stock Purchase Agreement, with certain purchasers identified therein pursuant to which we agreed to sell, and the purchasers agreed to purchase 6,540,669 shares of our common stock, par value $0.001 per share, at a cash purchase price equal to $0.45 per share. The aggregate purchase price payable to us for all of the shares sold under the Stock Purchase Agreement was approximately $2,900,000 before deducting transaction-related expenses. The closing of the sale of the shares was completed on April 10, 2018.

The Stock Purchase Agreement contained customary representations, warranties and covenants by us and the purchasers. Under the Stock Purchase Agreement, each purchaser agreed that, without our prior written consent, such purchaser will not, during the period beginning on the date of the Stock Purchase Agreement and ending six months following the closing, referred to as the Lock-Up Period, sell, contract to sell, offer to sell, pledge or otherwise transfer or dispose of, directly or indirectly, such purchaser’s shares. Further, we agreed that during the Lock-Up Period we will not sell, enter into any agreement to sell or publicly announce the sale or proposed sale of any shares of our common stock or common stock equivalents, subject to certain exempt issuances, for a period of six months following the closing of the sale of the shares, unless the lead investor identified in the Stock Purchase Agreement provides its prior consent.

The Stock Purchase Agreement also provides that we will use commercially reasonable efforts to cause the registration statement of which this prospectus forms a part, which covers the resale of the shares acquired by the purchasers, to be declared effective by the Securities and Exchange Commission by July 9, 2018. We are thereafter required to maintain the effectiveness of the registration statement of which this prospectus forms a part until all of the shares covered hereby are sold or may be sold pursuant to Rule 144 under the Securities Act without volume or manner-of-sale restrictions and without the requirement that we be in compliance with the current public information requirements of Rule 144.

USE OF PROCEEDS

We will receive none of the proceeds from the sale of the shares by the selling stockholders.

SELLING STOCKHOLDERS

This prospectus covers the resale by the selling stockholders identified below of 6,540,669 shares of our common stock.

The following table sets forth the number of shares of our common stock beneficially owned by the selling stockholders as of May 15, 2018, and after giving effect to this offering, except as otherwise referenced below.

Selling Stockholder	Shares beneficially owned before offering (1)	Number of outstanding shares offered by selling stockholder	Beneficial ownership after offering (1) Number of shares	Percent
Andrew Astor (2)	725,021	80,000	645,021	1.090
Cahr 1999 Saxony Dynastic Trust (3)	555,556	555,556	-	*
Darren Cahr	111,111	111,111	-	*
Stephen Dreier	222,223	222,223	-	*
Edwin A Levy Revocable Trust (4)	444,445	444,445	-	*
Anderson Evans (5)	114,832	12,000	102,832	*
Barbara Evans (6)	106,200	60,000	46,200	*
Scarlett Evans (7)	117,332	12,000	105,332	*
The Farwell Family Trust (8)	1,100,000	1,100,000	-	*
Brian L. Pessin (9)	856,067	666,667	189,400	*
Sandra F. Pessin (10)	2,732,707	2,666,667	66,040	*
PoC Capital, LLC (11)	95,000	55,000	40,000	*
Lloyd B. Solomon	555,000	555,000	-	*
TOTAL		**6,540,669**		

* denotes less than 1%

(1) Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act, and includes any shares as to which the security or stockholder has sole or shared voting power or investment power, and also any shares which the security or stockholder has the right to acquire within 60 days of the date hereof, whether through the exercise or conversion of any stock option, convertible security, warrant or other right. The indication herein that shares are beneficially owned is not an admission on the part of the security or stockholder that he, she or it is a direct or indirect beneficial owner of those shares. Percentage of shares beneficially owned after the resale of all the shares offered by this prospectus assumes there are outstanding 63,783,654 shares of common stock.

(2) In addition to the shares offered hereby, beneficial ownership also includes 368,792 shares of our common stock, 142,896 shares issuable upon exercise of options, and warrants to purchase 133,333 shares of our common stock. Mr. Astor is our Chief Financial officer.

(3) Michael Cahr, trustee, holds voting and/or dispositive power over the shares held by the selling stockholder.

(4) Edwin A. Levy, trustee, holds voting and/or dispositive power over the shares held by the selling stockholder.

(5) Daron Evans, parent of the minor child, holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes 51,166 shares of our common stock and warrants to purchase 51,666 shares of our common stock. Mr. Evans is our President and Chief Executive Officer and a member of our board of directors.

(6) In addition to the shares offered hereby, beneficial ownership also includes 6,200 shares of our common stock and warrants to purchase 40,000 shares of our common stock.

(7) Daron Evans, parent of the minor child, holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes 53,666 shares of our common stock and warrants to purchase 51,666 shares of our common stock. Mr. Evans is our President and Chief Executive Officer and a member of our board of directors.

(8) G. Nicholas Farwell and Gail Farwell, trustees, hold voting and/or dispositive power over the shares held by the selling stockholder.

(9) In addition to the shares offered hereby, beneficial ownership also includes 189,400 shares of our common stock.

(10) In addition to the shares offered hereby, beneficial ownership also includes 66,040 shares of our common stock

(11) Daron Evans, managing director of PoC Capital, LLC, holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes 40,000 shares of our common stock. Mr. Evans is our President and Chief Executive Officer and a member of our board of directors.

PLAN OF DISTRIBUTION

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

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

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

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

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

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

privately negotiated transactions;

settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;

in transactions through broker dealers that agree with the Selling Stockholders to sell a specified number of such securities at a stipulated price per security;

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

a combination of any such methods of sale; or

any other method permitted pursuant to applicable law.

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

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

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

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

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

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

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

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

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

We have agreed with the selling stockholders to keep the registration statement that includes this prospectus effective until all of the shares covered hereby are sold or may be sold pursuant to Rule 144 under the Securities Act without volume or manner-of-sale restrictions and without the requirement that we be in compliance with the current public information requirements of Rule 144.

DIVIDEND POLICY

We have neither paid nor declared dividends on our common stock since our inception. We do not anticipate paying any dividends on our common stock in the foreseeable future. We expect to retain future earnings, if any, for use in

our development activities and the operation of our business. The payment of any future dividends will be subject to the discretion of our board of directors and will depend, among other things, upon our results of operations, financial condition, cash requirements, prospects and other factors that our board of directors may deem relevant. Additionally, our ability to pay future dividends may be restricted by the terms of any debt financing, tax considerations and applicable law.

MARKET FOR OUR COMMON STOCK

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

Quarter Ended	**High**	**Low**
March 31, 2016	$0.40	$0.22
June 30, 2016	$0.57	$0.24
September 30, 2016	$0.60	$0.25
December 31, 2016	$0.45	$0.26
March 31, 2017	$0.60	$0.31
June 30, 2017	$0.42	$0.18
September 30, 2017	$0.38	$0.18
December 31, 2017	$0.55	$0.30
March 31, 2018	$0.65	$0.38
June 30, 2018 (through May 15, 2018)	$0.65	$0.38

As of May 15, 2018, there were approximately 61 holders of record and approximately 2,100 beneficial holders of our common stock.

On May 15, 2018, the last reported sale price of our common stock on the OTCQB was $0.59 per share.

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, 2017. The following discussion should also be read in conjunction with the consolidated financial statements and notes included herein.

Business Overview

We are a commercial stage medical device and commercial products company that develops and sells high performance liquid purification filters and hemodiafiltration ("HDF") systems. Our filters, which are generally classified as ultrafilters, are primarily used in hospitals for the prevention of infection from water-borne pathogens, such as legionella and pseudomonas, and in dialysis centers for the removal of biological contaminants from water and bicarbonate concentrate. Because our ultrafilters capture contaminants as small as 0.005 microns in size, they minimize exposure to a wide variety of bacteria, viruses, fungi, parasites, and endotoxins.

Our OLpūr H2H Hemodiafiltration System, used in conjunction with a standard hemodialysis machine, is the only FDA 510(k) cleared medical device that enables nephrologists to provide hemodiafiltration treatment to patients with end stage renal disease ("ESRD"). Additionally, we sell hemodiafilters, which serve the same purpose as dialyzers in a hemodialysis treatment, and other disposables used in the hemodiafiltration treatment process.

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. We have extended our filtration technologies to meet the demand for liquid purification in other areas, in particular water purification.

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

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

our ability to effectively and efficiently manufacture, market and distribute our products;

our ability to sell our products at competitive prices which exceed our per unit costs;

the consolidation of dialysis clinics into larger clinical groups; and

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

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

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers," related to revenue recognition. The underlying principle of the new standard is that a business or other organization will recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects what it expects to be entitled to in exchange for the goods or services. The standard also requires more detailed disclosures and provides additional guidance for transactions that were not addressed completely in prior accounting guidance. ASU 2014-09 provides alternative methods of initial adoption and was to be effective for fiscal years beginning after December 15, 2016, and interim periods within those annual periods. Early adoption was not permitted. In August 2015, the FASB issued ASU No. 2015-14, "Revenue from Contracts with Customers: Deferral of the Effective Date". The amendment in this ASU defers the effective date of ASU No. 2014-09 for all entities for one year. In March, April and May 2016, the FASB issued ASU No. 2016-08, ASU No. 2016-10 and ASU No. 2016-12, respectively, which clarify implementation guidance, including the guidance on principal versus agent considerations, performance obligations and licensing and assessments of collectability and noncash considerations. Public business entities, certain not-for-profit entities, and certain employee benefit plans should apply the guidance in ASU 2014-09 to fiscal years beginning after December 15, 2017, including interim reporting periods within that fiscal year. We adopted the new revenue recognition standard as of January 1, 2018 using the modified retrospective method, which requires the cumulative effect of adoption, if any, to be recognized as an adjustment to opening accumulated deficit in the period of adoption. The majority of the Company's revenue relates to the sale of finished products to various customers, and the adoption did not have any impact on revenue recognized from these transactions. We completed our analysis of the impact on certain less significant transactions involving third-party arrangements, and as a result of the analysis, we accelerated the remaining approximately $278,000 of deferred revenue to be recognized under the Bellco license agreement as of December 31, 2017 and recorded a cumulative effect adjustment to opening accumulated deficit as of January 1, 2018.

In July 2015, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2015-11, “Simplifying the Measurement of Inventory,” that requires inventory be measured at the lower of cost and net realizable value and options that currently exist for market value be eliminated. The standard defines net realizable value as estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation and is effective for fiscal years beginning after December 15, 2016 and interim periods within those fiscal years with early adoption permitted. The guidance should be applied prospectively. We adopted ASU 2015-11 during the three months ended March 31, 2017 and the adoption of this guidance did not have a significant impact on our consolidated financial statements.

In November 2015, the FASB issued ASU No. 2015-17, “Balance Sheet Classification of Deferred Taxes,” that requires that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. The current requirement that deferred tax liabilities and assets of a tax-paying component of an entity be offset and presented as a single amount is not affected by this amendment. The new guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016. Early adoption was permitted and the standard may be applied either retrospectively or on a prospective basis to all deferred tax assets and liabilities. We adopted ASU 2015-17 during the three months ended March 31, 2017 and the adoption of this guidance did not have a significant impact on our consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, “Recognition and Measurement of Financial Assets and Financial Liabilities,” that modifies certain aspects of the recognition, measurement, presentation, and disclosure of financial instruments. The accounting standard update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, and early adoption was permitted. We adopted this guidance as of January 1, 2018 and the guidance did not have an impact on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, “Improvements to Employee Share-Based Payment Accounting,” which simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The guidance was effective for the Company beginning in the first quarter of fiscal year 2017. Early adoption was permitted. We adopted ASU 2016-09 during the three months ended March 31, 2017 and elected to recognize forfeitures as they occur. Prior to the adoption of ASU 2016-09, we recognized stock-based compensation based on the estimated fair value of the award, net of expected forfeitures. As of January 1, 2017, a cumulative effect adjustment of approximately $12,000 was recognized to reflect the forfeiture rate that had been applied to unvested option awards prior to fiscal year 2017.

In August 2016, the FASB issued ASU 2016-15, “Classification of Certain Cash Receipts and Cash Payments,” which clarifies how certain cash receipts and cash payments are presented and classified in the statement of cash flows in order to reduce diversity in practice. The guidance was effective for us beginning in the first quarter of fiscal year 2018. Early adoption was permitted. We adopted the guidance as of January 1, 2018 and the guidance did not have a significant impact on our consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, “Restricted Cash,” which clarifies how restricted cash is presented and classified in the statement of cash flows. The guidance was effective for us beginning in the first quarter of fiscal year 2018. Early adoption was permitted. We adopted the guidance as of January 1, 2018 and the guidance did not have an impact on our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-01, “Clarifying the Definition of a Business,” which clarifies the definition of a business in a business combination. The guidance was effective for us beginning in the first quarter of

fiscal year 2018. Early adoption was permitted. We adopted the guidance as of January 1, 2018 and the guidance did not have an impact on our consolidated financial statements.

In May 2017, the FASB issued ASU 2017-09, “Compensation – Stock Compensation” which requires modification accounting to be used on shared-based payment awards if the fair value, the vesting conditions, or the classification of the award changes as a result of the change in terms or conditions. The guidance was effective for us beginning in the first quarter of fiscal year 2018. We adopted the guidance as of January 1, 2018 and the guidance did not have an impact on our consolidated financial statements.

Recent Accounting Pronouncements, Not Yet Effective

In February 2016, the FASB issued ASU No. 2016-02, “Leases”, that discusses how an entity should account for lease assets and lease liabilities. The guidance specifies that an entity who is a lessee under lease agreements should recognize lease assets and lease liabilities for those leases classified as operating leases under previous FASB guidance. Accounting for leases by lessors is largely unchanged under the new guidance. The guidance is effective for us beginning in the first quarter of 2019. Early adoption is permitted. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. We are evaluating the impact of adopting this guidance on our consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, “Measurement of Credit Losses on Financial Instruments,” which replaces the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The guidance is effective for us beginning in the first quarter of fiscal year 2020. Early adoption is permitted beginning in the first quarter of fiscal year 2019. We are evaluating the impact of adopting this guidance on our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, “Simplifying the Test for Goodwill Impairment,” which simplifies the test for goodwill impairment. The guidance is effective for us beginning in the first quarter of fiscal year 2020. Early adoption is permitted for interim or annual goodwill impairments tests after January 1, 2017. We will adopt the guidance as of January 1, 2020 and it will not have a significant impact 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 this prospectus, we believe that the following accounting policies require the application of significant judgments and estimates.

