H.C. Wainwright 23rd Annual Global Investment Conference Presentation

September 2021

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San Diego, California 92121

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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, including, without limitation: the ability to enroll patients in the Early Feasibility Studies; the ability to successfully complete the Early Feasibility Studies and achieve the endpoints for the studies, or any future studies with the Hemopurifier or to successfully develop and commercialize the Hemopurifier; the 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 glycoproteins with the Hemopurifier; the potential initiation of a SARS-CoV-2 clinical trial; the ability to establish collaborations and to raise capital; and 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; the Early Feasibility Studies and potential safety and other complications thereof; the ability to obtain regulatory approval within the timeframe expected, or at all; complications associated with product development and commercialization activities; the scope, progress and expansion of developing Aethlon's product candidates; the size and growth of the market(s) therefor 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 24, 2021, subsequent 10-Q filings, and other filings that Aethlon makes with the SEC 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.

The Aethlon Hemopurifier®

FDA designated “Breakthrough Device”

- Safely administered in > 150 patient treatments
- Proprietary mechanism of action
- Clears life-threatening glycosylated viruses
- Designed to clear cancer promoting exosomes

Aethlon Medical, Inc.

- Headquartered in San Diego, CA (NASDQ: AEMD)
- Focused on combating infectious disease and cancer with immunotherapeutic technologies
- Augment the body's natural immune defenses by eliminating life-threatening disease targets that are often shielded from the immune system and not well addressed by traditional drug therapies
- Hemopurifier® captures circulating viruses, bacterial toxins and disease promoting exosomes through affinity attachment to a unique structure that cloaks these targets from immune detection

