aethlon MEDICAL, INC.

Sequire Biotechnology Conference

February 2023

11555 Sorrento Valley Rd, Suite 203

San Diego, California 92121

619.941.0360

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 planned clinical trials; our ability to successfully complete the planned trials and achieve the endpoints for the trials, or any future studies with the 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; the ability to establish collaborations and to raise capital; and our financial strength and guidance. These statements are subject to a number of risks, uncertainties and assumptions, including, but not limited to: the risks associated with COVID-19 and other pandemic risks; the timing and success of Aethlon's studies and trials; our ability to enroll patients in our studies and trials on a timely basis, or at all; our dependence on our CRO and other third parties; our ability to obtain regulatory approval 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 vis-à-vis alternative therapies; and Aethlon's ability to attract or retain key management, members of the board of directors and personnel. 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 10-Q filings, 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.

Aethlon Medical, Inc.

- **Headquartered in San Diego, CA (NASDQ: AEMD)**
- **Focused on combating cancer and infectious diseases with immunotherapeutic technologies**
- **Aethlon's Hemopurifier has demonstrated the capture of disease promoting exosomes and circulating viruses in clinical trials and emergency use**

Aethlon's 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

Thomas L. Taccini, VP Manufacturing & Product Development

- Over 35 years experience in engineering
- Product development and quality systems

Companies

Abbott
Lilly
Johnson & Johnson
TORAY Innovation by Chemistry
CARDIOME inspiring science
ENTASIS THERAPEUTICS
CASCADIAN THERAPEUTICS
EXTHERA MEDICAL

