LD Micro Invitational XIII Conference

June 2023

Nasdaq: AEMD

www.AethlonMedical.com

FORWARD LOOKING STATEMENTS

This investor presentation contains forward-looking statements, as that term is defined in the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact contained in this presentation are forward-looking statements, including, without limitation, statements regarding: our ability to enroll patients in our ongoing and planned clinical trials; our ability to successfully complete our clinical trials and achieve the endpoints for the trials, or any future clinical trials with our Hemopurifier or to successfully develop and commercialize the Hemopurifier; our ability to demonstrate the removal of exosomes with the Hemopurifier; the potential synergistic use of the Hemopurifier with chemotherapy, immunotherapy and targeted agents; the ability to demonstrate the removal of SARS-CoV-2/COVID-19 or other viral glycoproteins with the Hemopurifier; and our ability to raise additional capital and to establish collaborations. These forward looking statements are subject to a number of risks, uncertainties and assumptions, including, but not limited to: the timing and success of our clinical trials with the Hemopurifier; our ability to enroll patients in our ongoing and planned clinical trials on a timely basis, or at all; our dependence on our CRO and other third parties; our ability to obtain regulatory approvals within the timeframe expected, or at all; complications associated with product development and commercialization activities; the size and growth of the market(s) for the Hemopurifier and the rate and degree of market acceptance thereof; our ability to raise additional capital; our ability to remain on Nasdaq; and our ability to attract and ~~or~~ retain key management, and members of our board of directors. In light of these risks and uncertainties, and other risks and uncertainties that are described in the Risk Factors section of Aethlon's Form 10-K filed with the SEC on June 28, 2022, subsequent filings with the SEC on Forms 10-Q and 8-K, and other filings that Aethlon makes with the Securities and Exchange Commission from time to time (which are available at http://www.sec.gov), the events and circumstances discussed in such forward-looking statements may not occur, and Aethlon's actual results could differ materially and adversely from those anticipated or implied thereby. Any forward-looking statements speak only as of the date of this presentation and are based on information available to Aethlon as of the date of this presentation.

Investment Highlights

- Focused on combating cancer and infectious diseases with development of first-in-class immunotherapeutic technologies
- Led by seasoned industry executives with extensive development and commercialization experience
- Aethlon’s Hemopurifier® has demonstrated the capture of disease promoting exosomes and circulating viruses in clinical trials and emergency use
- Hemopurifier® designated as a "Breakthrough Device" by U.S. Food and Drug Administration for two indications
- Well capitalized with solid cash position and no debt

Key Financial Highlights

- Approximately $17.5 million in cash as of December 31, 2022
- No debt on balance sheet
- Approximately 22.9 million shares outstanding
- Market capitalization of $7.2 million, as of May 23, 2023
- Traded on Nasdaq under the ticker AEMD

Senior Management Team Has Extensive Experience With Both Medical Devices And Therapeutics

Charles J. Fisher, Jr., MD, FACP, FCCP, FCCM, Chief Executive Officer

- Academic & Industry thought leader in sepsis & inflammation
- Head of critical care—Cleveland Clinic
- 35 years industry development experience
- Senior executive—Lilly, Abbott, Cardiome
- US Army Special Operations, Colonel (retired)

James B. Frakes, MBA, Senior VP & Chief Financial Officer

- Over 30 years public company CFO experience
- Investment banking & venture capital

Steven P. LaRosa, MD, Chief Medical Officer and Chief Scientific Officer

- 25 years Clinical and Research experience in Infectious Diseases, Critical Care, Coagulation, Inflammation, and Extracorporeal Devices

Guy Cipriani, MBA, Senior VP & Chief Business Officer

- 20 years transactional and operational experience with public and private biotech & device companies

Lee Arnold, PhD, Chief Scientific Officer

- Over 30 years experience in molecularly-targeted drug discovery.
- 94 published patents and applications, and more than 39 peer-reviewed publications