Revenue Recognition

We adopted Accounting Standards Codification (“ASC”) 606, Revenue from Contracts with Customers, as of January 1, 2018 using the modified retrospective method. ASC 606 prescribes a five step model for recognizing revenue which includes (i) identifying contracts with customers; (ii) identifying performance obligations; (iii) determining the transaction price; (iv) allocating the transaction price and (v) recognizing revenue.

We recognize revenue related to product sales when product is shipped via external logistics provider and the other criteria of ASC 606 are met. Product revenue is recorded net of returns and allowances.

In addition to product revenue, we recognize revenue related to license, royalty and other agreements in accordance with the five step model in ASC 606. During the three months ended March 31, 2018 and 2017, we recognized a total of approximately $27,000 and $44,000, respectively, related to the license agreement with Bellco. In accordance with the adoption of ASC 606, the remaining deferred revenue of approximately $278,000 related to license revenue as of December 31, 2017 was recognized as a cumulative effect adjustment to accumulated deficit as of January 1, 2018. During the three months ended March 31, 2017, approximately $17,000 was recognized as license revenue. We recognized royalty income from Bellco pursuant to the license agreement of approximately $27,000 for each of the three months ended March 31, 2018 and 2017.

The following table presents our revenue for the three months ended March 31, 2018 under the ASC 606 model as compared to revenue under the previous guidance:

	Revenue as reported	Revenue under previous guidance	Difference
Product revenue	$958,000	$958,000	$ -
Royalty revenue under the License Agreement with Bellco	27,000	27,000	-
License revenue under the License Agreement with Bellco [1]	-	17,000	(17,000)
Total net revenues	$985,000	$1,002,000	$ (17,000)

(1) Under ASC 606, amounts received related to the license under the Bellco license agreement would have been recognized.as revenue at the time that the license was transferred, which was at the time the payments were received by us. Under previous guidance, amounts received under the Bellco license agreement were deferred and recognized as revenue over the term of the Bellco license agreement.

Prior to January 1, 2018, revenue was recognized in accordance with Accounting Standards Codification ("ASC") Topic 605. Four basic criteria must have been met before revenue could 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 recognized revenue related to product sales when the criteria of ASC Topic 605 were met. Product revenue was recorded net of returns and allowances.

Deferred revenue on the accompanying December 31, 2017 consolidated balance sheet was approximately $278,000 and was related to the Bellco license agreement. We expected to recognize the remaining deferred revenue under the Bellco license agreement on a straight line basis over the remaining forty-eight month expected obligation period which was to end on December 31, 2021. Any difference between payments received and recognized revenue was to be reported as deferred revenue. We recognized approximately $2,798,000 of revenue related to this license agreement as of December 31, 2017 and approximately $70,000 for the year ended December 31, 2017, resulting in $278,000 being deferred as of December 31, 2017. As of January 1, 2018, the remaining approximately $278,000 of deferred revenue was recognized as a cumulative effect adjustment to opening retained earnings.

Stock-Based Compensation

The fair value of stock options is recognized as stock-based compensation expense in net income. We calculate employee stock-based compensation expense in accordance with ASC 718. 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 including expected stock price volatility and the estimated life of each award. The fair value of stock-based awards is amortized over the vesting period of the award. For stock awards that vest based on performance conditions (e.g. achievement of certain milestones), expense is recognized when it is probable that the condition will be met.

Warrants

We account for stock warrants as either equity instruments or derivative liabilities depending on the specific terms of the warrant agreement.

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 evaluate our assumptions for inventory reserve requirements.

Accrued Expenses

We are required to estimate accrued expenses as part of our process of preparing financial statements. This process involves identifying services which have been performed on our behalf, and the level of service performed and the associated cost incurred for such service as of each balance sheet date in our consolidated financial statements. Examples of areas in which subjective judgments may be required include costs associated with services provided by contract organizations for the preclinical development of our products, the manufacturing of clinical materials, and clinical trials, as well as legal and accounting services provided by professional organizations. In connection with such service fees, our estimates are most affected by our understanding of the status and timing of services provided relative to the actual levels of services 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.

Three Months Ended March 31, 2018 Compared to the Three Months Ended March 31, 2017

Revenues

Total revenues for the three months ended March 31, 2018 were approximately $985,000 compared to approximately $734,000 for the three months ended March 31, 2017. The increase of approximately $251,000, or 34%, was primarily driven by an increase in water filter product revenue in 2018 versus in 2017, which we believe indicates early success of our strategy to provide dialysis-quality water filtration into the water-borne infection control market within the hospital sector. This product revenue increase was offset by an approximately $17,000 decrease in license and royalty revenues due to the change in revenue recognition discussed in Note 4 of the Notes to our Unaudited Condensed Consolidated Interim Financial Statements.

Cost of Goods Sold

Cost of goods sold was approximately $518,000 for the three months ended March 31, 2018 compared to approximately $279,000 for the three months ended March 31, 2017. The increase of approximately $239,000, or 86%, was primarily composed of approximately $100,000 in increased direct product costs in support of increased sales, $50,000 in the effects of foreign exchange rates, $50,000 in inventory reserves for expiring items, and $30,000 in physical count inventory adjustments.

Gross Margins

Gross margins were approximately 47% for the three months ended March 31, 2018, compared to approximately 62% for the three months ended March 31, 2017. The decrease of approximately 15% was due to the combined effects of reduced license and royalty revenues and the increased cost of goods sold, as described in preceding paragraphs.

Research and Development

Research and development expenses were approximately $289,000 and $231,000 for the three months ended March 31, 2018 and March 31, 2017, respectively. This increase of approximately $58,000, or 25%, reflects an increase due to costs associated with the 2nd generation HDF development during the three months ended March 31, 2018 compared to the three months ended March 31, 2017.

Depreciation and Amortization Expense

Depreciation and amortization expense was approximately $41,000 for the three months ended March 31, 2018 compared to approximately $59,000 for the three months ended March 31, 2017. The decrease of approximately $18,000, or 31%, is due to lower amortization expense for the three months ended March 31, 2018 as a result of an amendment to our license and supply agreement with Medica, which extended the term from December 31, 2022 to December 31, 2025.

Selling, General and Administrative Expenses

Selling, general and administrative expenses were approximately $1,260,000, for the three months ended March 31, 2018 compared to approximately $770,000 for the three months ended March 31, 2017, representing an increase of $490,000, or 64%. The increase was primarily due to an increase in personnel-related expenses of approximately $277,000 due to increased headcount, an increase in share-based compensation of approximately $57,000 due to increased headcount, and an increase in professional services expenses of approximately $83,000 due to the implementation of a new ERP system and increased legal expenses.

Loss on Extinguishment of Debt

During the three months ended March 31, 2018, we recorded a loss on extinguishment of debt of approximately $199,000 as a result of the repayment of our outstanding unsecured long term note payable.

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Interest Expense

The table below summarizes interest expense for the three months ended March 31, 2018 and 2017:

	2018	2017
Interest related to unsecured long-term note payable	$30,000	$33,000
Amortization of debt discount - unsecured long-term note payable	34,000	26,000
Interest - outstanding payables due to a vendor	10,000	7,000
Interest related to secured note payable	6,000	-
Interest on secured revolving credit facility	6,000	-
Total interest expense	$86,000	$66,000

Interest Income

Interest income of approximately $1,000 for each of the three months ended March 31, 2018 and 2017, respectively, is as result of interest income recognized on a lease receivable.

Other Income/Expense

Other expense for the three months ended March 31, 2018 and 2017 of approximately $22,000 and $10,000, respectively, is related to foreign currency losses.

The Fiscal Year Ended December 31, 2017 Compared to the Fiscal Year Ended December 31, 2016

Revenues

Total revenues for the year ended December 31, 2017 were approximately $3,809,000 compared to approximately $2,320,000 for the year ended December 31, 2016. The increase of approximately $1,489,000, or 64%, was primarily driven by an increase in the number of filters sold in 2017 versus in 2016, which we believe indicates early success of our strategy to provide dialysis-quality water filtration into the water-borne infection control market within the

hospital sector.

Cost of Goods Sold

Cost of goods sold was approximately $1,517,000 for the year ended December 31, 2017 compared to approximately $1,026,000 for the year ended December 31, 2016. The increase of approximately $491,000, or 48%, in cost of goods sold was primarily related to an increase in the number of filters sold.

Gross Margins

Gross margins were approximately 60% for the year ended December 31, 2017, compared to approximately 56% for the year ended December 31, 2016. The increase of approximately 4% was due to pricing changes, fluctuations between direct and indirect selling, changing mix of distributors, and foreign exchange rates.

Research and Development

Research and development expenses were approximately $1,002,000 and $1,079,000 for the years ended December 31, 2017 and December 31, 2016, respectively. This decrease of approximately $77,000, or 7%, reflects a minor reduction due to increased focus on new product launches during the year ended December 31, 2017 compared to the year ended December 31, 2016.

Depreciation and Amortization Expense

Depreciation and amortization expense was approximately $218,000 for the year ended December 31, 2017 compared to approximately $230,000 for the year ended December 31, 2016. The decrease of approximately $12,000, or 5%, is due to lower amortization expense for the year ended December 31, 2017 as a result of an amendment to our license and supply agreement with Medica, which extended the term from December 31, 2022 to December 31, 2025. The decrease was partially offset by an increase in depreciation expense as a result of purchases that occurred during the year ended December 31, 2016.

Selling, General and Administrative Expenses

Selling, general and administrative expenses were approximately $3,298,000, for the year ended December 31, 2017 compared to approximately $2,854,000 for the year ended December 31, 2016, representing an increase of $444,000, or 15%. The increase was primarily due to an increase in personnel-related expenses of approximately $249,000 due to increased headcount, an increase in share-based compensation of approximately $118,000 due to increased headcount, an increase in professional services expenses of approximately $69,000 due to the implementation of a new ERP system and other IT costs and an increase in other expenses of approximately $8,000.

Interest Expense

The table below summarizes interest expense for the years ended December 31, 2017 and 2016:

	2017	2016
Interest related to unsecured long-term note payable	$133,000	$77,000
Amortization of debt discount – unsecured long-term note payable	116,000	53,000
Interest – outstanding payables due to a vendor	24,000	42,000
Interest on revolving credit facility	29,000	-
Total interest expense	$302,000	$172,000

Interest Income

Interest income of approximately $4,000 and $5,000 for the year ended December 31, 2017 and 2016, respectively, is as result of interest income recognized on a lease receivable.

Other Income/Expense

Other expense for the year ended December 31, 2017 of approximately $74,000 is related to foreign currency losses. Other income for the year ended December 31, 2016 of approximately $4,000 is related to foreign currency gains of approximately $2,000 and miscellaneous other income of approximately $2,000.

Income Tax Benefit

In the fiscal year ended December 31, 2017, an income tax benefit of approximately $1,789,000 was recorded due to the sale of net operating loss and research and development credit carryforwards under the New Jersey Economic Development Authority Technology Business Tax Certificate Transfer Program.

Off-Balance Sheet Arrangements

We did not have any off-balance sheet arrangements as of December 31, 2017 or December 31, 2016.

Liquidity and Capital Resources

The following table summarizes our liquidity and capital resources as of March 31, 2018 and December 31, 2017 and is intended to supplement the more detailed discussion that follows. The amounts stated are expressed in thousands.

Liquidity and capital resources	March 31, 2018	December 31, 2017
Cash	$1,819	$ 2,194
Other current assets	1,695	1,615
Working capital	1,766	1,938
Stockholders' equity	1,898	1,950

At March 31, 2018, we had an accumulated deficit of approximately $122,257,000 and we expect to incur additional operating losses over the next several quarters. On April 10, 2018, we completed a private placement transaction whereby we sold 6,540,669 shares of our common stock for aggregate net proceeds of approximately $2.9 million. We believe that our cash and cash equivalents, together with the proceeds from this private placement, will be sufficient to fund our current operating plan through at least the next twelve months.

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

- 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.

At March 31, 2018, we had cash totaling approximately $1,819,000 and total assets of approximately $3,594,000, excluding other intangible assets (related to the license and supply agreement with Medica) of approximately $1,038,000.

We have also continued to pursue different sources of additional financing. In the first quarter of 2018, we entered into a Secured Promissory Note with Tech Capital, LLC for a principal amount of $1,187,000. We used these proceeds to repay the 11% unsecured promissory notes issued pursuant to the Note and Warrant Agreement dated June 2016.

In the third quarter of 2017, we entered into a $1,000,000 secured revolving credit facility with Tech Capital, LLC (the "Credit Facility"). The outstanding principal balance of the Credit Facility was approximately $150,000 and approximately $711,000 as of March 31, 2018 and December 31, 2017, respectively. We are using these proceeds for working capital and general corporate purposes.

We also received approximately $1,789,000 from the sale of a portion of our New Jersey net operating losses and research and development tax credits through a program administered by the New Jersey Economic Development Authority ("NJEDA") during the fourth quarter of 2017.

On March 22, 2017, we received net proceeds of approximately $1,066,000 in connection with the issuance of common stock and warrants.

On June 7, 2016, we received net proceeds of approximately $1,187,000 in connection with the issuance of unsecured promissory notes and warrants.

On July 24, 2015, we entered into a purchase agreement, together with a registration rights agreement, with Lincoln Park Capital Fund, LLC ("Lincoln Park"). Under the terms and subject to the conditions of the purchase agreement, we have the right to sell to and Lincoln Park is obligated to purchase up to $10.0 million in shares of our common stock, subject to certain limitations, from time to time, over the 36-month period commencing on September 4, 2015. We may direct Lincoln Park, at our sole discretion and subject to certain conditions, to purchase up to 100,000 shares of common stock on any business day, provided that at least one business day has passed since the most recent purchase, increasing to up to 200,000 shares depending upon the closing sale price of the common stock. However, in no event shall any individual purchase exceed $500,000. The purchase price of shares of common stock related to the future funding will be based on the prevailing market prices of such shares at the time of sales, but in no event will shares be sold to Lincoln Park on a day the common stock closing price is less than the floor price as set forth in the purchase agreement. In addition, we may direct Lincoln Park to purchase additional amounts as accelerated purchases if on the date of a purchase the closing sale price of the common stock is not below the threshold price as set forth in the purchase agreement. Our sales of shares of common stock to Lincoln Park under the purchase agreement are limited to no more than the number of shares that would result in the beneficial ownership by Lincoln Park and its affiliates, at any single point in time, of more than 9.99% of the then-outstanding shares of the common stock. In connection with the purchase agreement, we issued to Lincoln Park 250,000 shares of common stock for no proceeds. The fair value of the 250,000 shares of common stock issued was approximately $163,000 and was recorded as a commitment fee. Pursuant to the purchase agreement, in the year ended December 31, 2015, we issued and sold an additional 300,000 shares of common stock to Lincoln Park, resulting in gross proceeds of $135,000. In the year ended December 31, 2017, we issued and sold an additional 300,000 shares of common stock to Lincoln Park, resulting in gross proceeds of $113,000.