Example Products

HUMIRA® adalimumab

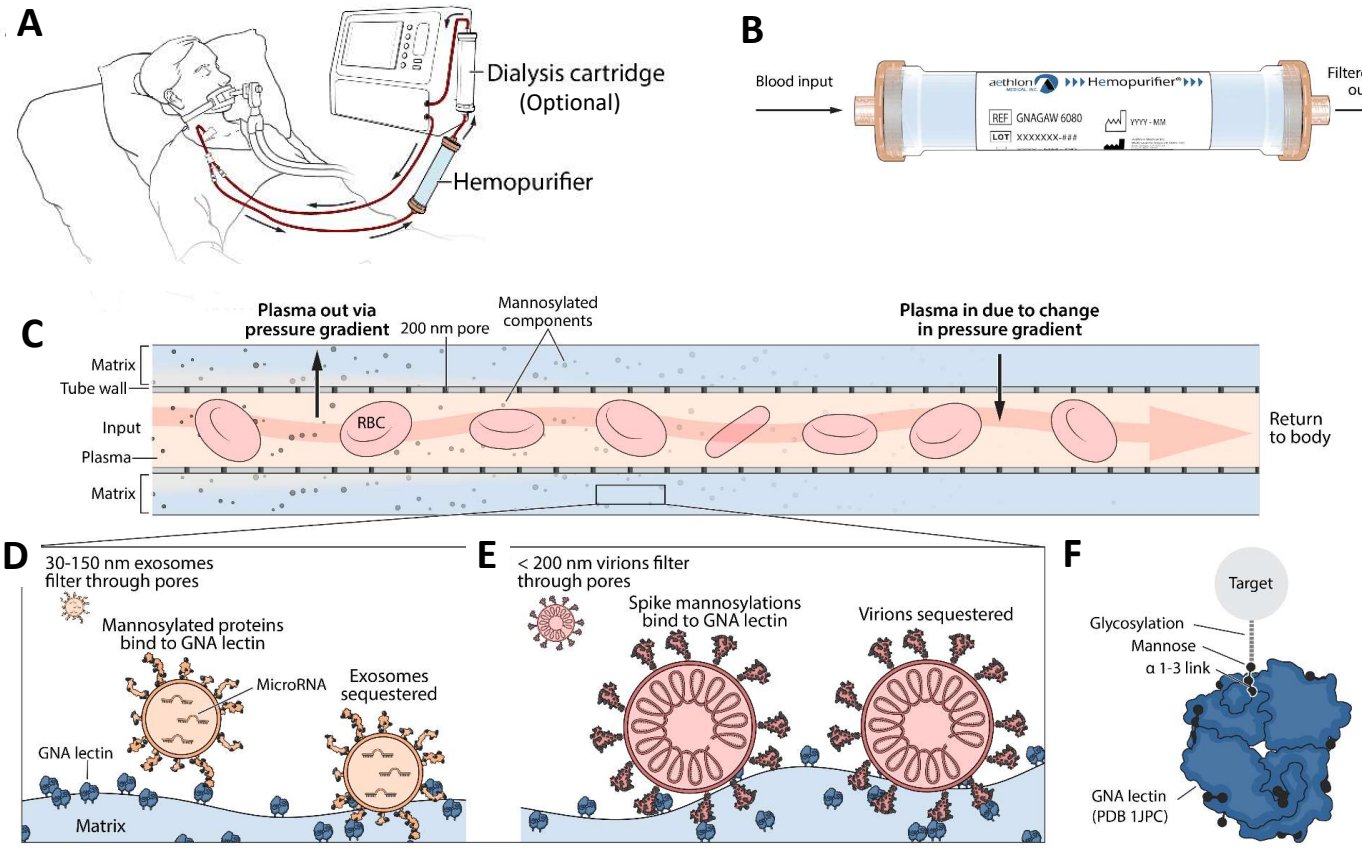
The Aethlon Hemopurifier®

FDA designated “Breakthrough Device”

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

* Mannose is a ”sugar” that coats viruses and exosomes

The Hemopurifier's unique mechanism of action captures virus and exosomes from a patient's blood via extracorporeal circuit



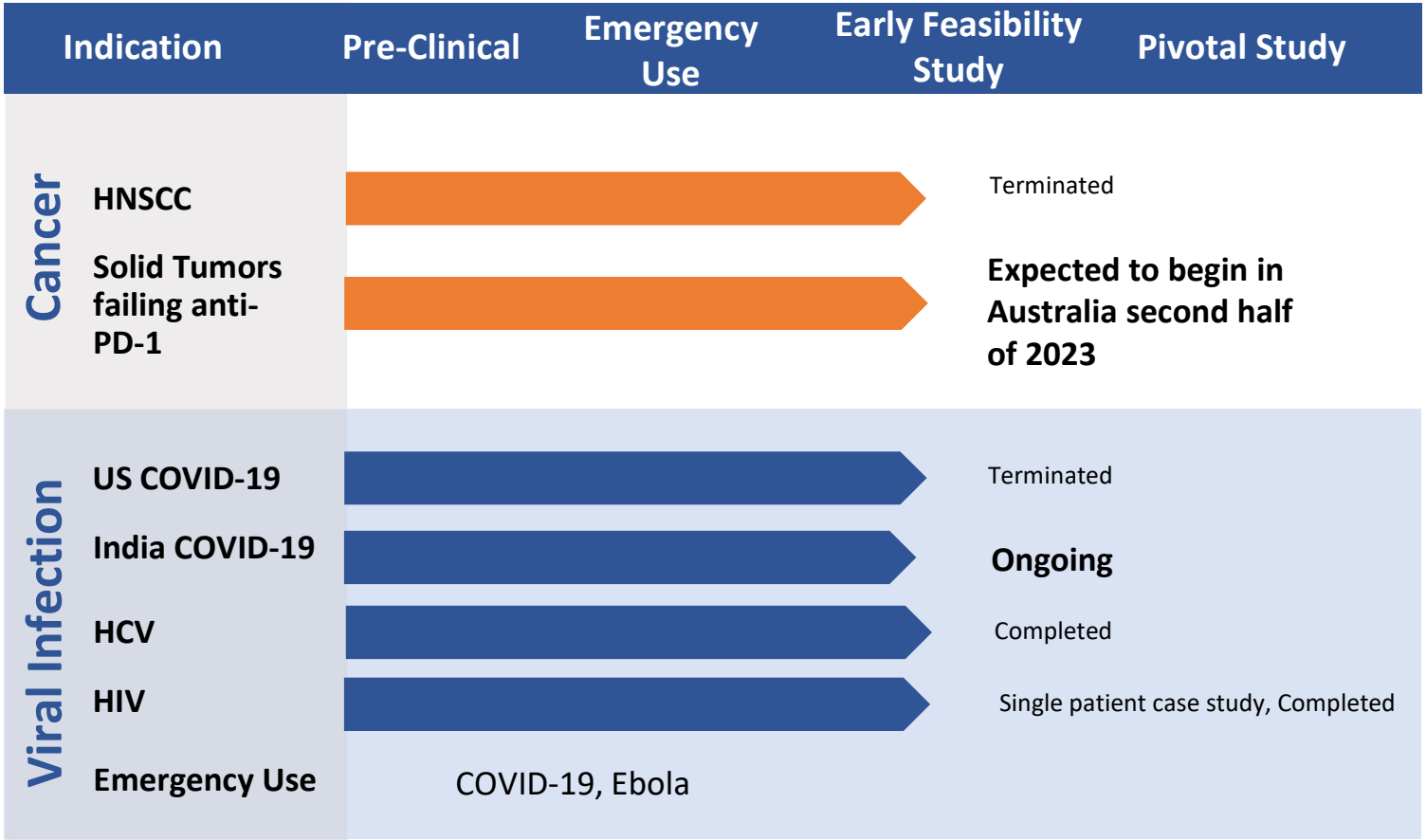
The Hemopurifier captures enveloped viral pathogens and exosomes in circulating blood