Companies

Abbott

Lilly

Johnson & Johnson

TORAY
Innovation by Chemistry

CARDIOME
inspiring science

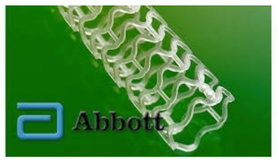
ENTASIS THERAPEUTICS

CASCADIAN THERAPEUTICS

EXTHERA MEDICAL

Example Products

HUMIRA®
adalimumab

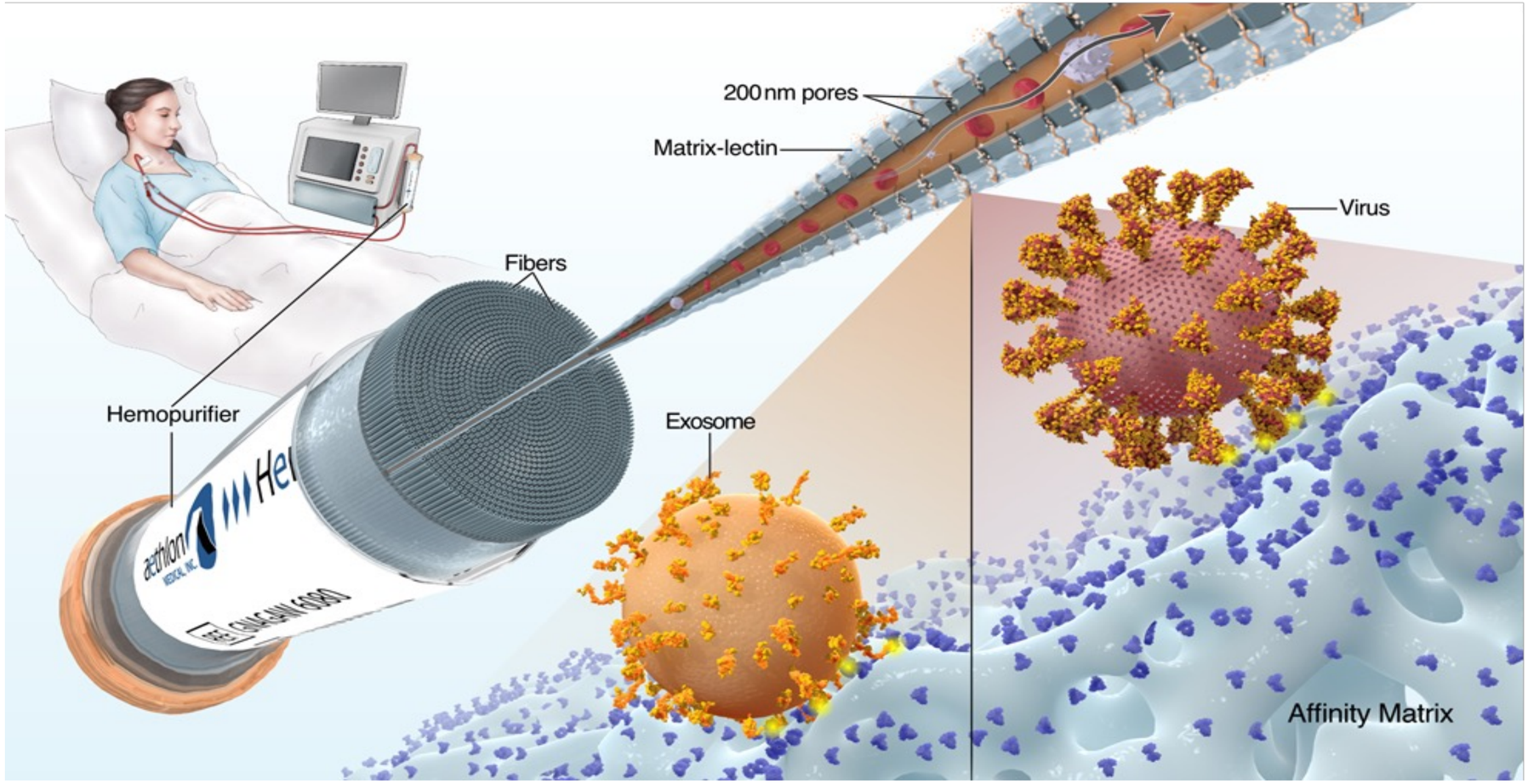


The Aethlon Hemopurifier®

FDA Designated “Breakthrough Device” In Viral And Oncology Indications

- Safely administered in 156 Hemopurifier® sessions in 36 patients
- Proprietary, patented mechanism of action
- Clears life-threatening viruses
- Designed to clear tumor-derived exosomes