On February 19, 2014, we entered into the first amendment to our license agreement with Bellco, which extended the term of the license agreement through December 31, 2021. The first amendment also expanded the territory covered by the license agreement to include Sweden, Denmark, Norway, Finland, Korea, Mexico, Brazil, China and the Netherlands. The first amendment further provided new minimum sales targets which, if not satisfied, will, at our discretion, result in conversion of the license to non-exclusive status. We agreed to reduce the fixed royalty payment payable to us for the period beginning on January 1, 2015 through and including December 31, 2021, such that Bellco now pays us a royalty based on the number of units of products sold per year in the territory as follows: for the first 125,000 units sold in total, €1.75 (approximately $1.91) per unit; thereafter, €1.25 (approximately $1.36) per unit. In addition, the first amendment provides that, in the event that we pursue a transaction to sell, assign or transfer all right, title and interest to the licensed patents to a third party, we will provide Bellco with written notice thereof and a right of first offer with respect to the contemplated transaction for a period of thirty days.

Pursuant to our license and supply agreement with Medica, we agreed to make minimum annual aggregate purchases from Medica throughout the term of the agreement. We currently have an understanding with Medica whereby we have agreed to pay interest to Medica at a 12% annual rate calculated on the principal amount of any outstanding invoices that are not paid pursuant to the original payment terms.

Cash Flows for the Three Months Ended March 31, 2018 Compared to the Three Months Ended March 31, 2017

Net cash used in operating activities was approximately $669,000 for the three months ended March 31, 2018 compared to approximately $659,000 for the three months ended March 31, 2017. Our net loss was approximately $1,429,000 for the three months ended March 31, 2018 compared to a net loss of approximately $680,000 for the three months ended March 31, 2017, an increase of approximately $749,000.

The most significant items classified as cash used in operating activities that serve to offset the increase in net loss of approximately $749,000 are highlighted below:

- our accounts receivable decreased by approximately $158,000 during the 2018 period compared to an increase of approximately $185,000 during the 2017 period primarily as a result of improved management focus on receivable collections;
- our loss on extinguishment of debt of approximately $199,000 during the 2018 period as a result of the repayment of our outstanding unsecured long term note payable;
- our stock-based compensation was approximately $242,000 during the 2018 period compared to approximately $199,000 during the 2017 period, primarily due to increased headcount; and
- our accounts payable increased approximately $190,000 during the 2018 period compared to a decrease of approximately $226,000 during the 2017 period primarily as a result of increased purchases required for our higher sales volume.

The above changes are partially offset by:

- our inventory increased by approximately $304,000 during the 2018 period compared to a decrease of approximately $78,000 during the 2017 period primarily as a result of managing inventory levels to support increased sales volume.

There was no cash used in investing activities for the three months ended March 31, 2018 or 2017.

Net cash provided by financing activities of approximately $293,000 for the three months ended March 31, 2018 resulted from net proceeds from the issuance of common stock of approximately $854,000 and proceeds from the issuance of a secured note payable of approximately $1,187,000, offset partially by net payments on our secured revolving credit facility of approximately $561,000 and payments of approximately $1,187,000 on our unsecured long-term note payable.

Net cash provided by financing activities for the three months ended March 31, 2017 resulted from net proceeds of approximately $1,187,000 from the issuance of common stock.

Cash Flows for the Year Ended December 31, 2017 Compared to the Year Ended December 31, 2016

Net cash used in operating activities was approximately $77,000 for the year ended December 31, 2017 compared to approximately $2,112,000 for the year ended December 31, 2016. Our net loss was approximately $809,000 for the year ended December 31, 2017 compared to a net loss of approximately $3,032,000 for the year ended December 31, 2016, a decrease of approximately $2,223,000.

The most significant item contributing to the decrease in net cash used in operating activities and the decrease in net loss was the sale of tax credits through NJEDA in the amount of approximately $1,789,000. Other significant items contributing to the net decrease in cash used in operating activities during the year ended December 31, 2017 compared to the year ended December 31, 2016 are highlighted below:

- our inventory increased by approximately $195,000 during the 2017 period compared to an increase of approximately $103,000 during the 2016 period primarily as a result of managing inventory levels to match increased sales volume;

- our accounts receivable increased by approximately $416,000 during the 2017 period compared to an increase of approximately $17,000 during the 2016 period primarily as a result of increased sales volume;

our stock based compensation was approximately $772,000 during the 2017 period compared to approximately $597,000 during the 2016 period; and

our accounts payable increased approximately $268,000 during the 2017 period compared to a decrease of approximately $76,000 during the 2016 period primarily as a result of increased purchases required for our higher sales volume.

There was no cash used in investing activities for the year ended December 31, 2017. Net cash used in investing activities was approximately $45,000 for the year ended December 31, 2016 as a result of the purchase of property and equipment.

Net cash provided by financing activities of approximately $1,990,000 for the year ended December 31, 2017 resulted from net proceeds from the issuance of common stock of approximately $1,179,000, net proceeds from our secured revolving credit facility of approximately $711,000, and approximately $100,000 of proceeds resulting from the exercise of warrants.

Net cash provided by financing activities for the year ended December 31, 2016 resulted from net proceeds of approximately $1,187,000 from the issuance of unsecured notes payable and approximately $1,000 of proceeds resulting from the exercise of warrants.

Contractual Obligations and Commercial Commitments

The following tables summarize our approximate minimum contractual obligations and commercial commitments as of December 31, 2017:

	Payments Due in Period				
	Total	Within 1 Year	Years 2 - 3	Years 4 - 5	More than 5 Years
Minimum Purchase Commitments[1]	$30,300,000	$2,700,000	$6,700,000	$7,400,000	$13,500,000
Leases[2]	712,000	141,000	290,000	281,000	—
Employment Contracts[3]	452,000	350,000	102,000	—	—
Total	$31,464,000	$3,191,000	$7,092,000	$7,681,000	$13,500,000

[1] License and supply agreement with Medica.

[2] In addition to lease obligations for office space, obligations include a lease for various office equipment which expires in 2020.

[3] Relates to employment agreement with Daron Evans, our President and Chief Executive Officer, entered into on April 15, 2015 for a term of four years.

BUSINESS

Overview

We are a commercial stage medical device and commercial products company that develops and sells high performance liquid purification filters and hemodiafiltration ("HDF") systems. Our filters, which are generally classified as ultrafilters, are primarily used in hospitals for the prevention of infection from water-borne pathogens, such as legionella and pseudomonas, and in dialysis centers for the removal of biological contaminants from water and bicarbonate concentrate. Because our ultrafilters capture contaminants as small as 0.005 microns in size, they minimize exposure to a wide variety of bacteria, viruses, fungi, parasites, and endotoxins.

Our OLpūr H2H Hemodiafiltration System, used in conjunction with a standard hemodialysis machine, is the only FDA 510(k) cleared medical device that enables nephrologists to provide hemodiafiltration treatment to patients with end stage renal disease ("ESRD"). Additionally, we sell hemodiafilters, which serve the same purpose as dialyzers in a hemodialysis treatment, and other disposables used in the hemodiafiltration treatment process.

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. We have extended our filtration technologies to meet the demand for liquid purification in other areas, in particular water purification.

Our Products

Presently, we produce two core product lines: water ultrafiltration products and HDF systems. Water ultrafiltration is our primary near-term market opportunity, which we expect to continue to grow rapidly as we launch new products and further penetrate the market. HDF is a long-term investment that we expect to grow as we develop a second-generation system and as the U.S. dialysis market reimbursement environment migrates to full capitation.

Ultrafiltration Products

Our ultrafilters are used in both medical and non-medical applications. Like competing filters, they purify by passing liquids through the pores of polysulfone hollow fiber. Our filters' pores are significantly smaller than those of

competing products, resulting in highly effective elimination of water-borne pathogens, including legionella bacteria (the cause of Legionnaires disease). Additionally, the fiber structure and pore density in our hollow fiber enables significantly higher flow rates than in other polysulfone hollow fiber.

During 2016 and 2017, we developed several ultrafilter cartridge products that are designed to fit directly into existing water filtration systems, eliminating the need for plumbing modifications during installation and replacement. These “plug and play” systems are an important part of our strategy to penetrate the water filtration market.

Our sales strategy is a combination of direct selling to end customers and indirect selling through value-added resellers (“VARs”). Leveraging VARs has enabled us to expand rapidly our access to target customers in the medical market without significant sales staff expansion. In addition, while we are currently focused in medical markets, the VARs that support these customers also support a wide variety of commercial and industrial customers. We believe that our VAR relationships will facilitate growth in filter sales outside of the medical industry.

Target Markets

Our ultrafiltration products currently target the following markets:

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

Dialysis Centers: Filtration of water or bicarbonate concentrate used in hemodialysis.

Commercial Facilities: Filtration of water for washing and drinking, including use in ice machines and soft drink dispensers.

Military and Outdoor Recreation: Individual water purification devices used by soldiers and backpackers to produce drinking water in the field, as well as filters customized to remote water processing systems.

Hospitals and Other Healthcare Facilities. According to the American Hospital Association, approximately 5,700 hospitals, with approximately 915,000 beds, treated over 35 million patients in the United States in 2013. The U.S. Centers for Disease Control and Prevention estimates that healthcare associated infections ("HAI") occurred in approximately 1 out of every 25 hospital patients, or about 1.4 million patients in 2013. HAIs affect patients in hospitals or other healthcare facilities, and are not present or incubating at the time of admission. They also include infections acquired by patients in the hospital or facility, but appearing after discharge, and occupational infections among staff. Many HAIs are caused by waterborne bacteria and viruses that can thrive in aging or complex plumbing systems often found in healthcare facilities.

The Affordable Care Act, passed in March 2010, puts in place comprehensive health insurance reforms that aim to lower costs and enhance quality of care. With its implementation, healthcare providers have substantial incentives to deliver better care or be forced to absorb the expenses associated with repeat medical procedures or complications like HAIs. As a consequence, hospitals and other healthcare facilities are proactively implementing strategies to reduce HAI potential. Our ultrafilters are designed to aid in infection control in the hospital and healthcare setting by treating facility water at the points of delivery, such as ice machines, sinks and showers.

In June 2017, the Center for Clinical Standards and Quality at the Centers for Medicare and Medicaid Services ("CMS") announced the addition of requirements for facilities to develop policies and procedures that inhibit the growth and spread of legionella and other opportunistic pathogens in building water systems. Going forward, CMS surveyors will review policies, procedures, and reports documenting water management implementation results to verify that facilities are compliant with these requirements. We believe that these CMS regulations may have a positive impact on the sale of our HAI-inhibiting ultrafilters.

We currently have FDA 510(k) clearance on the following portfolio of medical device products for use in the hospital setting to aid in infection control:

The DSU-H is an in-line, 0.005 micron ultrafilter that provides dual-stage protection from water borne pathogens. The DSU-H is primarily used to filter potable water feeding ice machines, sinks, and medical equipment, such as endoscope washers and surgical room humidifiers. The DSU-H has an up to 6 month product life when used in a hospital setting.

The SSU-H is an in-line, 0.005 micron ultrafilter that provides single-stage protection from water borne pathogens. The SSU-H is primarily used to filter potable water feeding sinks, showers and medical equipment. The SSU-H has an up to 3 month product life when used in a hospital setting.

The S100 is a point-of-use, 0.01 micron microfilter that provides protection from water borne pathogens. The S100 is primarily used to filter potable water feeding sinks and showers. The S100 has an up to 3 month product life when used in a hospital setting.

The HydraGuard™ and HydraGuard™ - Flush are 0.005 micron cartridge ultrafilters that provide single-stage protection from water borne pathogens. The HydraGuard™ ultrafilters are primarily used to filter potable water feeding ice machines and medical equipment, such as endoscope washers and surgical room humidifiers. The HydraGuard™ has an up to 6 month product life and the HydraGuard™ - Flush has an up to 12 month product life when used in a hospital setting.

We received FDA 510(k) clearance to market the HydraGuard™ in December 2016 and began shipping it in July 2017. We began shipping the HydraGuard™ - Flush in September 2017. The DSU, SSU, and S100 products were 510(k)-cleared in prior years.

The complete hospital infection control product line, including in-line, point-of-use, and cartridge filters, can be viewed on our website at http://www.nephros.com/infection-control/ . We are not including the information on our website as a part of, nor incorporating it by reference, into this prospectus.

Dialysis Centers - Water/Bicarbonate. To perform hemodialysis, all dialysis clinics have dedicated water purification systems to produce water and bicarbonate concentrate, two essential ingredients for making dialysate, the liquid that removes waste material from the blood. According to the American Journal of Kidney Diseases, there are approximately 6,300 dialysis clinics in the United States servicing approximately 430,000 patients annually. We estimate that there are over 100,000 hemodialysis machines in operation in the United States.

Medicare is the main payer for dialysis treatment in the United States. To be eligible for Medicare reimbursement, dialysis centers must meet the minimum standards for water and bicarbonate concentrate quality set by the Association for the Advancement of Medical Instrumentation ("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.

We currently have FDA 510(k) clearance on the following portfolio of medical device products for use in the dialysis setting to aid in bacteria, virus, and endotoxin retention:

The DSU-D, SSU-D and SSUmini are in-line, 0.005 micron ultrafilters that provide protection from bacteria, viruses, and endotoxins. All of these products have an up to 12 month product life in the dialysis setting, and are used to filter water following treatment with a reverse osmosis ("RO") system, and to filter bicarbonate concentrate. These ultrafilters are primarily used in the water lines and bicarbonate concentrate lines leading into dialysis machines, and as a polish filter for portable RO machines.