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

- 29 years public company CFO experience
- Investment banking & venture capital

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

- 23 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

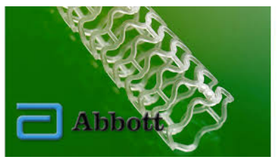
ENTASIS THERAPEUTICS

CASCADIAN THERAPEUTICS

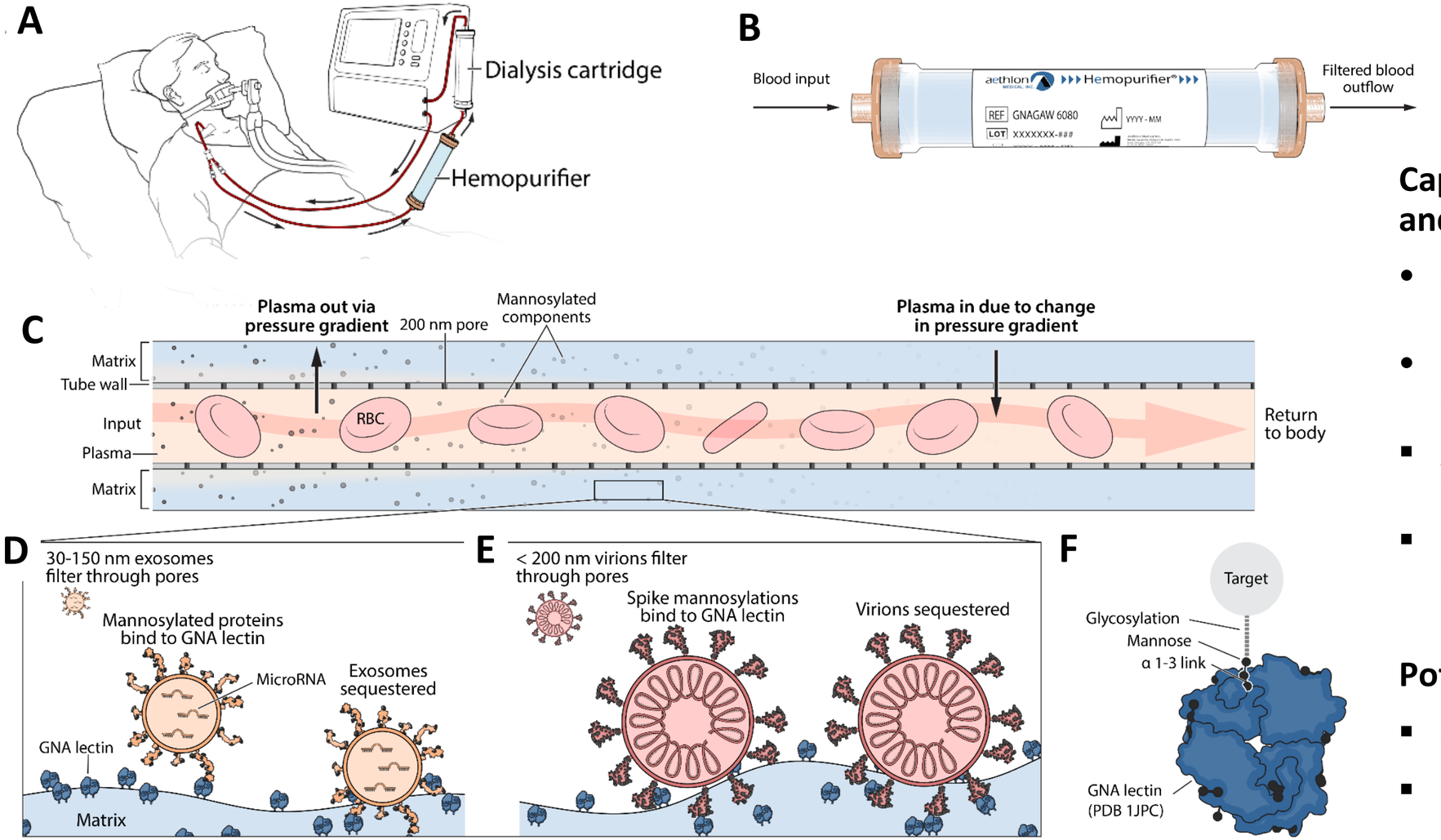
EXTHERA MEDICAL

Example Products

HUMIRA®
adalimumab



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



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]**
- Compatible with existing dialysis or CRRT infrastructure **[figure A]**

Potential Therapeutic Applications:

- Life-threatening viral infections
- Cancer

Hemopurifier® Pipeline

Indication		Pre-Clinical	Early Feasibility Study	Pivotal Study
Oncology	HNSCC	IDE Protocol – Tx Before Keytruda		
	Other Solid Tumors	TBD		
Viral Infection	Covid-19	Emergency Use & IDE Protocol		
	Ebola	Emergency Use		
	HCV	Safety Testing		
	HIV	Emergency Use & IDE Protocol		
	Other	TBD		

Hemopurifier® Treatment for Oncology

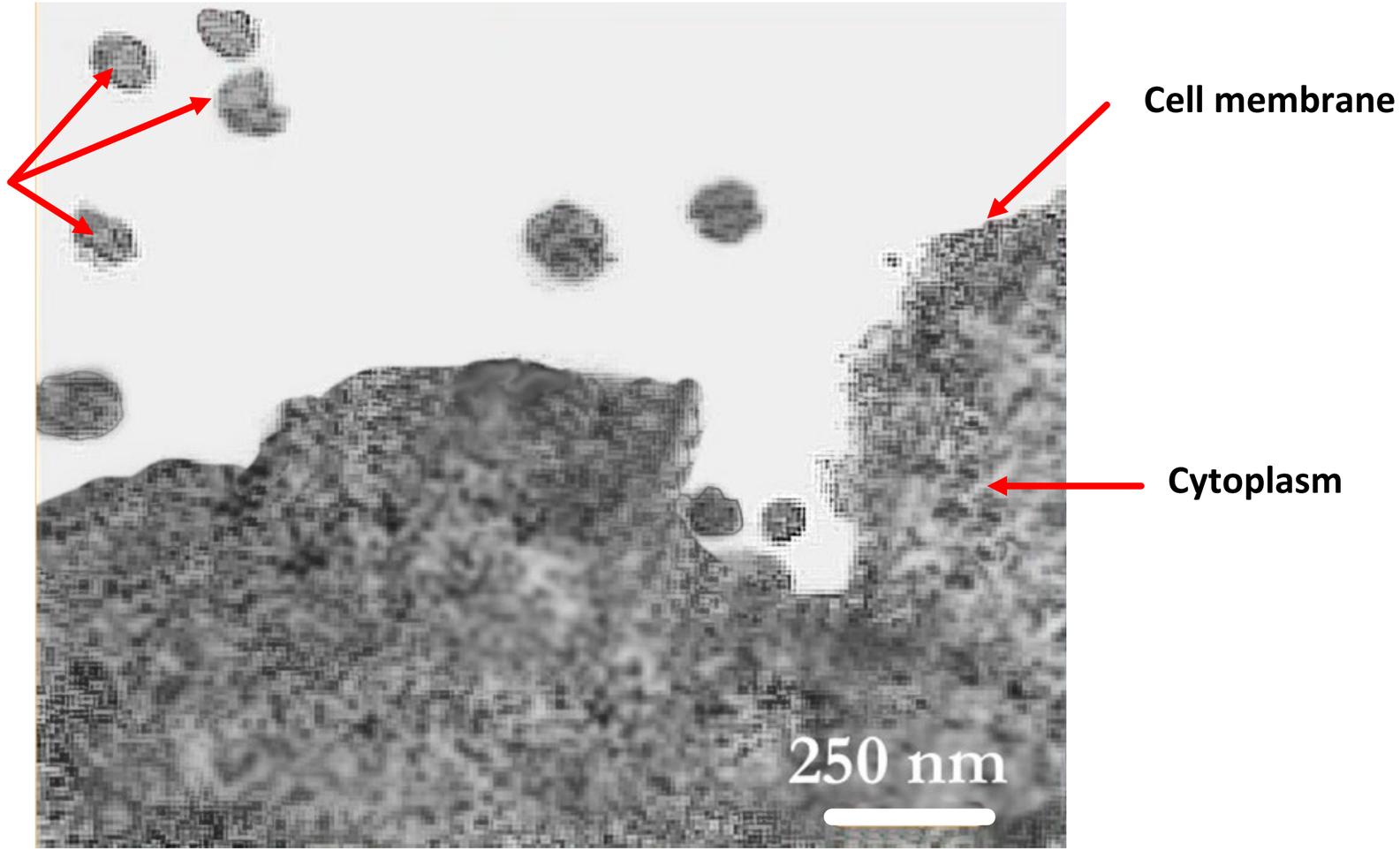
- **Clearance of cancer promoting exosomes**
- **Potentially synergistic with immunotherapy, targeted agents, chemotherapy**
- **Multiple potential clinical targets**
  - Head and neck, breast, gastrointestinal, melanoma, other solid tumors
- **Well characterized markets, development pathways & endpoints**
- **Early feasibility study in head and neck cancer initiated**
  - First patient treatment at University of Pittsburgh Medical Center in December 2020