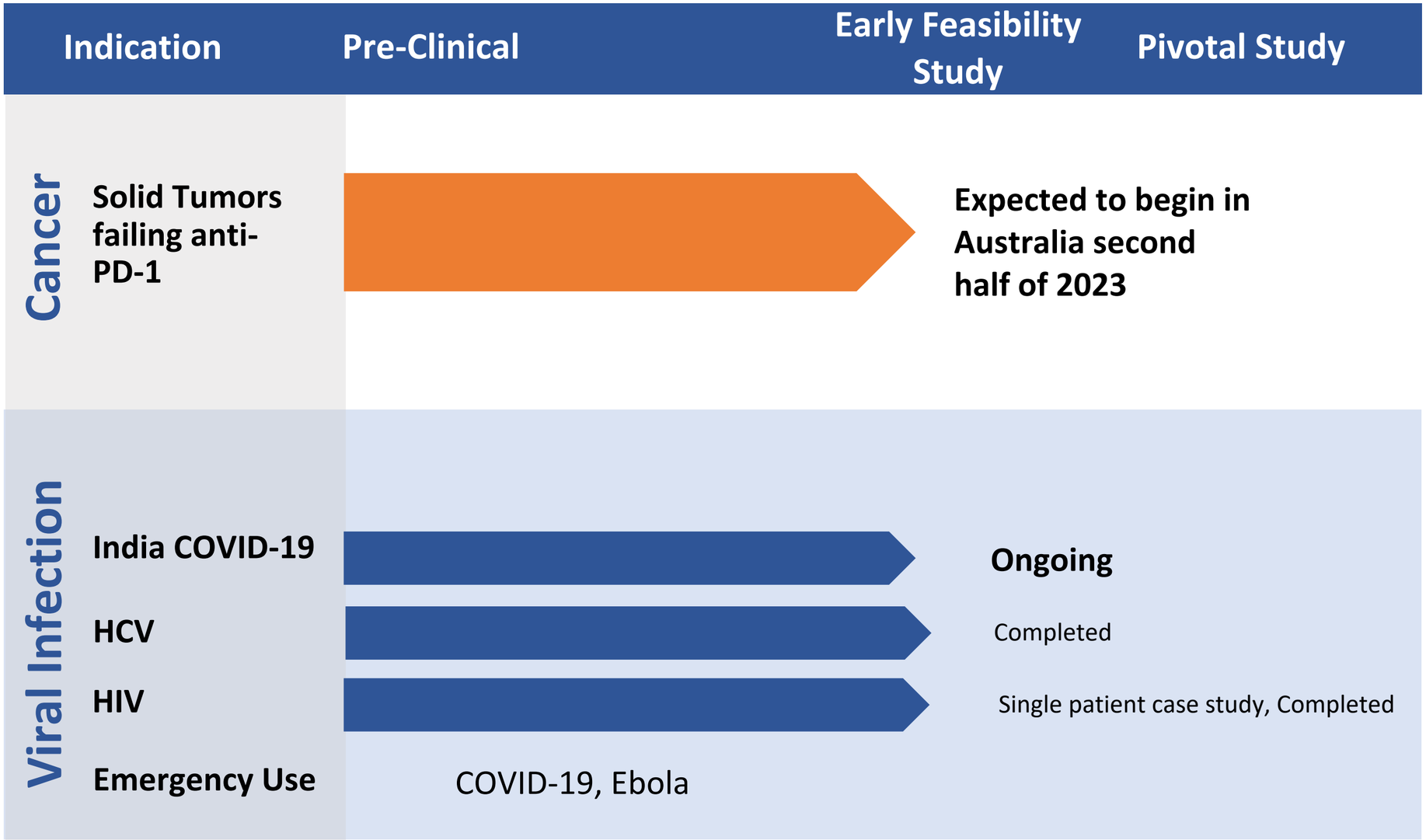
The Hemopurifier's Unique Mechanism Of Action Captures Virus And Exosomes From A Patient's Blood Via Extracorporeal Circuit



Potential Therapeutic Applications:

- Cancer
- Life-threatening viral infections

Pipeline Targeting Multiple Indications



Rationale Exists For The Removal Of Tumor-derived Exosomes By Aethlon's Hemopurifier® To Treat Cancer

Exosomes are 50-150nm extracellular vesicles that are released by all cell types, including tumor cells.