The EndoPur is a 0.005 micron cartridge ultrafilter that provides single-stage protection from bacteria, viruses, and endotoxins. The EndoPur has an up to 12 month product life in the dialysis setting, and is used to filter water following treatment with an RO system. More specifically, the EndoPur is used primarily to filter water in large RO systems designed to provide ultrapure water to an entire dialysis clinic. The EndoPur is available in 10", 20", and 30" configurations.

The EndoPur is a cartridge-based, "plug and play" market entry that requires no plumbing at installation or replacement. In March 2017, we received FDA 510(k) clearance to market the EndoPur filter. We began shipping the EndoPur 10" filter in July 2017 and the 20" and 30" versions in September 2017.

Commercial and Industrial Facilities. We currently market the following portfolio of proprietary products for use in the commercial, industrial, and food service settings:

The NanoGuard™-D is an in-line, 0.005 micron ultrafilter that provides dual-stage retention of any organic or inorganic particle larger than 15,000 Daltons. The NanoGuard™-D is primarily used to filter potable water feeding ice machines, sinks and equipment that requires or benefits from ultrafiltered water, and filters up to 10,000 gallons of potable water, depending upon the particle load.

The NanoGuard™-S is an in-line, 0.005 micron ultrafilter that provides single-stage retention of any organic or inorganic particle larger than 15,000 Daltons. The NanoGuard™-S is primarily used to filter potable water feeding ice machines, sinks, showers and equipment that requires or benefits from ultrafiltered water, and filters up to 3,000 gallons of potable water, depending upon the particle load.

The NanoGuard™-E is a 0.005 micron ultrafilter cartridge that plugs into an Everpure® filter manifold and provides single-stage retention of any organic or inorganic particle larger than 15,000 Daltons. The NanoGuard™-E is primarily used to filter potable water feeding ice machines, beverage dispensers, and other equipment that requires or benefits from ultrafiltered water, and filters up to 10,000 gallons of potable water, depending upon the particle load.

The NanoGuard™-C is a 0.005 micron cartridge ultrafilter that fits with most 10”, 20”, 30” and 40” cartridge housings and provides single-stage retention of any organic or inorganic particle larger than 15,000 Daltons. The NanoGuard™-C is primarily used to filter potable water feeding ice machines and equipment that requires or benefits from ultrafiltered water, and filters up to 10,000 gallons of potable water per 10” of length, depending upon the particle load.

The NanoGuard™-F is a 0.005 micron flushable cartridge ultrafilter, available in 10” or 20” sizes and provides single-stage retention of any organic or inorganic particle larger than 15,000 Daltons. The NanoGuard™-F is primarily used to filter potable water feeding ice machines, sinks and equipment that requires or benefits from ultrafiltered water. The NanoGuard™-F has an up to 12 month product life and can filter up to 2.5 gallons per minute per 10” length, depending upon the particle load.

In April 2017, we announced a partnership with WorldWater & Solar Technology to provide ultrafiltration capabilities to their drinking water systems. This partnership centers on our NanoGuard™-F product line. This partnership is in the early stages of market roll-out.

In the fourth quarter of 2017, we released a lead filtration system that addresses both soluble and particulate lead in potable water, with the ability to treat up to 9,000 gallons of water between filter change-outs. This system is in the early stages of market roll-out.

Military and Outdoor Recreation. We developed our individual water treatment device (“IWTD”) in both in-line and point-of-use configurations. Our IWTD allows a soldier in the field to derive drinking water from any freshwater source. This enables the soldier to remain hydrated, to help maintain mission effectiveness and unit readiness, and to extend mission reach. Our IWTD has been validated by the military to meet the NSF Protocol P248 standard. It has also been approved by the U.S. Army Public Health Command and the U.S. Army Test and Evaluation Command for deployment.

In May 2015, we entered into a Sublicense Agreement with CamelBak Products, LLC (“CamelBak”). Under this Sublicense Agreement, we granted CamelBak an exclusive, non-transferable, worldwide (with the exception of Italy) sublicense and license, in each case solely to market, sell, distribute, import and export the IWTD. In exchange for the rights granted to CamelBak, CamelBak agreed, through December 31, 2022, to pay us a percentage of the gross profit on any sales made to a branch of the U.S. military, subject to certain exceptions, and to pay us a fixed per-unit fee for any other sales made. CamelBak is also required to meet or exceed certain minimum annual fees payable to us, and, if such fees are not met or exceeded, we may convert the exclusive sublicense to a non-exclusive sublicense with respect to non-U.S. military sales. During the years ended December 31, 2017 and December 31, 2016, Camelbak met its minimum fee payments, and we recognized royalty revenue of $25,000 and $10,000, respectively, related to this Sublicense Agreement.

HDF Systems

The current standard of care in the United States for patients with chronic renal failure is hemodialysis (“HD”), a process in which toxins are cleared via diffusion. Patients typically receive HD treatments 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 United States 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 more challenging for patients, as it is performed on a daily basis, and typically takes 12-24 hours per treatment.

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 United States, HDF is prevalent in Europe and is performed for a growing number of patients. Clinical experience and literature show the following clinical and patient benefits of HDF:

- Enhanced clearance of middle and large molecular weight toxins
- Improved survival - up to a 35% reduction in mortality risk
- Reduction in the occurrence of dialysis-related amyloidosis
- Reduction in inflammation
- Reduction in medication such as EPO and phosphate binders

Improved patient quality of life

Reduction in number of hospitalizations and overall length of stay

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

We originally developed a medical device that enabled a standard HD machine to perform HDF. We refer to our approach as an on-line mid-dilution hemodiafiltration ("mid-dilution HDF") system. Our original solution included a OLpūr H2H Hemodiafiltration Module ("H2H Module"), a OLpūr MD 220 Hemodiafilter ("HDF Filter") and a H2H Substitution Filter ("Dialysate Filter").

Our H2H Module attaches to a standard HD machine to perform on-line HDF therapy. The HD machine controls and monitors the basic treatment functions, as it would normally when providing HD therapy. The H2H Module is a free-standing, movable device that is placed next to either side of an HD machine. The H2H Module connects to the clinic's water supply, drain, and electricity.

The H2H Module utilizes the HDF Filter, and is very similar to a typical hollow fiber dialyzer assembled with a single hollow fiber bundle made with a high-flux (or high-permeability) membrane. The fiber bundle is separated into two discrete, but serially connected, blood paths. Dialysate flows in one direction that is counter-current to blood flow in Stage 1 and co-current to blood flow in Stage 2.

In addition to the HDF Filter, the H2H Module also utilizes a Dialysate Filter during patient treatment. The Dialysate Filter is a hollow fiber, ultrafilter device that consists of two sequential (redundant) ultrafiltration stages in a single housing. During on-line HDF with the H2H Module, fresh dialysate is redirected by the H2H Module's hydraulic (substitution) pump and passed through this dual-stage ultrafilter before being infused as substitution fluid into the extracorporeal circuit. Providing ultrapure dialysate is crucial for the success of on-line HDF treatment.

Our original HDF system conformed with current ANSI/AAMI/ISO standards and was cleared by the FDA for the treatment of patients with chronic renal failure in 2012. To date, our HDF System is the only HDF system cleared by the FDA.

Over the last four years, DaVita Healthcare Partners, the Renal Research Institute (a research division of Fresenius Medical Care), and Vanderbilt University conducted post-market evaluations of our hemodiafiltration system in their

clinics. We gathered direct feedback from these evaluations to develop a better understanding of how our system best fits into the current clinical and economic ESRD treatment paradigm. The ultimate goal of the evaluations was to better understand the potential for HDF, in the U.S. clinical setting, to (a) improve the quality of life for the patient, (b) reduce overall expenditure compared to other dialysis modalities, (c) minimize the impact on nurse work flow at the clinic, and (d) demonstrate the pharmacoeconomic benefit of the HDF technology to the U.S. healthcare system, as has been done in Europe with other HDF systems. The last evaluation was concluded at Vanderbilt in the first quarter of 2018. When practical, we will work with Vanderbilt to publish observational findings.

Leveraging the learnings from our evaluations, we have initiated the development of the 2nd generation HDF system. We believe that the 2nd generation system, as currently designed, incorporates new features that could enable us to better manufacture at scale, to reduce the per treatment cost of performing HDF, and to better align with current work flow practices, versus our 1st generation HDF system. We filed a provisional patent on our new system design in June 2017. We are funding the 2nd generation HDF system as cash flow is available, and have announced plans to form a new subsidiary, Specialty Renal Products, Inc., to drive the development of this 2nd generation HDF system.

Corporate Information

We were incorporated under the laws of the State of Delaware in April 1997. Our principal executive offices are located at 380 Lackawanna Place, South Orange, NJ 07079, 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*.

Manufacturing and Suppliers

We do not, and do not intend to in the near future, manufacture any of our products and components. With regard to the OLpūr MD190 and MD220, on June 27, 2011, we entered into a license agreement, effective July 1, 2011, as amended by the first amendment dated February 19, 2014, with Bellco S.r.l. ("Bellco"), an Italy-based supplier of hemodialysis and intensive care products, for the manufacturing, marketing and sale of our patented mid-dilution dialysis filters. Pursuant to the first amendment, we and Bellco agreed to extend the term of the License Agreement from December 31, 2016 to December 31, 2021. In addition, under the agreement, as amended by the first amendment, we granted Bellco a license to manufacture, market and sell these products under its own name, label and CE mark in Italy, France, Belgium, Spain, Canada, Denmark, Finland, Norway and Sweden on an exclusive basis, and to do the same on a non-exclusive basis in the United Kingdom, Greece, Brazil, China, Korea, Mexico and the Netherlands and, upon our written approval, other European countries where we do not sell these products, as well as non-European countries.

On April 23, 2012, we entered into a license and supply agreement with Medica S.p.A., an Italy-based medical product manufacturing company, for the marketing and sale of certain filtration products based upon Medica's proprietary Medisulfone ultrafiltration technology in conjunction with our filtration products and for an exclusive supply arrangement for the filtration products. Under the 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 agreement. In addition, we granted to Medica an exclusive license under our intellectual property to make the filtration products during the term of the agreement. In exchange for the rights granted, we agreed to make minimum annual aggregate purchases from Medica throughout the term of the agreement. As part of the agreement, we granted to Medica 300,000 options to purchase our common stock, which vested over the first three years of the agreement. We currently have an understanding with Medica whereby we have agreed to pay interest to Medica at a 12% annual rate calculated on the principal amount of any outstanding invoices that are not paid pursuant to the original payment terms.

On May 5, 2017, we entered into a third amendment to the agreement with Medica. Pursuant to the third amendment, Medica expanded the products covered by the original agreement to include both certain filtration products based on Medica's proprietary Versatile microfiber technology and certain filtration products based on Medica's proprietary Medisulfone ultrafiltration technology. The third amendment also limits the territory in which Medica granted us an exclusive license, with right of sublicense, to market, promote, distribute, offer for sale, and sell the filtration products to North America, Central America, Columbia, Venezuela, Chile, Ecuador, Peru, Ireland, the United Kingdom, Australia and New Zealand. Our multinational distributors retain the right to market certain of the products worldwide, other than in Italy, on a non-exclusive basis. On September 26, 2017, we entered into a fourth amendment to the agreement with Medica, which extended the term of the agreement from December 31, 2022 to December 31, 2025.

Sales and Marketing

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

Our New Jersey office oversees global sales and marketing activity of our ultrafilter products. We work with multiple distributors for our ultrafilter products in the hospital and dialysis water markets. In the food service market, Biocon 1 LLC has the exclusive right to distribute our custom filter cartridge developed for the AETHER® Water System. For each prospective market for our ultrafilter products, we are pursuing alliance opportunities for joint product development and/or distribution. Our ultrafilter manufacturer in Europe shares certain intellectual property rights with us for one of our Dual Stage Ultrafilter designs.

Research and Development

Our research and development efforts continue on several fronts directly related to our current product lines. For the ultrafiltration systems business, we are continually working with existing and potential distributors of ultrafilter products to develop solutions to meet customer needs. For the HDF systems business, we are working with our current customers to develop a 2nd generation HDF system. For the years ended December 31, 2017 and 2016, we spent approximately $1,002,000 and $1,079,000, respectively, on research and development activities.

Major Customers

For the years ended December 31, 2017 and 2016, four customers accounted for 50% and 55%, respectively, of our revenues.

As of December 31, 2017 and 2016, three customers accounted for 38% and 47%, respectively, of our accounts receivable.

Competition

With respect to the water filtration market, we expect to compete with companies that are well entrenched in the water filtration domain. These companies include Pall Corporation (now wholly-owned by Danaher Corporation), which manufactures end-point water filtration systems, as well as 3M, Siemens and Everpure®. 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 goals of 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 Baxter International, Inc., currently two of the primary machine manufacturers in hemodialysis. Fresenius Medical Care AG and Baxter International, Inc. also manufacture HDF machines that are not currently approved in the United States.

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

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

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

- 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 our agreement with Bellco 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 apply 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 OLpūr 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, 2017, we had twelve U.S. patents, four Mexican patents, one South Korean patent, two Chinese patents, two French patents, two German patents, one Israeli patent, two Italian patents, one Spanish patent, two United Kingdom patents, one Canadian patent, one Australian patent, one Swedish patent, and one patent in the Netherlands. In addition, we have two pending patent applications in the U.S. and one in Canada. Our pending patent applications relate to a range of filter technologies, including cartridge configurations, cartridge assembly, substitution fluid systems, and methods to enhance and ensure performance.

Trademarks

As of December 31, 2017, we secured registrations of the trademarks H2H and OLpūr in the European Union and OLpūr in the United States. We have also filed trademark applications for HYDRAGUARD, NANOGUARD, and ENDOPUR in the United States, and have a trademark registration in the European Union for Nephros Hydraguard.

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 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.

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

In April 2012, we announced that 510(k) clearance was received from the FDA to market the OLpūr H2H Module and OLpūr MD 220 Hemodiafilter for use with a UF controlled hemodialysis machine that provides ultrapure dialysate in accordance with current ANSI/AAMI/ISO standards, for the treatment of patients with chronic renal failure in the United States.

