Certain statements in this management presentation 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 and the availability of funding sources for continued development of such products and other statements that are not historical facts, including statements which may be preceded by the words “intends,” “may,” “will,” “plans,” “expects,” “anticipates,” “projects,” “predicts,” “estimates,” “aims,” “believes,” “hopes,” “potential” or similar words. Forward-looking statements are not guarantees of future performance, are based on certain assumptions and are subject to various known and unknown risks and uncertainties, many of which are beyond our control. Actual results may differ materially from the expectations contained in the forward-looking statements. Factors that may cause such differences include, but are not limited to, the risks that: (i) we may not be able to find a strategic partner to successfully market our HDF system; (ii) our HDF system may not be accepted by patients or health care providers in the U.S. marketplace; (iii) we may not be able to continue as a going concern; (iv) the voluntary recalls of point of use and DSU in-line ultrafilters used in hospital water treatment applications announced on October 30, 2013 and the related circumstances could subject us to claims or proceedings by consumers, the FDA or other regulatory authorities which may adversely impact our sales and revenues; (v) we face significant challenges in obtaining market acceptance of our products, which could adversely affect our potential sales and revenues; (vi) 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; (vii) 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; (viii) to the extent our products or marketing materials are found to violate any provisions of the FDC Act or any other statutes or regulations, we could be subject to enforcement actions by the FDA or other governmental agencies; (ix) we may not be able to obtain funding if and when needed or on terms favorable to us in order to continue operations; (x) we may not have sufficient capital to successfully implement our business plan; (xi) we may not be able to effectively market our products; (xii) we may not be able to sell our water filtration products or chronic renal failure therapy products at competitive prices or profitably; (xiii) we may encounter problems with our suppliers, manufacturers and distributors; (xiv) we may encounter unanticipated internal control deficiencies or weaknesses or ineffective disclosure controls and procedures; (xv) we may not obtain appropriate or necessary regulatory approvals to achieve our business plan; (xvi) 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; (xvii) we may not be able to secure or enforce adequate legal protection, including patent protection, for our products; and (xviii) we may not be able to achieve sales growth in key geographic markets. More detailed information about the Company and the risk factors that may affect the realization of forward-looking statements, including the forward-looking statements in this management presentation, is set forth in our filings with the SEC, including our Annual Report on Form 10-K for the fiscal year ended December 31, 2014 and our other periodic reports filed with the SEC. We urge you 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.
Commercial Stage Medical Device Company
Hemodiafiltration Devices & High Performance Liquid Filters

OTC Market: NEPH
Market Cap: ~$19 million*
Share Price: $ 0.40*
52 wk range: $ 0.20 – 0.60*
Common Stock: 47.8.M
Fully Diluted Shares: 56.7 M
2015 Revenue: $1.9 M

CEO: Daron Evans

*As of Aug 25, 2016
Investment Highlights

- Ultrafilter business unit has $100M+ revenue potential within 5 years
  - Four new product lines launching in 2016
  - Distributor-based sales model into dialysis clinics, hospitals, food service and industrial
  - ASHRAE 188-2015, a recently approved industry guideline that is generating high-levels of focus on waterborne pathogen protection

- Hemodiafiltration (HDF) System business unit has $100M+ revenue potential with minimal market penetration
  - Dialysis market will shift to HDF in the long term
  - Only 4% market share of dialysis patients = $100M in revenue from disposables from HDF system

- Royalties and profit sharing from license to CamelBak® in Military / Recreation market
We could become cash flow positive at ~$1.6M per quarter
Nephros has Two Core Product Lines

**HDF Systems**

**Hemodiafiltration System:** Advanced renal replacement therapy for end-stage renal disease patients

**Ultrafiltration Products**

**Ultrafiltration Products:** Medical ultrafilters used in hospitals and dialysis clinics and non-medical ultrafilters for commercial, military and recreational markets
Nephros has the ONLY FDA Cleared HDF system available for use in the U.S.

**OLpūr H2H Module:** Converts standard HD Systems to Online HDF Systems

**OLpūr MD220 Dialyzer:** Patented mid-dilution design optimized for HDF treatment
Total Annual U.S. expenditure on ESRD is $47.5 billion (2010 est.)