Specifically, exosomes:

- Have been shown to contribute to the spread of cancer (metastases)
- Play a role in immune system evasion by the tumor
- Facilitate chemotherapy resistance
- Interfere with antibody-based treatments (e.g., PD-1 antibody therapies such as Keytruda)

Removal of harmful exosomes may enhance existing cancer treatments

Aethlon's Hemopurifier® has demonstrated exosome clearance in vitro and in patients

In Vitro Removal Of Cancer-derived Exosomes Has Been Demonstrated With A “Benchtop” Hemopurifier®

- A scaled down benchtop version of the Hemopurifier® was operated by recirculating samples of cancer patients' plasma through the hollow fiber filters, ex vivo
- The exosomes remaining in plasma were quantified
- In vitro, the Hemopurifier® was effective for clearing **92-99%** of exosomes
- Demonstrated capture from diverse tumor types including **head and neck** cancer, **melanoma**, **ovarian** cancer, **esophageal** cancer and **breast** cancer

Aethlon is exploring the therapeutic potential of removing tumor-derived exosomes in cancer patients with the Hemopurifier®

Marleau AM, et al.; Cancer Res 2020;80(16 Suppl):Abstract nr 4509.

Clinical Development Plans Underway In Oncology

- A new clinical trial in oncology is planned to include more tumor types, as well as dosing intervals to help direct the development of Aethlon's Hemopurifier® as a treatment option in oncology

- The Company has contracted with NAMSA, a major global CRO, to direct the planned oncology study in Australia and the U.S.

- Exploring oncology trial in India

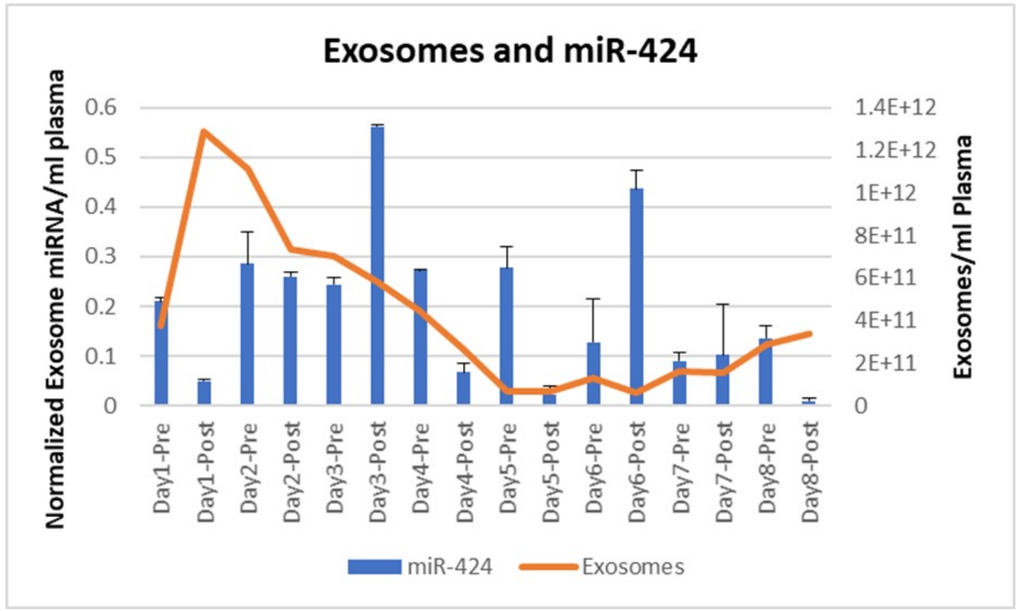
Recent Scientific & Clinical Literature Provide A Rationale For Hemopurifier® Treatment In Severe COVID –19 Infections