In October 2014, we announced that we received 510(k) clearance from the FDA to market our DSU H and SSU H ultrafilters; in April 2016, we announced that we received 510(k) clearance from the FDA to market our S100 point-of-use filter; in December 2016, we announced that we received 510(k) clearance from the FDA to market our HydraGuard 10" ultrafilter; and in March 2017, we announced that we received 510(k) clearance from the FDA to market our EndoPur 10" ultrafilter.

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

Reimbursement

In both domestic markets and markets outside of the United States, sales of our ESRD therapy products will depend in part, on the availability of reimbursement from third-party payers. In the United States, ESRD providers are reimbursed through Medicare, Medicaid and private insurers. In countries other than the United States, ESRD providers are also reimbursed through governmental and private insurers. In countries other than the United States, the pricing and profitability of our products generally will be subject to government controls. Despite the continually expanding influence of the European Union, national healthcare systems in its member nations, including reimbursement decision-making, are neither regulated nor integrated at the European Union level. Each country has its own system, often closely protected by its corresponding national government.

Product Liability and Insurance

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

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

Employees

As of December 31, 2017, we employed a total of 15 full-time employees, including 3 employed in sales/marketing/customer support, 5 in general and administrative, and 7 in research and development.

Properties

Our U.S. facilities are located at 380 Lackawanna Place, South Orange, New Jersey 07079 and consist of approximately 7,700 square feet of space. The current rental agreement expires in November 2022 with a monthly cost of approximately $11,000. We use these facilities to house our corporate headquarters and research facilities.

Our office in Europe is currently located at Ulysses House, Foley Street, Dublin, Ireland. The lease agreement was entered into on August 1, 2017 and is for a twelve month term.

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

Legal Proceedings

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

Available Information

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

MANAGEMENT

Director Classes

Our Board of Directors (the "Board") is currently composed of five directors. Our Board 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 380 Lackawanna Place, South Orange, New Jersey 07079.

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 LLC ("Lambda") (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 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 director will be empowered to convene such meeting. Arthur Amron and Paul Mieyal are the current Lambda directors.

Name	Age (as of 5/15/18)	Director Since	Business Experience For The Last Five Years
Class I Directors			
Arthur H. Amron	61	2007	Mr. Amron has served as a director of our company since September 2007. Mr. Amron is a Partner of Wexford Capital LP, an SEC-registered investment advisor and serves as its General Counsel. Mr. Amron also actively participates in various private equity transactions, particularly in the bankruptcy and restructuring areas, and has served on the boards and creditors' committees of a number of public and private companies in which Wexford has held investments. 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.
Class II Directors			
Paul A. Mieyal	48	2007	Dr. Mieyal has served as a director of our company since September 2007 and served as our Acting President, Acting Chief Executive Officer, Acting Chief Financial Officer and Acting Secretary from January 4, 2015 to April 15, 2015. Dr. Mieyal also previously served as our Acting Chief Executive Officer from April 6, 2010 until April 20, 2012. Dr. Mieyal has been a Vice President of Wexford Capital LP since October 2006. From January 2000 through September 2006, he was Vice President in charge of healthcare investments for Wechsler & Co., Inc., a private investment firm and registered broker-dealer. Dr. Mieyal was a director of Nile Therapeutics, Inc., a publicly traded company, from September 2007 through November 2013. Dr. Mieyal received his Ph.D. in Pharmacology from New York Medical College, a B.A. in Chemistry and Psychology from Case Western Reserve University, and is a Chartered Financial Analyst. Among other experience, qualifications, attributes and skills, Dr. Mieyal's pharmacology and chemistry education, his experience in investment banking in the healthcare industry, as well as his experience serving on boards of directors of other public companies, led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure.
Malcolm Persen	64	2015	Mr. Persen has served as a director of our company since May 2015 and is currently the President of Resolute Performance Contracting, a solar construction firm that he founded in 2011. Previously, from 2009 through 2011, he was the Executive Vice President at Ironco Enterprises, a renewable energy contracting organization. From 2004 through 2008, Mr. Persen served as the Chief Financial Officer for Radyne Corporation, a Nasdaq-traded manufacturer and distributor of satellite and telecommunications equipment. Earlier, Mr. Persen was employed as Group Financial Officer for Avnet, Inc., a global distributor of electronic components and computer systems. Other experience included assignments with consultancies Arthur D. Little and Mercer Management Consulting. In addition, Mr. Persen is a Faculty Associate at the W. P. Carey School of Business at Arizona State University. Previously, Mr. Persen has served on the Finance Faculties of the University of Arizona, Boston College and the University of Massachusetts. Mr. Persen currently serves on the Board of Valutek, a supplier of cleanroom supplies through direct and distribution channels. Mr. Persen holds a BA in Political Economics from The Colorado College, and an MBA from The Amos Tuck School of Business at Dartmouth College. Among other experience, qualifications, attributes and skills, Mr. Persen's extensive financial background led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure.

Class III Directors			
Daron Evans	44	2013	Mr. Evans is currently our President and Chief Executive Officer. He has served on our Board since November 29, 2013, and served as the Chairman from January 4, 2015 through April 15, 2015. Mr. Evans is a life sciences executive with over 20 years of financial leadership and operational experience. Mr. Evans is currently Managing Director of PoC Capital, LLC, and a Director of Zumbro Discovery, an early stage company developing a novel therapy for resistant hypertension. Mr. Evans was most recently Chief Financial Officer of Nile Therapeutics, Inc., from 2007 until its merger with Capricor, Inc. in November 2013. From 2004 to 2007, he held various positions at Scios, Inc. and Vistakon, Inc., both divisions of Johnson & Johnson Corp. Mr. Evans was a co-founder of Applied Neuronal Network Dynamics, Inc. and served as its President from 2002 to 2004. From 1995 to 2002, Mr. Evans served in various roles at consulting firms Arthur D. Little and Booz Allen & Hamilton. Mr. Evans is the author of four U.S. patents. Mr. Evans received his Bachelor of Science in Chemical Engineering from Rice University, his Master of Science in Biomedical Engineering from a joint program at the University of Texas at Arlington and Southwestern Medical School and his MBA from the Fuqua School of Business at Duke University. Among other experience, qualifications, attributes and skills, Mr. Evans's extensive operational and business development experience led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure.
Moshe Pinto	43	2015	Mr. Pinto has served as a director of our company since August 2015. Mr. Pinto was recently the CEO of Home Dialysis Plus, now Outset Medical, Inc., a Warburg Pincus backed company dedicated to the development and commercialization of a new hemodialysis system, providing an improved experience for patients. Previously, from 2007 through 2010, he was CEO of Spiracur Inc., a developer of innovative wound healing technologies that Mr. Pinto co-founded out of the Stanford University Biodesign Innovation Program. Mr. Pinto also worked for Herzog, Fox & Neeman, a law firm based in Israel. He served on the Board of Directors of Spiracur Inc. from 2010 to 2015. Mr. Pinto received an MBA from Stanford University, an LLM from Universita di Bologna, an EMLE from the University of Hamburg, and an LLB in Law from Tel Aviv University. Among other experience, qualifications, attributes and skills, the Board concluded that Mr. Pinto should serve as a director of our company due to his historical experience with businesses in the medical industry and in light of our business and structure.

Director Independence

Presently, we are not required to comply with the director independence requirements of any securities exchange. Our Board has determined that all of the current directors are "independent" within the meaning of the Nasdaq independence standard, other than Mr. Evans, who currently serves as the Company's President and CEO, Dr. Mieyal, who served as our Acting President, Acting Chief Executive Officer, Acting Chief Financial Officer and Acting Secretary from January 4, 2015 until April 15, 2015, and Mr. Amron, who is a Partner of Wexford Capital LP, the managing member of Lambda Investors LLC, which owns beneficially approximately 50% of our common stock as of May 15, 2018.

Executive Officers

Our current executive officers are Daron Evans, who serves as our President and Chief Executive Officer, and Andrew Astor, who serves as our Chief Financial Officer. Mr. Astor joined as our Chief Financial Officer on February 13, 2017, and his biography is set forth below:

Mr. Astor, age 61, joined as our Chief Financial Officer on February 13, 2017. He is a technology, financial, and business executive and was most recently President and Chief Financial Officer at Open Source Consulting Group, a growth stage services firm. Previously, he was a Managing Director at Synechron, a global consulting organization, from 2013 to 2015. From 2009 to 2013, he served as Vice President at Asurion, a large, privately-held insurance company. Mr. Astor was co-founder of the software company EnterpriseDB, and served as its CEO from 2004 to 2008. Mr. Astor was Vice President at webMethods, a software firm, from 2002 to 2004 and Vice President at Dun & Bradstreet from 1998 to 2001. Prior to 1998, Mr. Astor held various roles at American Management Systems, SHL/MCI Systemhouse, and Ernst & Young. Mr. Astor received his Bachelor of Arts in Mathematics from Clark University, and his MBA from The Wharton School at the University of Pennsylvania.

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 2017, all of our officers, directors and 10% stockholders complied with applicable Section 16(a) filing requirements.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

There have been no disagreements with our accountants during 2017 or 2016 reportable pursuant to this requirement.

EXECUTIVE COMPENSATION

Executive Compensation

The following table sets forth all compensation earned in the fiscal years ended December 31, 2017 and 2016 by our named executive officers.

Summary Compensation Table

Name and Principal Position	Year	Salary ($)	**Stock Awards[1] ($)**	**Options Awards[1] ($)**	**All Other Compensation[2] ($)**	Total ($)
Daron Evans[3]	2017	240,000	96,747	340,000	7,043	683,790
President and Chief Executive Officer	2016	240,000	68,182	—	17,880	326,062
Andrew Astor[4]	2017	193,000	60,209	341,069	6,094	600,372
Chief Financial Officer						

(1) The amount reported is the aggregate grant date fair value of the options and restricted stock awards granted, computed in accordance with FASB ASC Topic 718. The assumptions used in determining the grant date fair values of the option awards are set forth in Note 2 of the consolidated financial statements included in our 2017 Annual Report on Form 10-K.

(2) Consists of employer matching 401(k) contributions.

(3) Mr. Evans served as President, Chief Executive Officer and Acting Chief Financial Officer from April 15, 2015 to February 13, 2017. He currently serves as President and Chief Executive Officer, but no longer serves as Acting Chief Financial Officer as of February 13, 2017 in connection with the appointment of Andrew Astor as Chief Financial Officer.

(4) Mr. Astor has served as Chief Financial Officer since February 13, 2017.

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

The following table shows information concerning unexercised options and unvested restricted stock awards outstanding as of December 31, 2017 for our named executive officers.

Outstanding Equity Awards at Fiscal Year-End 2017

		Option Awards[2]					Stock Awards	
Name	**Grant Date[1]**	**Number of Securities Underlying Unexercised Options (#) Exercisable[2]**	**Number of Securities Underlying Unexercised Options (#) Unexercisable[2]**	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	**Option Exercise Price ($)**	**Option Expiration Date**	Number of Shares of Restricted Stock that Have Not Vested (#)	Market Value of Shares of Restricted Stock that Have Not Vested ($)
Daron Evans	03/26/2014	75,361	—	—	0.46	03/26/2024	—	—
Daron Evans	04/15/2015	525,572	238,896	1,419,725	0.60	04/15/2025	—	—
Daron Evans	12/20/2017	—	837,125	—	0.50	12/20/2027	—	—
Daron Evans	12/20/2017	—	—	—	—		180,000	81,000
Andrew Astor	02/13/2017	—	289,785	289,786	0.46	02/13/2027	—	—
Andrew Astor	05/01/2017	—	209,355	209,355	0.29	05/01/2027	—	—
Andrew Astor	12/20/2017	—	50,000	—	0.50	12/20/2027	—	—
Andrew Astor	12/20/2017	—	—	—	—		120,418	54,188

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

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

Name	**Grant Date**	**Vesting**
Daron Evans	03/26/2014	Fully exercisable

Daron Evans	04/15/2015	35% of the shares subject to the option vest in 16 equal quarterly installments over 4 years, commencing June 30, 2015; 15% of the shares subject to the option will vest upon approval of listing of the our common stock on the Nasdaq Stock Market, New York Stock Exchange or such other national securities exchange approved by the Board; 10% of the shares subject to the option will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $3,000,000; 20% of the shares subject to the option will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $6,000,000; and 20% of the shares subject to the option will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $10,000,000.
Daron Evans	12/20/2017	25% of the shares subject to the option will vest on the first anniversary of the grant date, the remainder of the shares subject to the option will vest therein after on a quarterly basis.
Andrew Astor	02/13/2017	12.5% of the shares subject to the option vested on February 13, 2018; 37.5% of the shares subject to the option vest in twelve equal quarterly installments, with the first installment vesting three months following the first anniversary of the grant date; 20% of the shares subject to the option will vest, if ever, upon approval of listing of our common stock on the Nasdaq Stock Market, New York Stock Exchange or such other national securities exchange approved by the Board; 10% of the shares subject to the option will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $6,000,000; and 20% of the shares subject to the option will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $10,000,000.
Andrew Astor	05/01/2017	12.5% of the shares subject to the option vest on the first anniversary of the grant date; 37.5% of the shares subject to the option vest in twelve equal quarterly installments, with the first installment vesting three months following the first anniversary of the grant date; 20% of the shares subject to the option will vest, if ever, upon approval of listing of our common stock on the Nasdaq Stock Market, New York Stock Exchange or such other national securities exchange approved by the Board; 10% of the shares subject to the option will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $6,000,000; and 20% of the shares subject to the option will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $10,000,000.
Andrew Astor	12/20/2017	25% of the shares subject to the option will vest on the first anniversary of the grant date, the remainder of the shares subject to the option will vest therein after on a quarterly basis.