- ~400,000 patients receive hemodialysis (HD) per year in the U.S.
- Patients are hemodialyzed 156 times annually (3 tx/wk, 52 wk/yr)
- Medicare spent $87,561 per hemodialysis patient annualized in 2010
- ~6,000 dialysis centers, 100,000 machines, 20 million dialyzer filters
- In 2011 changes in Medicare reimbursement have changed practices
  - Medicare implemented a bundled payment system for the cost of the dialysis treatment and dialysis-related drugs, reducing EPO over-use
- A full capitation model is being evaluated by certain insurance companies
  - A full capitation model provides a fixed payment for ALL dialysis patient care costs in a given year, including any hospitalizations

Source: United States Renal Data System (USRDS) and external market research
1. ~600,000 patients with ESRD in 2010’ the US obesity and diabetes problem increases the incidence of end stage renal disease (ESRD) patients
2. 5% in the US would equate to a market with: ~5,000 H2H Modules, ~1,000,000 dialyzer filters sold annually
The clinical value for Online HDF

<table>
<thead>
<tr>
<th>How does it work?</th>
<th>Hemodialysis (HD)</th>
<th>Hemodiafiltration (HDF)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HD systems clear toxins from blood via diffusion using a concentration gradient</td>
<td>HDF systems use diffusion and convection via a pressure gradient and filtration</td>
</tr>
</tbody>
</table>

**Key Biomarker Changes Shown in Nephros Study (n = 28 Patients)**

| Change in β-2-microglobulin during treatment | 19 mg/L @ baseline | 23 mg/L @ 12 wks treatment |
| C-reactive protein | 1.5 mg/dl @ baseline | 1 mg/dl @ 12 wks treatment |

**Key Data from Large European HDF Studies using Other HDF Systems**

| Survival (757 pts.) | - | 34% improvement vs HD |
| CV Mortality (714 pts.) | - | 20% reduction vs HD |
| Hospitalizations (906 pts.) | - | 22% reduction vs HD |
| Charlson Comorbidity Index | Pts w/ higher index did better |

Data Sources: Survival - RISCAVID study; CV Mortality - CONTRAST Study; Hospitalizations - ESHOL HDF Study
The economic value of Online HDF

- HDF therapy is more expensive per treatment
  - Adding an approximately $4,000 per year in per patient costs
- Based on European data from the ESHOL Study, versus patients on normal HD therapy, patients on HDF therapy could:
  - 28% fewer hypotensive episodes; 22% fewer hospital admissions
- Hospitalization is a key cost component
  - The average patient on dialysis was admitted 1.9 times per year and spent 12 days in the hospital in 2010
  - Each day in the hospital in the US costs an average of $4,293 (2013)
- To compete, HDF must be AT LEAST cost neutral by:
  - HDF Patients spending one (1) fewer days in hospital per year
  - Attracting one (1) additional commercial insurance patient per nine (9) patients on HDF

Data Sources: United States Renal Data System 2012 Annual Report; ESHOL Study; International Federation of Health Plans 2013 Comparative Price Report
OLpūr H2H Modules have provided over 2,000 treatments over 15 months

Partner with Vanderbilt to generate patient and work flow data

OLpūr H2H Module software update launched in Jan 2016

Build System 2.0
- Incorporate Feedback to Improve Work Flow
- Engineer for Scalability and Lower Treatment Costs
Nephros has Two Core Product Lines

HDF Systems

Hemodiafiltration System: Advanced renal replacement therapy for end-stage renal disease patients

Ultrafiltration Products

Ultrafiltration Products: Medical ultrafilters used in hospitals and dialysis clinics and non-medical ultrafilters for commercial, military and recreational markets
Ultrapure Filters: Proprietary membrane technology

- **Conventional MicroFilters** (0.2 μm)
  - Endotoxins
    - Clostridium Botulinum
    - Staphylococcal enterotoxin
    - Ricin toxin
  - Viruses
    - Enterovirus
    - Rotavirus
    - Adenovirus
  - Bacteria

- **Nephros Ultrafilters** (0.005 μm)
  - Salts & Minerals
Our proprietary hollow fiber technology optimizes the three elements critical to filter performance.
Addressable Ultrafilter Market presents a significant opportunity