- Hollow-fiber plasma separator filled with proprietary "affinity resin" **[figures B, C]**
- Size restriction: < 200nm diameter to access "affinity resin" [figure C]
- Affinity resin captures mannosylated nano particles (e.g., enveloped virus, exosomes) **[figure D, E]**
- Compatible with existing dialysis or CRRT infrastructure **[figure A]**

Potential Therapeutic Applications:

- Life-threatening viral infections
- Cancer

Hemopurifier Clinical Pipeline – Safety, Feasibility, Proof of Concept



Extensive 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:

- Communicate with other cells to modulate local and distant microenvironment
- Allow tumor growth and tissue invasion
- Promote metastasis by establishing pre-metastatic niches
- Promote angiogenesis
- Facilitate chemotherapy resistance (e.g., drug expulsion of chemotherapy from tumor cells)
- Suppress cytotoxic T cell tumor killing
- Interfere / bind to immunotherapeutic agents (e.g., PD-1 antibodies)

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

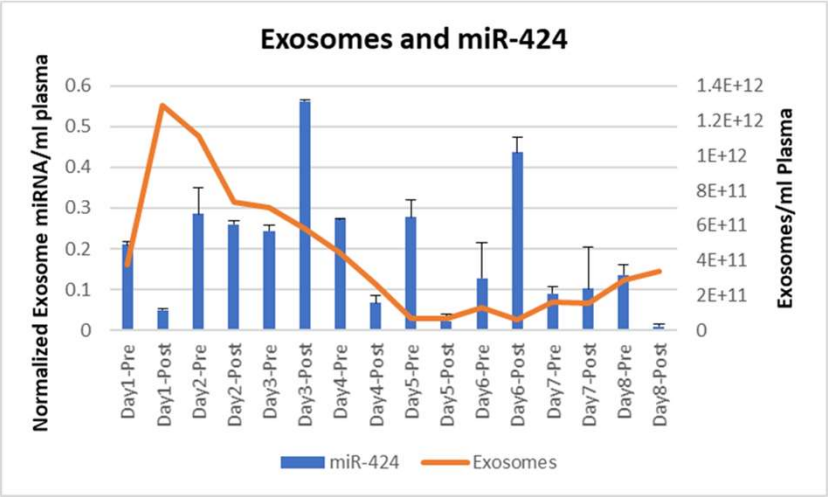
- A scaled down benchtop version of the Hemopurifier was operated by recirculating samples of cancer patients' plasma through the hollow fiber filters ex vivo
- The exosomes remaining in plasma were quantified
- In vitro, Hemopurifier was effective for clearing **92-99%** of exosomes
- Demonstrated capture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