Advisory Vote on Executive Compensation

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

Employment and Change in Control Agreements

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

Agreement with Mr. Daron Evans

The terms of Mr. Evans's employment with us are set forth in an Employment Agreement dated as of April 15, 2015 (the "Evans Employment Agreement"). The Evans Employment Agreement provides for a four-year term expiring on April 14, 2019, unless sooner terminated by either party. Pursuant to the Evans Employment Agreement, Mr. Evans received an initial annualized base salary of $240,000 and is eligible to receive an annual performance bonus of up to 30% of his annualized base salary. As of January 1, 2018, Mr. Evans receives an annualized base salary of $350,000. At such time that our common stock is approved for listing on the Nasdaq Stock Market, New York Stock Exchange or such other national securities exchange approved by the Board and begins trading on such exchange, the Board may review and adjust Mr. Evans's base salary to a market competitive level. In addition, Mr. Evans was granted a 10-year stock option to purchase an aggregate of 2,184,193 shares of our common stock pursuant to our 2015 Equity Incentive Plan. The option is exercisable at a price of $0.60 per share and vests, subject to Mr. Evans's continued employment, as follows:

35% of the shares subject to the option (relating to a total of 764,468 shares) vest quarterly in 16 equal amounts, commencing on June 30, 2015;

15% of the shares subject to the option (related to a total of 327,629 shares) will vest upon approval of listing of our common stock on the Nasdaq Stock Market, New York Stock Exchange or such other national securities exchange approved by the Board;

10% of the shares subject to the option (relating to a total of 218,420 shares) will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $3,000,000;

20% of the shares subject to the option (relating to a total of 436,838 shares) will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $6,000,000; and

20% of the shares subject to the option (relating to a total of 436,838 shares) will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $10,000,000.

The Evans Employment Agreement provides that if we terminate Mr. Evans without “Cause,” or if he resigns for “Good Reason” (each as defined in the Evans Employment Agreement), then he shall be entitled to: (i) continuation of his base salary for a period of three months if such termination occurs prior to April 15, 2016, or if such termination occurs following April 15, 2016, continuation of his base salary for a period of six months (or the expiration of the term of the Evans Employment Agreement, if sooner).

Agreement with Mr. Andrew Astor

The terms of Mr. Astor's employment with us are set forth in a Letter Agreement dated as of February 10, 2017 (the "Astor Employment Agreement"). Mr. Astor's initial employment was part-time, but was increased to full time as of April 27, 2017.

Pursuant to the Astor Employment Agreement, Mr. Astor received an initial base salary of $10,000 per month, which was increased to base annual compensation to $250,000 on April 27, 2017. Mr. Astor is eligible for an annual performance bonus of up to 25% of his annualized base salary, based primarily on our performance. In addition, Mr. Astor was granted a 10-year stock option to purchase an aggregate of 579,571 shares of our common stock pursuant to our 2015 Equity Incentive Plan. The option is exercisable at a price of $0.4599 per share and vests, subject to Mr. Astor's continued employment, as follows:

- 12.5% of the shares subject to the option (relating to a total of 72,446 shares) vested on February 13, 2018;
- 37.5% of the shares subject to the option (relating to a total of 217,340 shares) vest quarterly in 12 equal amounts, commencing on May 13, 2018;
- 20% of the shares subject to the option (relating to a total of 115,914 shares) will vest, if ever, upon approval of listing of our common stock on the Nasdaq Stock Market, New York Stock Exchange or such other national securities exchange approved by the Board;
- 10% of the shares subject to the option (relating to a total of 57,957 shares) will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $6,000,000; and
- 20% of the shares subject to the option (relating to a total of 115,914 shares) will vest, if ever, on the February 1st following our first completed fiscal year in which annual revenue exceeds $10,000,000.

The Astor Employment Agreement provides that if we terminate Mr. Astor without "cause" (as defined in the Astor Employment Agreement), then he shall be entitled to: (i) three months of base salary and three months of continued health benefits following one year of employment; or (ii) six months base salary and six months of health benefits following at least two years of employment.

Change in Control Agreements

Although we do not currently have change in control agreements in place with any employees, our 2015 Plan provides that upon a change of control, as such term is defined in the 2015 Plan, unless the agreement granting an award provides otherwise, the administrator of the 2015 Plan may provide for one or more of the following: (i) the acceleration of the exercisability, vesting, or lapse of the risks of forfeiture of any or all awards (or portions thereof); (ii) the complete termination of the 2015 Plan and the cancellation of any or all awards (or portions thereof) that have not been exercised, have not vested, or remain subject to risks of forfeiture, as applicable in each case as of the effective date of the change of control; (iii) that the entity succeeding us by reason of such change of control, or the parent of such entity, must assume or continue any or all awards (or portions thereof) outstanding immediately prior to the change of control or substitute for any or all such awards (or portions thereof) a substantially equivalent award with respect to the securities of such successor entity, as determined in accordance with applicable laws and regulations; or (iv) that participants holding outstanding awards will become entitled to receive, with respect to each share of common stock subject to such award (whether vested or unvested, as determined by the administrator pursuant to the 2015 Plan) as of the effective date of any such change of control, cash in an amount equal to (1) for participants holding options or stock appreciation rights, the excess of the fair market value of such common stock on the date immediately preceding the effective date of such change of control over the exercise price per share of options or stock appreciation rights, or (2) for participants holding awards other than options or stock appreciation rights, the fair market value of such common stock on the date immediately preceding the effective date of such change of control. The administrator need not take the same action with respect to all awards (or portions thereof) or with respect to all participants.

Director Compensation

For fiscal year 2017, our directors received a $20,000 annual retainer, $1,500 per meeting for each quarterly Board meeting attended and reimbursement for expenses incurred in connection with serving on our Board. The Chairman of our Audit Committee was paid a $10,000 annual retainer and $1,000 per meeting for meetings of the Audit Committee, with a maximum of eight meetings per year. There was no named Chairman of the Board during fiscal year 2017. Director fees owed as of December 31, 2017 were paid in restricted stock in lieu of a cash payment.

We grant each non-employee director who first joins our Board, immediately upon such director joining our Board, the number of options equal to the product of 0.0011 multiplied by the total number of outstanding shares of common stock of the Company on a fully-diluted basis. The exercise price per share will be equal to the fair market value price per share of our common stock on the date of grant. We will also grant annually to each non-employee director the number of options equal to the product of 0.0006 multiplied by the total number of outstanding shares of common stock of the company on a fully-diluted basis. The exercise price per share will be equal to the fair market value price per share of our common stock on the date of grant. These non-employee director options vest in three equal installments on each of the date of grant and the first and second 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, 2017.

Non-Employee Director Compensation in Fiscal Year 2017

Name	**Restricted Stock Awards (1)(2)**	**Option Awards(3)(4)**	Total
Arthur H. Amron(5)	$ 36,932	$ 15,782	$52,714
Paul A. Mieyal(5)	$ 36,932	$ 15,782	$52,714
Malcolm Persen	$ 56,818	$ 15,782	$71,600
Moshe Pinto	$ 36,932	$ 15,782	$52,714

(1) Director fees owed as of December 31, 2017 were paid in restricted stock in lieu of a cash payment.

(2) As of December 31, 2017, Mr. Persen had 113,636 shares of restricted stock and Mr. Pinto had 73,864 shares of restricted stock.

(3) 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 the consolidated financial statements included in our 2017 Annual Report on Form 10-K.

(4) As of December 31, 2017, Mr. Persen had 92,996 shares of common stock issuable upon exercise of vested options and 38,149 shares issuable upon exercise of unvested options and Mr. Pinto had 95,170 shares of common stock issuable upon exercise of vested options and 38,149 shares issuable upon exercise of unvested options.

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

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

On June 3, 2016, we entered into a note and warrant purchase agreement with certain accredited investors pursuant to which we sold an aggregate principal amount of $807,000 of 11% unsecured promissory notes and five-year warrants to purchase an aggregate of 1,614,000 shares of our common stock at an exercise price of $0.30 per share. Purchasers included PoC Capital, LLC, an entity owned by Mr. Evans, as well as two of Mr. Evans's minor children for whom he acts as custodian. Collectively, such purchasers related to Mr. Evans purchased $30,000 principal amount of notes and warrants to purchase 60,000 shares of common stock. Lambda Investors LLC ("Lambda") also purchased notes in the principal amount of $300,000 and received warrants to purchase 600,000 shares of common stock. Lambda is controlled by Wexford Capital LP, its managing member. Mr. Amron is a Partner and General Counsel of Wexford Capital LP and Dr. Mieyal is a Vice President of Wexford Capital LP.

On March 17, 2017, we entered into a securities purchase agreement with certain purchasers identified therein pursuant to which we agreed to sell, and the purchasers agreed to purchase 4,059,994 units of our securities, each unit consisting of one share of our common stock, par value $0.001 per share, and a warrant to purchase one share of common stock, at a cash purchase price equal to $0.30 per unit. Purchasers included two minor children of Mr. Evans, who collectively purchased 83,332 units of our securities, and Mr. Astor, who purchased 166,666 units.

On April 10, 2018, we entered into a stock purchase agreement with certain purchasers identified therein pursuant to which we agreed to sell, and the purchasers agreed to purchase 6,540,669 shares of our common stock, par value $0.001 per share, at a cash purchase price equal to $0.45 per share. The purchasers included Mr. Evans and two minor children of Mr. Evans, who collectively purchased 79,000 shares, and Mr. Astor, who purchased 80,000 shares.

As of May 15, 2018, Lambda is our largest stockholder and beneficially owns approximately 50% of our outstanding common stock. The shares beneficially owned by Lambda may be deemed beneficially owned by Wexford Capital LP, which is the managing member of Lambda. Mr. Amron is a Partner and General Counsel of Wexford Capital LP and Dr. Mieyal is a Vice President of Wexford Capital LP. During 2017 and 2016, at the request of Mr. Amron and Dr. Mieyal, fees and options in the aggregate amount of approximately $105,427 and $94,078, respectively, earned in respect of services they rendered to us were directed to Wexford Capital LP.

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, 2017 about compensation plans under which shares of our common stock may be issued to employees, consultants or members of our Board. Our equity compensation plans as of December 31, 2017 consisted of our Amended and Restated Nephros 2000 Equity Incentive Plan and our Nephros, Inc. 2004 Stock Incentive Plan (together, the "Prior Plans") and our 2015 Equity Incentive Plan (the "2015 Plan"). All of our employees and directors were eligible to participate in the Prior Plans and are eligible to participate in the 2015 Plan. The Prior Plans are both expired and no further equity is granted under the Prior Plans. Our Prior Plans were approved by our stockholders. On March 26, 2015, our Board approved the 2015 Plan and on December 20, 2017, the Board approved an amendment to the 2015 Plan to increase the number of shares reserved for issuance pursuant to the 2015 Plan.

Plan Category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for issuance under equity compensation plans (excluding securities reflected in column (a) and restricted stock granted under the 2015 Plan)
Equity compensation plans approved by our stockholders	1,159,386	$ 0.76	-
Equity compensation plans not approved by our stockholders	5,611,391	$ 0.50	1,752,135
Total	6,770,777	$ 0.55	1,752,135

Security Ownership of Certain Beneficial Owners

The following table sets forth the beneficial ownership of our common stock as of May 15, 2018, 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]	32,065,257	49.6	%
Pessin Group[3]	5,202,341	8.2	%
Arthur H. Amron[4]	-	*	
Andrew Astor[5]	645,021	1.0	%
Daron Evans[6]	2,008,253	3.1	%
Paul A. Mieyal[7]	-	*	
Malcolm Persen[8]	404,977	*	
Moshe Pinto[9]	251,615	*	
All executive officers and directors as a group (6 individuals)[10]	3,309,866	5.1	%

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

(1) Applicable percentage ownership is based on 63,783,654 shares of common stock outstanding as of May 15, 2018, together with applicable options and warrants for each stockholder. Beneficial ownership is determined in accordance with the rules of the SEC, 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 May 15, 2018 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 on information provided in a Schedule 13D dated January 12, 2018. The shares beneficially owned by Lambda Investors LLC ("Lambda") may be deemed beneficially owned by Wexford Capital LP, which is the managing member of Lambda, 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, Wexford Capital LP, Mr. Davidson and Mr. Jacobs is c/o Wexford Capital LP, 777 South Flagler Drive, Suite 602 East. West Palm Beach, FL 33401. 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 except, in the case of Mr. Davidson and Mr. Jacobs, to the extent of their respective interests in each member of Lambda. Includes 231,226 shares issuable upon exercise of options and 600,000 shares issuable upon exercise of warrants. Lambda 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, one of our directors and our former Acting President, Acting Chief Executive Officer, and Acting Chief Financial Officer until April 15, 2015, is a Vice President of Wexford Capital LP.

(3) Based on information provided in a Schedule 13D dated April 17, 2018. The shares beneficially owned by the Pessin Group are individually owned as follows: (i) Brian Pessin, 856,067 shares; (ii) Sandra F. Pessin, 2,732,707 shares; (iii) Norman H. Pessin, 1,613,567 shares. Each of Brian Pessin, Sandra F. Pessin, and Norman H. Pessin have sole voting and dispositive power over the shares each individually owns. The address for Brian Pessin is 310 East 75th Street, Apt. 2A, New York, NY 10021. The address for Sandra F. Pessin and Norman H. Pessin is 366 Madison Avenue, 14th Floor, New York, NY 10017.

(4) Mr. Amron's address is c/o Wexford Capital LP, 411 West Putnam Avenue, Greenwich, CT 06830.

(5) Mr. Astor's address is the company address: 380 Lackawanna Place, South Orange, NJ 07079. The shares identified as being beneficially owned by Mr. Astor consist of: (i) 368,792 shares of common stock; (ii) 142,896 shares issuable upon exercise of options; and (iii) 133,333 shares issuable upon exercise of warrants.

(6) Mr. Evans' address is the company address: 380 Lackawanna Place, South Orange, NJ 07079. The shares identified as being beneficially owned by Mr. Evans consist of: (i) 712,958 shares of common stock; (ii) 144,832 shares of common stock held indirectly; (iii) 180,000 shares of restricted stock; (iv) 867,131 shares issuable upon exercise of options; and (v) 103,332 shares issuable upon exercise of warrants.

(7) Dr. Mieyal's address is c/o Wexford Capital LP, 411 West Putnam Avenue, Greenwich, CT 06830.

(8) Mr. Persen's address is the company address: 380 Lackawanna Place, South Orange, NJ 07079. The shares identified as being beneficially owned by Mr. Persen consist of: (i) 151,605 shares of common stock; (ii) 31,160 shares of common stock held by Mr. Persen's spouse; (iii) 113,636 shares of restricted stock; (iv) 92,996 shares

issuable upon exercise of options and (v) 15,580 shares issuable upon exercise of warrants.