<table>
<thead>
<tr>
<th></th>
<th>1 Hospitals</th>
<th>2 Dialysis Clinics</th>
<th>3 Military / Recreation</th>
<th>4 Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of U.S. Sites</td>
<td>~6,000</td>
<td>~6,600</td>
<td>N/A</td>
<td>50,000+</td>
</tr>
<tr>
<td>Number of Filter Locations</td>
<td>1,000,000+</td>
<td>~125,000</td>
<td>400-500,000+ contract units</td>
<td>150,000+</td>
</tr>
<tr>
<td>Nephros Filter Life</td>
<td>3-6 Months</td>
<td>1 Year</td>
<td>1,000L</td>
<td>3 – 12 Months</td>
</tr>
<tr>
<td>Regulatory / Standards</td>
<td>FDA*</td>
<td>FDA / CE Mark</td>
<td>NSF P248</td>
<td>EPA</td>
</tr>
<tr>
<td>U.S. Market Potential</td>
<td>$400M+</td>
<td>$40M</td>
<td>$75M+</td>
<td>$50M+</td>
</tr>
<tr>
<td>% of Market Using Filters</td>
<td>&lt;10%</td>
<td>&gt;10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Market w/ Nephros Filters</td>
<td>&gt;0.1%</td>
<td>~1%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- IWP Licensed to CamelBak®
- OEM discussions for larger formats
Hospital Market: ASHRAE 188-2015 may increase point-of-use filter market

- Applies to all “human-occupied buildings, excluding single family residential”

- Facilities must have a “Hazard Analysis and Critical Control Point” team and risk management plan

- If an infection, or suspected infection, occurs, then the facility must:
  - Disinfect facility with chemicals, heat, or both
  - Use point of use filtration at certain taps and faucets
## Hospital Market: Better Performance – Partner with Leading Water Treatment Co’s

<table>
<thead>
<tr>
<th></th>
<th>Pall-Aquasafe™</th>
<th>Nephros DSU-H, SSU-H &amp; S100¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regulatory</strong></td>
<td>FDA 510(k) CLEARED as a medical device</td>
<td>FDA 510(k) CLEARED as a medical device</td>
</tr>
<tr>
<td><strong>Filter life</strong></td>
<td>Up to 62 days</td>
<td>From 90 to 180 days</td>
</tr>
<tr>
<td><strong>Sales approach</strong></td>
<td>Partnered with Nalco, Direct Sales</td>
<td>Leverage major distributors: HOH, Garrett-Callahan, Chem-Aqua, TQM</td>
</tr>
</tbody>
</table>

¹ Intended to be used to filter EPA quality drinking water; retain bacteria, viruses and endotoxin; provide ultrapure water for patient washing and drinking; produce water suitable for wound cleaning, cleaning of equipment used in medical procedures and washing of surgeon’s hands; not intended to provide water that can be used as a substitute for USP sterile water.
Hospital Market: There is an App for That!

We built a tool to help our distributor sales force quote, sell and track filter sales

Available on IOS and Android Phone/Pads

Over 4,800 Medical Facilities and Growing!

Tools to help estimate quotes and to help know when to go back for the replacement sale!
Dialysis Market: Superior Filtration, Long Life, Low Cost Per Treatment

- **Locations of Use:**
  - Final polish filter for portable RO unit
    - DSU-D, SSU-D, SSUmini (Launched in March 2016)
  - In-line in between wall box and HD Station
    - DSU-D, SSU-D, SSUmini (Launched in March 2016)
  - Endotoxin Cartridge in RO Loop
    - 10” / 20” / 30” Endotoxin (targeted to launch in Q4 2016)

- **$40M US market potential**
- **Superior Filtration:** 5 nm nominal vs. 50 nm absolute
- **Superior Product Life:** 12 months vs. 3 or 6 months
- **Broad Regulatory Approval:** FDA Cleared & CE Mark
- **Sell into companies who provide and maintain the water systems for dialysis clinics**
Military/Recreation Market: CamelBak® license and OEM for other products

- Our individual water purification devices enable soldiers to filter water from available sources instantly
  - Integrated into CamelBak® backpack product
- Tested to NSF Protocol P248 for removal of biological toxins
- Licensed to CamelBak® for profit sharing and royalties
- Other OEM Military Products:
  - Roving Blue portable water purification system (pre-filter to ozone purification module)
  - Additional companies testing Nephros products
Commercial Market: Strategic Partnership w/ Biocon 1 targets Food Service Industry

AETHER® filtration is used in restaurants, hotels, and convenience stores for ice machines, coffee stations and soda fountains.