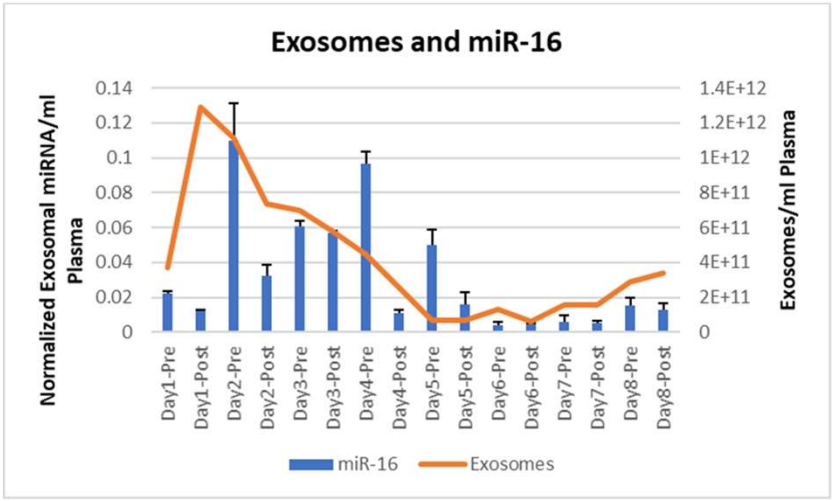
Aethlon is exploring the therapeutic potential of removing tumor-derived exosomes in cancer patients with the Hemopurifier

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

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

Clinical Development: Hemopurifier Treatment for Oncology

- Initial Early Feasibility study in head and neck cancer terminated due to lack of patient recruitment - two subjects were enrolled at University of Pittsburgh Medical Center
- A new clinical trial in oncology is planned to include more tumor types, as well as dosing intervals to help direct the development of our Hemopurifier as a treatment option in oncology
- We have contracted with NAMSA, a major global CRO, to direct our planned oncology study in Australia and the US

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 GNA 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

COVID-19 US IDE study update: Treatment of SARS-CoV-2 infection in humans with Hemopurifier device

- **The FDA approved an Early Feasibility Study**
  - ICU patients with severe or life-threatening disease
  - 1 patient enrolled
  - Terminated study due to lack of COVID-19 patients in the ICU
- **While our Investigational Device Exemption (IDE) related to severe viral infections remains open, we have terminated the U.S. COVID clinical trial**
- **Short term supply issue related to a component change, impacts US only**
- **No supply issues outside the US**

COVID-19 India trial update: Treatment of SARS-CoV-2 infection in humans with Hemopurifier device

- ICU patients with severe or life-threatening disease
- Up to 15 patients at up to 3 centers
- 1 patient enrolled and treated
- Regulatory agency has approved the use of Hemopurifier devices for clinical trial use
- Trial remains open for enrollment

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

US Government funded preclinical studies focused on identifying exosomes in cancer patients

- **Phase I contract from NCI — Completed**
  - "Device Strategy for Differential Isolation of Oncosomes* and Non-Malignant Exosomes"
- **NCI SBIR Grant — Completed**
  - "The Hemopurifier Device for Targeted Removal of Breast Cancer Exosomes from the Blood Circulation"
- **Phase II NCI SBIR Contract — Completed**
  - $1.8 million over 3 years
  - "Technologies for Differential Isolation of Exosomes and Oncosomes"
- **NIDCR RO1 — July 2020 – Terminated**
  - Collaboration with University of Pittsburgh, MGH, University of Hawaii
  - $3.5 million over 5 years for the overall project paid to the University of Pittsburgh as prime contractor
  - "Depleting exosomes to improve responses to immune therapy in head and neck squamous cell carcinoma"

*Oncosomes are exosomes from tumor cells

Ongoing preclinical studies to expand potential utility of Hemopurifier

- **Monkeypox (mPox)**
  - Experiment underway at Battelle Labs to examine the in vitro removal of the currently circulating strain of mPox by a miniature version of the Aethlon Hemopurifier
- **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

Strong Cash Position

- As of September 30, 2022 Company's cash balance was approximately $19.6 million
- No debt
- NASDAQ: AEMD ~22.9 million shares outstanding
- Current market cap ~$11 million

Summary

- Unique Hemopurifier blood purification device
- Experienced management team; strong cash position
- Two FDA Breakthrough Device designations
- Planned and ongoing international clinical trials
- Multiple therapeutic targets in cancer and viral disease
- Demonstrated virus and exosome clearance in vitro and in patients

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