(9) Mr. Pinto's address is the company address: 380 Lackawanna Place, South Orange, NJ 07079. The shares identified as being beneficially owned by Mr. Pinto consist of: (i) 82,581 shares of common stock; (ii) 73,864 shares of restricted stock and (iii) 95,170 shares issuable upon exercise of options.

(10) Includes options to purchase a total of 1,198,193 shares of common stock and warrants to purchase a total of 252,245 shares of common stock. See Footnotes 5, 6, 8 and 9 above.

DESCRIPTION OF CAPITAL STOCK

This prospectus relates to the shares of our common stock issued to the investors in the 2018 Private Placement.

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 December 31, 2017, we had issued and outstanding approximately:

- 55,293,267 shares of common stock;
- Options to purchase 6,770,777 shares of our common stock at exercise prices ranging from $0.27 to $23.80, with a weighted average exercise price of $0.55; and
- Warrants to purchase 7,099,010 shares of our common stock, including warrants to purchase 917,149 shares of our common stock at $0.85 per share with expiration dates in 2020, warrants to purchase 2,374,000 shares at an exercise price of $0.30 per share with expiration dates in 2021, and warrants to purchase 3,807,861 shares at an exercise price of $0.30 per share with expiration dates in 2022.

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.

LEGAL MATTERS

The legality of the securities offered hereby have been passed upon for us by Fredrikson & Byron P.A., Minneapolis, Minnesota.

EXPERTS

Our financial statements as of and for the years ended December 31, 2017 and 2016 included in this prospectus have been audited by Moody, Famiglietti & Andronico, LLP, 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 included 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.

FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of

Nephros, Inc.

South Orange, New Jersey

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Nephros, Inc. and Subsidiary (the "Company") as of December 31, 2017 and 2016, and the related consolidated statements of operations and comprehensive loss, changes in stockholders' equity (deficit), and cash flows for each of the years in the two-year period ended December 31, 2017, and the related notes (collectively referred to as the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31 ,2017 and 2016, and the results of their operations and their cash flows for each of the years in the two-year period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Going Concern Uncertainty

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's recurring losses and difficulty in generating sufficient cash flow to meet its obligations and sustain its operations 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 consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

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

applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Moody, Famiglietti & Andronico, LLP
We have served as the Company's auditor since 2015.
Tewksbury, Massachusetts
February 26, 2018

NEPHROS, INC. AND SUBSIDIARY

CONSOLIDATED BALANCE SHEETS

(In Thousands, Except Share and Per Share Amounts)

	December 31, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash	$2,194	$275
Accounts receivable, net	836	388
Investment in lease, net-current portion	20	27
Inventory, net	674	479
Prepaid expenses and other current assets	85	95
Total current assets	3,809	1,264
Property and equipment, net	52	70
Investment in lease, net-less current portion	39	61
License and supply agreement, net	1,072	1,262
Other asset	11	21
Total assets	$4,983	$2,678
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Secured revolving credit facility	$711	$-
Accounts payable	872	585
Accrued expenses	218	240
Deferred revenue, current portion	70	70
Total current liabilities	1,871	895
Unsecured long-term note payable, net of debt issuance costs and debt discount of $233 and $349, respectively	954	838
Long-term portion of deferred revenue	208	278
Total liabilities	3,033	2,011
Commitments and Contingencies (Note 13)		
Stockholders' equity:		
Preferred stock, $.001 par value; 5,000,000 shares authorized at December 31, 2017 and 2016; no shares issued and outstanding at December 31, 2017 and 2016.	-	-
Common stock, $.001 par value; 90,000,000 shares authorized at December 31, 2017 and 2016; 55,293,267 and 49,782,797 shares issued and outstanding at December 31, 2017 and December 31, 2016, respectively.	55	50

Additional paid-in capital	122,924	120,835
Accumulated other comprehensive income	77	67
Accumulated deficit	(121,106)	(120,285)
Total stockholders' equity	1,950	667
Total liabilities and stockholders' equity	$4,983	$2,678

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

NEPHROS, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(In Thousands, Except Share and Per Share Amounts)

	Years Ended December 31,	
	2017	2016
Net revenue:		
Product revenues	$3,544	$2,093
License, royalty and other revenues	265	227
Total net revenues	3,809	2,320
Cost of goods sold	1,517	1,026
Gross margin	2,292	1,294
Operating expenses:		
Research and development	1,002	1,079
Depreciation and amortization	218	230
Selling, general and administrative	3,298	2,854
Total operating expenses	4,518	4,163
Loss from operations	(2,226)	(2,869)
Interest expense	(302)	(172)
Interest income	4	5
Other income (expense), net	(74)	4
Loss before income taxes	(2,598)	(3,032)
Income tax benefit	1,789	-
Net loss	(809)	(3,032)
Other comprehensive income (loss), foreign currency translation adjustments, net of tax	10	(4)
Total comprehensive loss	$(799)	$(3,036)
Net loss per common share, basic and diluted	$(0.02)	$(0.06)
Weighted average common shares outstanding, basic and diluted	52,935,728	48,583,165

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

NEPHROS, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIT)

(In Thousands, Except Share Amounts)

	Common Stock		Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Stockholders' Equity (Deficit)
	Shares	Amount	Capital	Income	Deficit	Total
Balance, December 31, 2015	48,580,355	$49	$119,797	$ 71	$ (117,253)	$ (2,664)
Net loss					(3,032)	(3,032)
Net unrealized losses on foreign currency translation, net of tax				(4)		(4)
Issuance of restricted stock	1,021,763	1				1
Restricted stock issued to settle liability	179,773		51			51
Exercise of warrants	906	-	1			1
Issuance of warrants			389			389
Noncash stock-based compensation			597			597
Balance, December 31, 2016	49,782,797	$50	$120,835	$ 67	$ (120,285)	$ 667
Net loss					(809)	(809)
Cumulative effect of change in accounting principle			12		(12)	-
Issuance of common stock, net of equity issuance costs of $152	4,059,994	4	1,062			1,066
Issuance of common stock	300,000	-	113			113
Exercise of warrants	333,332	-	100			100
Net unrealized gains on foreign currency translation, net of tax				10		10
Issuance of restricted stock	750,099	1				1
Restricted stock issued to settle liability	67,045		30			30
Noncash stock-based compensation			772			772
Balance, December 31, 2017	55,293,267	55	122,924	77	(121,106)	1,950

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

NEPHROS, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In Thousands)

	Years Ended December 31,	
	2017	2016
Operating activities		
Net loss	$(809)	$(3,032)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation of property and equipment	28	19
Amortization of license and supply agreement	190	211
Non-cash stock-based compensation, including stock options and restricted stock	772	551
Non-employee stock-based compensation	-	46
Inventory reserve	-	27
Allowance for doubtful accounts reserve	-	35
Amortization of debt discount	116	53
(Gain) loss on foreign currency transactions	19	(4)
(Increase) decrease in operating assets:		
Accounts receivable	(416)	(17)
Inventory	(195)	(103)
Prepaid expenses and other current assets	30	(10)
Other assets	(10)	-
Increase (decrease) in operating liabilities:		
Accounts payable	268	(76)
Accrued expenses	-	51
Deferred revenue	(70)	(69)
Net cash used in operating activities	(77)	(2,112)
Investing activities		
Purchases of property and equipment	-	(45)
Net cash used in investing activities	-	(45)
Financing activities		
Proceeds from issuance of common stock	1,179	-
Net proceeds from secured revolving credit facility	711	-
Proceeds from issuance of unsecured note	-	1,187
Proceeds from exercise of warrants	100	1
Net cash provided by (used in) financing activities	1,990	1,188

Effect of exchange rates on cash	6	(4)
Net increase (decrease) in cash	1,919	(973)
Cash, beginning of year	275	1,248
Cash, end of year	$2,194	$275
Supplemental disclosure of cash flow information		
Cash paid for interest expense	$148	$113
Cash paid for income taxes	$7	$11
Supplemental disclosure of noncash investing and financing activities		
Purchase of equipment in accrued expenses	$10	$-
Fair value of warrants issued with unsecured note payable	$-	$393
Investment in lease receivable, net	$-	$92
Cost of equipment in sales-type lease	$-	$92
Restricted stock issued to settle liability	$30	$51
Deposit on inventory reclassified from prepaid expenses and other current assets to inventory	$-	$18
Deposit on property and equipment reclassified from prepaid expenses and other current assets to property and equipment	$-	$124

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

NEPHROS, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 - Organization and Nature of Operations

Nephros, Inc. (“Nephros” or the “Company”) was incorporated under the laws of the State of Delaware on April 3, 1997. The Company was founded by health professionals, scientists and engineers affiliated with Columbia University to develop advanced end stage renal disease (“ESRD”) therapy technology and products. Today, the Company has two FDA-cleared products in the hemodiafiltration (“HDF”) market that deliver therapy to ESRD patients. These are the OLpūr mid-dilution HDF filter or “dialyzer,” designed expressly for HDF therapy, and the OLpūr H2H HDF module, an add-on module designed to allow the most common types of hemodialysis machines to be used for HDF therapy.

Beginning in 2009, Nephros introduced an additional, complementary business developing and marketing high performance liquid purification filters, to meet the demand for water purification in certain medical markets. The Company’s filters, generally classified as ultrafilters, are primarily used in hospitals for the prevention of infection from water-borne pathogens, such as legionella and pseudomonas, and in dialysis centers for the removal of biological contaminants from water and bicarbonate concentrate. The Company is also exploring water purification applications in several commercial markets, including food and beverage, data center cooling, and military field applications.

The U.S. facilities, located at 380 Lackawanna Place, South Orange, New Jersey, 07079, are used to house the Company’s corporate headquarters and research facilities.

On June 4, 2003, Nephros International Limited was incorporated under the laws of Ireland as a wholly-owned subsidiary of the Company. In August 2003, the Company established a European office in Dublin, Ireland.

Note 2 - Summary of Significant Accounting Policies

Principles of Consolidation and Basis of Presentation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiary, Nephros International Limited. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates in the Preparation of Financial Statements

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities, at the date of the financial statements, and the reported amount of revenues and expenses, during the reporting period. Actual results could differ materially from those estimates. Included in these estimates are assumptions about the valuation of the warrant liability, the collection of accounts receivable, value of inventories, useful life of fixed assets and intangible assets, assumptions used in determining stock compensation such as expected volatility and risk-free interest rate and the ability of the Company to continue as a going concern.

Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. However, there can be no assurance that the Company will be able to do so. The Company’s recurring losses and difficulty in generating sufficient cash flow to meet its obligations and sustain its operations raise substantial doubt about its ability to continue as a going concern within one year after the date of issuance of these consolidated financial statements. The Company’s consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

The Company’s current plans intended to mitigate the conditions noted above anticipate continued revenue growth, increasing gross profit, and improving cash flows from operations for the period of twelve months following the date of issuance of these consolidated financial statements. In addition, the Company has approximately $2,194,000 of cash and $289,000 available under its secured revolving credit facility as of December 31, 2017 to meet its obligations and sustain its operations.

There can be no assurance, however, that these plans will be achieved and reflected in the Company’s actual performance, nor that the Company’s future cash flows will be sufficient to meet its obligations and commitments. The Company has incurred significant losses from operations in each quarter since inception. If the Company is unable to generate sufficient cash flow from operations in the future to meet its operating requirements and other commitments, the Company will be required to adopt alternatives, such as seeking to raise debt or equity capital, curtailing its planned activities, reducing operating expenses 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 the Company to continue to satisfy its capital requirements.

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NEPHROS, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Recently Adopted Accounting Pronouncements

In July 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2015-11, "Simplifying the Measurement of Inventory," that requires inventory be measured at the lower of cost and net realizable value and options that currently exist for market value be eliminated. The standard defines net realizable value as estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation and is effective for fiscal years beginning after December 15, 2016 and interim periods within those fiscal years with early adoption permitted. The guidance should be applied prospectively. The Company adopted ASU 2015-11 during the three months ended March 31, 2017 and the adoption of this guidance did not have a significant impact on the Company's consolidated financial statements.

In November 2015, the FASB issued ASU No. 2015-17, "Balance Sheet Classification of Deferred Taxes," that requires that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. The current requirement that deferred tax liabilities and assets of a tax-paying component of an entity be offset and presented as a single amount is not affected by this amendment. The new guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016. Early adoption was permitted and the standard may be applied either retrospectively or on a prospective basis to all deferred tax assets and liabilities. The Company adopted ASU 2015-17 during the three months ended March 31, 2017 and the adoption of this guidance did not have a significant impact on the Company's consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, "Improvements to Employee Share-Based Payment Accounting," which simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The guidance was effective for the Company beginning in the first quarter of fiscal year 2017. Early adoption was permitted. The Company adopted ASU 2016-09 during the three months ended March 31, 2017 and elected to recognize forfeitures as they occur. Prior to the adoption of ASU 2016-09, the Company recognized stock-based compensation based on the estimated fair value of the award, net of expected forfeitures. As of January 1, 2017, a cumulative effect adjustment of approximately $12,000 was recognized to reflect the forfeiture rate that had been applied to unvested option awards prior to fiscal year 2017.

Concentration of Credit Risk

The Company deposits its cash in financial institutions. At times, such deposits may be in excess of insured limits. To date, the Company has not experienced any impairment losses on its cash. The Company also limits its credit risk with respect to accounts receivable by performing credit evaluations when deemed necessary.

Major Customers

For the year ended December 31, 2017, four customers accounted for 50% of the Company's revenues. For the year ended December 31, 2016, four customers accounted for 55% of the Company's revenues. As of December 31, 2017, three customers accounted for 38% of the Company's accounts receivable. As of December 31, 2016, two customers accounted for 47% of the Company's accounts receivable.

For the year ended December 31, 2017 and 2016, the following customers accounted for the following percentages of the Company's revenues, respectively:

Customer	2017		2016	
A	20	%	15	%
B	13	%	20	%
C	9	%	11	%
D	8	%	9	%

As of December 31, 2017 and 2016, the following customers accounted for the following percentages of the Company's accounts receivable, respectively:

Customer	2017		2016	
A	18	%	35	%
B	11	%	-	%
C	9	%	12	%

NEPHROS, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Accounts Receivable

The Company provides credit terms to customers in connection with purchases of the Company's products. Management periodically reviews 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 management's best estimate of potential losses. The allowance for doubtful accounts was approximately $1,000 and $50,000 as of December 31, 2017 and 2016, respectively. There was no allowance for sales returns at December 31, 2017 or 2016. During the year ended December 31, 2017, there were write offs of accounts receivable of approximately $42,000, which were fully reserved. There were no write-offs of accounts receivable to bad debt expense during 2016.