AETHER® Water System Filtration
1. Pre-filter
2. Carbon Filter
3. Bacterial Filter (*Nephros*)
4. Scale Filter
Commercial Market: Targeting other potential markets for Nephros technology

- Data centers: used in the cleaning of thermal cooling water
  - High flow requirements (25-50 GPM)
  - Removes copper colloidal and organic particles
  - Flushable ultrafilter targeted for 12 month product life
  - Expect to initiate limited roll-out in Q3 2016

- Restaurants Point of Entry System: food service sites
  - Medium flow requirement (5-10 GPM)
  - Remove particulates, including any bacteria
  - Flushable feature allows for 12 month product life
  - Expect to initiate limited roll-out in Q4 2016

- Reverse osmosis systems – ultrafiltration can reduce the particulate burden on RO systems, extending the life of the membrane

- Cooling towers – reduce particulate and bacteria levels in cooling water to increase the number of cycles water can be used in the system
6 Water Application Patent Families
- DSU Patent - Currently issued in US, Mexico, Israel, Japan and Australia (expires in 2026) and in application for rest of world
- 3 patents have been issued covering portable filter designs with integral pump and a flush pump/field integrity test feature
- 2 additional patents are still pending related to filter design
- Ultrafilters contain “trade secret formula and know how” developed by Medica SpA
- 510(k) clearance (US), Health Canada and CE mark approval for dialysis water

15 Blood Application Patent Families
- Patents issued in US, EU, Japan, Canada and BRIC specifically for MD220 filter and H2H Module
- 12 additional patents have been issued covering aspects of Mid-dilution, HDF, and Infusion Fluid
- 510(k) clearance (US) for HDF system, Health Canada and CE mark approval for MD HDF filter.
### Management Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daron Evans</td>
<td>President &amp; CEO</td>
<td>▪ Managing Director of PoC Capital&lt;br&gt;▪ CFO of Nile Therapeutics, Inc. (now CAPR)&lt;br&gt;▪ Johnson &amp; Johnson, Arthur D. Little, Booz Allen &amp; Hamilton&lt;br&gt;▪ B.S. in Chem Eng, M.S. in Biomed Eng, MBA</td>
</tr>
<tr>
<td>Greg Collins, Ph.D.</td>
<td>VP of R&amp;D</td>
<td>▪ Significant experience in design and development of medical devices&lt;br&gt;▪ Previously served as R&amp;D Product Manager with National Medical Care (Fresenius Medical Care)</td>
</tr>
<tr>
<td>Shane Sullivan</td>
<td>Director of North American Sales</td>
<td>▪ Proven Sales, Sales Management and Business Development experience&lt;br&gt;▪ Regional Manager at Thermo Scientific</td>
</tr>
<tr>
<td>Monet Carnahan</td>
<td>Director of Dialysis Products</td>
<td>▪ 10 years as a Registered Nurse&lt;br&gt;▪ Performance improvement group at Fresenius Medical Care&lt;br&gt;▪ Editor of ANNA Journal</td>
</tr>
<tr>
<td>Jim Summerton</td>
<td>Director of Product Development</td>
<td>▪ Co-author of 18 Nephros patents&lt;br&gt;▪ Proj Mgr at Howmedica (now Stryker), National Medical Care (now Fresenius) and Althin Medical (now Baxter)</td>
</tr>
<tr>
<td>Hollie Johnson</td>
<td>Director of Quality and Regulatory</td>
<td>▪ 15 year of regulatory and quality experience&lt;br&gt;▪ Previously Swissray, Shulka Medical, TyRx (now Medtronic), Osteotech (now Medtronic)</td>
</tr>
</tbody>
</table>
Conclusion and Catalysts

- Expanding ultrafilter product portfolio into common form factors
- Entering non-medical filter markets through strategic partnerships
- Targeting cash-flow positive by end of 2016 / early 2017

- **Ultrafilters: Hospital and Dialysis Clinic Water Markets**
  - $100M+ U.S. market potential
  - Four new product lines launching in 2016

- **Hemodiafiltration (HDF) System**
  - $100M+ revenue potential with minimal market adoption of HDF system
  - Nephros working with partner clinics to generate additional data and improving system to encourage adoption

- **Ultrafilters: Non-Medical Market**
  - Licensed technology to CamelBak® for military / recreation market
  - Strategic relationship with Biocon 1 for food service market
  - Efforts underway to provide OEM filters to equipment manufactures
  - Working with distributors to evaluation new uses and new geographies for Nephros filtration technology
Nephros, Inc. (NEPH)

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