Rationale for exosome removal in cancer

- **Key mediators in cell communication and potent drivers in healing and repair**
- **Exosomes shed from both normal and malignant cells**
- **Tumor derived exosomes promote metastasis, treatment resistance, immune suppression**
- **No other known treatment in development for depletion of exosomes**
- **Implicated in viral disease – inflammation, coagulopathy**
- **Hemopurifier® has demonstrated exosome clearance in patients[1]**

[1] Source: company data; https://assets.researchsquare.com/files/rs-571347/v1/f8b6099d-22f0-4431-b065-0aba476b154b.pdf?c=1622643147

Tumor-derived exosomes are released by tumor cells



National Cancer Institute studies underway or completed

- **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 — September 2019**
  - $1.8 million over 2 years
  - “Technologies for Differential Isolation of Exosomes and Oncosomes”
- **NIDCR RO1 — July 2020**
  - Collaboration with University of Pittsburgh, MGH, UHawaii
  - $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”

Early Feasibility Study in Head and Neck Cancer

- **NCT #04453046**
- **University of Pittsburgh Hillman Cancer Center**
- **10-12 subjects with advanced or metastatic HNSSC**
- **Combination with pembrolizumab (Keytruda®)**
  - Keytruda approved June 2019 in front line setting
- **4-hour Hemopurifier treatment immediately prior to Keytruda**
- **Endpoints: Safety, exosome clearance and characterization**
  - ORR (Objective Response Rate), PFS (Progression Free Survival) , OS (Overall Survival)
- **First patient treated in December 2020**

Rationale for Hemopurifier® treatment of viral infections

- **Demonstrated clearance of multiple different viruses in vitro**
  - HIV, dengue, West Nile, influenza, Ebola, herpes, MERS
- **Safety and viral clearance in four human clinical trials in HCV**
- **Over 120 Hemopurifier applications in humans with HCV with no safety issues**
- **Single patient treatments in Ebola and HIV**
  - Open protocol for Emergency Use in US and Canada for Ebola
- **IDE Supplement for COVID-19 - June 2020**

Rationale for Hemopurifier® treatment of SARS-CoV-2/COVID-19

- Circulating virus correlates with cytokine levels and poor outcome
- Hemopurifier has been shown to clear MERS, another coronavirus
- Clears SARS-CoV-2/COVID-19 glycoproteins based on in vitro experiments
- IDE supplement for COVID-19 approved June 17, 2020
- New Feasibility Study starting
- Approved for 20 sites—40 patients in total
- ICU patients with severe or life-threatening symptoms and central IV access

Demonstrated removal of virus and disease related exosomes from expanded access treatment of two emergency use Covid-19 patients [1]

[1] Source: https://assets.researchsquare.com/files/rs-571347/v1/f8b6099d-22f0-4431-b065-0aba476b154b.pdf?c=1622643147

Strong Cash Position

- **June 30, 2021 Company's cash balance was approximately $25.1 million**
- **No debt**
- **NASDAQ: AEMD ~15.4 million shares outstanding**

Summary

- Unique Hemopurifier® blood purification device
- Two FDA Breakthrough Therapy Designations
- Multiple therapeutic targets in cancer and viral disease
- Demonstrated virus and exosome clearance in patients
- Management team with well over 100 years healthcare experience

Upcoming News 2021-2022

Aethlon Hemopurifier®

- IDE supplement approved for SARS-CoV-2/COVID-19 ✔
- Emergency treatment of SARS-CoV-2/COVID-19 patients ✔
- EFS initiated for head and neck cancer and first patient treated ✔

- Expected News:
- Updates on SARS-CoV-2 trial
- Early clinical data from EFS trials
- Proof of concept for other solid tumors

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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