Inventory

The Company engages third parties to manufacture and package inventory held for sale, takes title to certain inventory once manufactured, and warehouses such goods until packaged for final distribution and sale. Inventory consists of finished goods and raw materials held at the manufacturers' facilities, and are valued at the lower of cost or net realizable value using the first-in, first-out method.

The Company's 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, the Company will make adjustments to its assumptions for inventory reserve requirements.

License and Supply Rights

The Company's rights under the License and Supply Agreement with Medica are capitalized and stated at cost, less accumulated amortization, and are amortized using the straight-line method over the term of the License and Supply Agreement. The License and Supply Agreement term is from April 23, 2012 through December 31, 2025. The

Company determines amortization periods for licenses based on its assessment of various factors impacting estimated useful lives and cash flows of the acquired rights. Such factors include the expected launch date of the product, the strength of the intellectual property protection of the product and various other competitive, developmental and regulatory issues, and contractual terms. See Note 13 for further discussion.

Patents

The Company has filed numerous patent applications with the United States Patent and Trademark Office and in foreign countries. All costs and direct expenses incurred in connection with patent applications have been expensed as incurred and are included in selling, general and administrative expenses on the accompanying consolidated statement of operations and comprehensive loss.

Property and Equipment, net

Property and equipment, net is stated at cost less accumulated depreciation. These assets are depreciated over their estimated useful lives of three to seven years using the straight line method.

Impairment for Long-Lived Assets

The Company adheres to Accounting Standards Codification (“ASC”) Topic 360 and periodically evaluates whether current facts or circumstances indicate that the carrying value of its depreciable assets to be held and used may not be recoverable. If such circumstances are determined to exist, an estimate of undiscounted future cash flows produced by the long-lived assets, or the appropriate grouping of assets, is compared to the carrying value to determine whether impairment exists. If an asset is determined to be impaired, the loss is measured based on the difference between the asset’s fair value and its carrying value. For long-lived assets, the estimate of fair value is based on various valuation techniques, including a discounted value of estimated future cash flows. The Company reports an asset to be disposed of at the lower of its carrying value or its fair value less costs to sell. There were no impairment losses for long-lived assets recorded for the years ended December 31, 2017 and December 31, 2016.

NEPHROS, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Fair Value of Financial Instruments

The carrying amounts of cash, accounts receivable, secured revolving credit facility, accounts payable and accrued expenses approximate fair value due to the short-term maturity of these instruments.

The carrying amounts of the investment in lease, net, and the unsecured long-term note payable approximate fair value as of December 31, 2017 because those financial instruments bear interest at rates that approximate current market rates for similar agreements with similar maturities and credit.

Revenue Recognition

Revenue related to product sales is recognized in accordance with ASC Topic 605. Four basic criteria must be met before revenue can be recognized: (i) persuasive evidence of 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. Product revenue is recorded net of returns and allowances.

In addition to product revenue, the Company recognizes revenue related to license, royalty and other agreements. During the years ended December 31, 2017 and 2016, the Company recognized approximately $265,000 and $227,000, respectively, related to these agreements of which approximately $210,000 and $183,000, respectively, relates to the License Agreement with Bellco. Royalty revenue recognized related to the Bellco Agreement is recognized as the respective sales occur. License revenue related to the Bellco Agreement is recognized ratably over the term of the agreement. See Note 13 for a further discussion of revenue recognized related to the Company’s License Agreement with Bellco. The Company recognized an additional approximately $55,000 and $44,000 during the years ended December 31, 2017 and December 31, 2016, respectively, from other agreements.

Shipping and Handling Costs

Shipping and handling costs charged to customers are recorded as cost of goods sold and were approximately $35,000 and $24,000 for the years ended December 31, 2017 and 2016, respectively.

Research and Development Costs

Research and development costs are expensed as incurred.

Stock-Based Compensation

The fair value of stock options is recognized as stock-based compensation expense in the Company's consolidated statement of operations and comprehensive loss. The Company calculates employee stock-based compensation expense in accordance with ASC 718. The Company accounts for stock option grants to consultants under the provisions of ASC 505-50, and as such, these stock options are revalued at each reporting period through the vesting period. The fair value of the Company's 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. The fair value of stock-based awards is amortized over the vesting period of the award.

Warrants

The Company accounts for stock warrants as either equity instruments or derivative liabilities depending on the specific terms of the warrant agreement. Stock warrants that allow for cash settlement or provide for anti-dilution of the warrant exercise price under certain conditions are accounted for as derivative liabilities.

Amortization of Debt Issuance Costs

The Company accounts for debt issuance costs in accordance with ASU 2015-03, which requires that costs paid directly to the issuer of a recognized debt liability be reported in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The Company amortizes the debt discount, including debt issuance costs, in accordance with ASC 835, Interest, over the term of the associated debt. See Note 7 for a discussion of the Company's unsecured long-term note payable.

Other Income (Expense), net

Other expense of approximately $74,000 and other income of approximately $4,000 for the years ended December 31, 2017 and 2016, respectively, is primarily due to foreign currency transaction gains and losses.

NEPHROS, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Income Taxes

The Company accounts for income taxes in accordance with ASC Topic 740, which requires accounting for deferred income taxes under the asset and liability method. Deferred income taxes are recognized for the tax consequences of temporary differences by applying enacted statutory tax rates applicable in future years to differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities.

For financial reporting purposes, the Company has incurred a loss in each period since its inception. Based on available objective evidence, including the Company's history of losses, management believes it is more likely than not that the net deferred tax assets will not be fully realizable. Accordingly, the Company provided for a full valuation allowance against its net deferred tax assets at December 31, 2017 and 2016.

ASC Topic 740 prescribes, among other things, a recognition threshold and measurement attributes for the financial statement recognition and measurement of uncertain tax positions taken or expected to be taken in a company's income tax return. ASC 740 utilizes a two-step approach for evaluating uncertain tax positions. Step one, or recognition, requires a company to determine if the weight of available evidence indicates a tax position is more likely than not to be sustained upon audit, including resolution of related appeals or litigation processes, if any. Step two, or measurement, is based on the largest amount of benefit, which is more likely than not to be realized on settlement with the taxing authority. The Company is subject to income tax examinations by major taxing authorities for all tax years subsequent to 2013. During the years ended December 31, 2017 and 2016, the Company recognized no adjustments for uncertain tax positions. However, management's conclusions regarding this policy may be subject to review and adjustment at a later date based on factors including, but not limited to, on-going analyses of and changes to tax laws, regulation and interpretations, thereof.

In December 2017, the SEC issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act ("SAB 118"), which allows the Company to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. Since the Tax Cuts and Jobs Act of 2017 was passed late in the fourth quarter of 2017, and ongoing guidance and accounting interpretations are expected over the next 12 months, the Company considers the accounting of the transition tax, deferred tax re-measurements, and other items to be incomplete due to the forthcoming guidance and ongoing analysis of its final tax positions for the year ended December 31, 2017. The Company expects to complete its analysis within the measurement period in accordance with SAB 118.

The Company received approximately $1,789,000 in December 2017 from the sale of net operating loss and research and development credit carryforwards under the New Jersey Economic Development Authority Technology Business Tax Certificate Transfer Program. These amounts are recorded on the consolidated financial statements as income tax benefit in the year they are received. See Note 9 for further discussion.

Net Income (Loss) per Common Share

Basic income (loss) per common share is calculated by dividing net income (loss) available to common shareholders by the number of weighted average common shares issued and outstanding. Diluted earnings (loss) per common share is calculated by dividing net income (loss) available to common shareholders by the weighted average number of common shares issued and outstanding for the period, plus amounts representing the dilutive effect from the exercise of stock options and warrants, as applicable. The Company calculates dilutive potential common shares using the treasury stock method, which assumes the Company will use the proceeds from the exercise of stock options and warrants to repurchase shares of common stock to hold in its treasury stock reserves.

The following securities have been excluded from the dilutive per share computation as they are antidilutive:

	December 31,	
	2017	2016
Shares underlying options outstanding	6,770,777	4,592,347
Shares underlying warrants outstanding	7,099,010	3,291,149
Unvested restricted stock	799,387	957,336

Foreign Currency Translation

Foreign currency translation is recognized in accordance with ASC Topic 830. The functional currency of Nephros International Limited is the Euro and its translation gains and losses are included in accumulated other comprehensive income. The balance sheet is translated at the year-end rate. The consolidated statements of operations and comprehensive loss are translated at the weighted average rate for the year.

NEPHROS, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Comprehensive Income (Loss)

Comprehensive income (loss), as defined in ASC 220, is the total of net income (loss) and all other non-owner changes in equity (or other comprehensive income (loss)). The Company's other comprehensive income (loss) consists only of foreign currency translation adjustments.

Recent Accounting Pronouncements, Not Yet Effective

In May 2014, the FASB issued Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers," related to revenue recognition. The underlying principle of the new standard is that a business or other organization will recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects what it expects to be entitled to in exchange for the goods or services. The standard also requires more detailed disclosures and provides additional guidance for transactions that were not addressed completely in prior accounting guidance. ASU 2014-09 provides alternative methods of initial adoption, and was effective for fiscal years beginning after December 15, 2016, and interim periods within those annual periods. Early adoption was not permitted. In August, 2015, the FASB issued ASU No. 2015-14, "Revenue from Contracts with Customers: Deferral of the Effective Date". The amendment in this ASU defers the effective date of ASU No. 2014-09 for all entities for one year. In March, April and May 2016, the FASB issued ASU No. 2016-08, ASU No. 2016-10 and ASU No. 2016-12, respectively, which clarify implementation guidance, including the guidance on principal versus agent considerations, performance obligations and licensing and assessments of collectability and noncash considerations. Public business entities, certain not-for-profit entities, and certain employee benefit plans should apply the guidance in ASU 2014-09 to fiscal years beginning after December 15, 2017, including interim reporting periods within that fiscal year. The Company will adopt the new revenue recognition standard as of January 1, 2018 using the modified retrospective method, which requires the cumulative effect of adoption, if any, to be recognized as an adjustment to opening retained earnings in the period of adoption. The majority of the Company's revenue relates to the sale of finished products to various customers, and the adoption will not have any impact on revenue recognized from these transactions. The Company has finalized its analysis of the impact on certain less significant transactions involving third-party arrangements, and as a result of the analysis, the Company will accelerate the remaining approximately $278,000 of deferred revenue to be recognized under the Bellco agreement as a cumulative effect adjustment to opening retained earnings as of January 1, 2018.

In January 2016, the FASB issued ASU No. 2016-01, “Recognition and Measurement of Financial Assets and Financial Liabilities,” that modifies certain aspects of the recognition, measurement, presentation, and disclosure of financial instruments. The accounting standard update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, and early adoption is permitted. The Company will adopt the guidance as of January 1, 2018 and the guidance will not have a significant impact on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, “Leases”, that discusses how an entity should account for lease assets and lease liabilities. The guidance specifies that an entity who is a lessee under lease agreements should recognize lease assets and lease liabilities for those leases classified as operating leases under previous FASB guidance. Accounting for leases by lessors is largely unchanged under the new guidance. The guidance is effective for us beginning in the first quarter of 2019. Early adoption is permitted. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The Company is evaluating the impact of adopting this guidance on its consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, “Measurement of Credit Losses on Financial Instruments,” which replaces the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The guidance is effective for us beginning in the first quarter of fiscal year 2020. Early adoption is permitted beginning in the first quarter of fiscal year 2019. The Company is evaluating the impact of adopting this guidance on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, “Classification of Certain Cash Receipts and Cash Payments,” which clarifies how certain cash receipts and cash payments are presented and classified in the statement of cash flows in order to reduce diversity in practice. The guidance is effective for the Company beginning in the first quarter of fiscal year 2018. Early adoption is permitted. The Company will adopt the guidance as of January 1, 2018 and it will not have a significant impact on its consolidated financial statements.

In November 2016, the FASB issued ASU 2016-17, “Restricted Cash,” which clarifies how restricted cash is presented and classified in the statement of cash flows. The guidance is effective for us beginning in the first quarter of fiscal year 2018. Early adoption is permitted. The Company will adopt the guidance as of January 1, 2018 and it will not have a significant impact on its consolidated financial statements.

NEPHROS, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In January 2017, the FASB issued ASU 2017-01, “Clarifying the Definition of a Business,” which clarifies the definition of a business in a business combination. The guidance is effective for us beginning in the first quarter of fiscal year 2018. Early adoption is permitted. The Company will adopt the guidance as of January 1, 2018 and it will not have a significant impact on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, “Simplifying the Test for Goodwill Impairment,” which simplifies the test for goodwill impairment. The guidance is effective for us beginning in the first quarter of fiscal year 2020. Early adoption is permitted for interim or annual goodwill impairments tests after January 1, 2017. The Company will adopt the guidance as of January 1, 2020 and it will not have a significant impact on its consolidated financial statements.

In May 2017, the FASB issued ASU 2017-09, “Compensation – Stock Compensation” which requires modification accounting to be used on shared-based payment award if the fair value, the vesting conditions, or the classification of the award changes as a result of the change in terms or conditions. The guidance is effective for the Company beginning in the first quarter of fiscal year 2018. The Company will adopt the guidance as of January 1, 2018 and it will not have a significant impact on its consolidated financial statements.

Note 3 - Inventory, net

The Company’s inventory components as of December 31, 2017 and 2016 were as follows:

	December 31,	
	2017	2016
Finished goods	$654,000	$528,000
Raw material	51,000	-
Less: inventory reserve	(31,000)	(49,000)
Total inventory, net	$674,000	$479,000

Note 4 - Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets as of December 31, 2017 and 2016 were as follows:

	December 31,	
	2017	2016
Prepaid insurance premiums	$39,000	$66,000
Security deposit	20,000	-
Other	26,000	29,000
Prepaid expenses and other current assets	$85,000	$95,000

Note 5 - Property and Equipment, Net

Property and equipment as of December 31, 2017 and 2016 was as follows:

	December 31,		Life