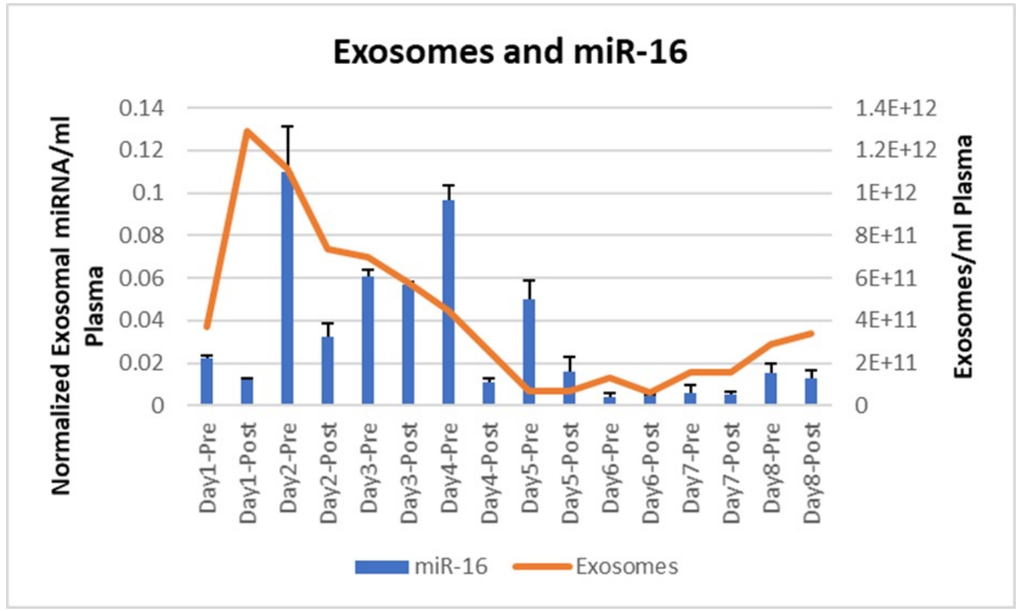
- COVID viremia is detected in **~34% of patients** and is associated with severity, requirement for ICU stay, development of multi-organ failure and poor outcomes
- Direct viral injury to non-pulmonary organs has been noted in a COVID post-mortem study
- **Viremia** in COVID is associated with **immune dysregulation**, **endothelial injury**, **coagulopathy** and **complement activation**
- **Exosomes** and exosomal miRNAs may play a role in **spread of infection** as well as ongoing **inflammation**, development of **coagulopathy** and **lung injury**
- Aethlon's proprietary Affinity Resin **binds all clinically relevant SARS-CoV-2 variants**

Demonstrated removal of SARS-CoV-2, exosomes and exosomal miRNAs in patients treated with the Hemopurifier®

Demonstrated Reduction Of Total Exosomes And Harmful Cargo In An Emergency Use COVID-19 Patient Treated With Hemopurifier®

Total Exosomes and Exosomal miRNA over time:





miR-424 is associated with COVID-associated coagulopathy (excessive blood clotting)

miR-16 is associated with acute lung injury

*COVID-19 plasma viral load was undetectable at onset of HP treatment

Amundson DE, et al. Front Med (Lausanne) 2021;8:744141

COVID-19 India Trial Update: Treatment Of Sars-Cov-2 Infection In Humans With Hemopurifier® Device

- Regulatory agency in India has approved the use of Hemopurifier® devices for clinical trial use
- Studying ICU patients with severe or life-threatening disease
- Designed to include up to 15 patients at up to 3 centers
- 1 patient enrolled and treated
- Trial remains open for enrollment
- Recently received Ethics Board Approval for a second hospital site in India

Hemopurifier® Clinical Development Summary

Oncology

- Safety, feasibility and dose finding study in solid tumors failing anti-PD-1 antibodies
- To be initiated first in Australia and then in the United States

Viral Infections

- Clinical trial of Hemopurifier® in severe COVID-19 infection
- Currently underway in India

Investigating Additional Utility Of The Hemopurifier® Including Long COVID-19

- **Post-acute Sequelae of COVID-19 infection (PASC) also known as “Long COVID-19”**
  - Materials Transfer Agreement (MTA) in place with University of California San Francisco Medical Center to receive plasma samples in patients with PASC, as well as patients with prior COVID-19 without PASC symptoms
  - Extensive in vitro analysis of exosomes planned to determine viability of PASC as a therapeutic target for the Hemopurifier®

Investment Summary

- Developing novel, patented Hemopurifier® blood purification device
  - Early trials have demonstrated virus and exosome clearance both in vitro and in patients
- Granted two FDA “Breakthrough Device” designations
- Focused on multiple therapeutic targets in cancer and viral disease
  - Solid tumors failing anti-PD1
  - COVID-19
- Ongoing and planned U.S. and international clinical trials (India, Australia~~, U.S.)~~
- Experienced management team and solid cash position

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This presentation may contain predictions, estimates, and other forward looking statements that involve risks and uncertainties, including whether and when our products are successfully developed and introduced; market acceptance of the Aethlon Hemopurifier® and other product offerings; regulatory delays, manufacturing delays, and other risks detailed in our SEC filings, which are accessible at www.sec.gov or on our website: www.AethlonMedical.com