

Image of Ebola viruses exiting host cells - Courtesy of NIAID

RODMAN & RENSHAW CONFERENCE

JIM JOYCE - CHAIRMAN, CEO

NASDAQ - AEMD / SEPTEMBER 11, 2017



FORWARD LOOKING STATEMENTS

The following 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

TO ADDRESS UNMET NEEDS IN GLOBAL HEALTH & BIODEFENSE

MISSION

TO SAVE LIVES

OUR LEAD THERAPEUTIC CANDIDATE



A FIRST-IN-CLASS THERAPEUTIC TECHNOLOGY TO BE ADVANCED THROUGH THE FDA

THE HEMOPURIFIER®

A BROAD-SPECTRUM VIRUS TREATMENT CANDIDATE

DESIGNED FOR THE SINGLE-USE REMOVAL OF INFECTIOUS VIRUSES FROM BLOOD



FDA EXPEDITED ACCESS PATHWAY PROGRAM SUBMISSION

- WE SUBMITTED AN EXPEDITED ACCESS PATHWAY (EAP) PROGRAM SUBMISSION TO THE FDA ON AUGUST 11, 2017
- THE FDA ESTABLISHED THE EXPEDITED ACCESS PATHWAY (EAP) PROGRAM FOR SELECT MEDICAL DEVICES THAT DEMONSTRATE THE POTENTIAL TO ADDRESS LIFE-THREATENING OR IRREVERSIBLY DEBILITATING, UNMET MEDICAL NEEDS
- AN OBJECTIVE OF THE EAP PROGRAM IS TO HELP PATIENTS HAVE MORE TIMELY ACCESS TO EAP DESIGNATED MEDICAL DEVICES BY EXPEDITING THEIR DEVELOPMENT, ASSESSMENT AND REVIEW

THE AETHLON HEMOPURIFIER®



THE UNITED STATES FOOD AND DRUG ADMINISTRATION (FDA) HAS DESIGNATED THE AETHLON HEMOPURIFIER® TO THE EXPEDITED ACCESS PATHWAY (EAP) PROGRAM RELATED TO THE TREATMENT OF LIFE-THREATENING VIRUSES THAT ARE NOT ADDRESSED WITH AN APPROVED THERAPY

INFECTIOUS HUMAN VIRUSES

A SIGNIFICANT UNMET NEED IN GLOBAL HEALTH & BIODEFENSE

- ~300 VIRUSES ARE INFECTIOUS TO HUMANS
 - ONLY 9 ARE ADDRESSED WITH AN APPROVED ANTIVIRAL DRUG AGENT
 - JUST 1 OF 13 CATEGORY "A" VIRUSES ARE ADDRESSED WITH A TREATMENT COUNTERMEASURE IN THE STRATEGIC NATIONAL STOCKPILE
 - 3-4 NEW HUMAN VIRUSES ARE IDENTIFIED EACH YEAR*
 - GLOBAL WARMING, URBAN CROWDING AND TRANSCONTINENTAL TRAVEL ARE FUELING AN INCREASED EMERGENCE OF PANDEMIC VIRUS OUTBREAKS
 - NO ANTIVIRAL STRATEGY TO ADDRESS VIRUSES ENGINEERED BY MAN AS AGENTS OF BIOTERRORISM

* *Center for Immunity and Evolution, University of Edinburgh*

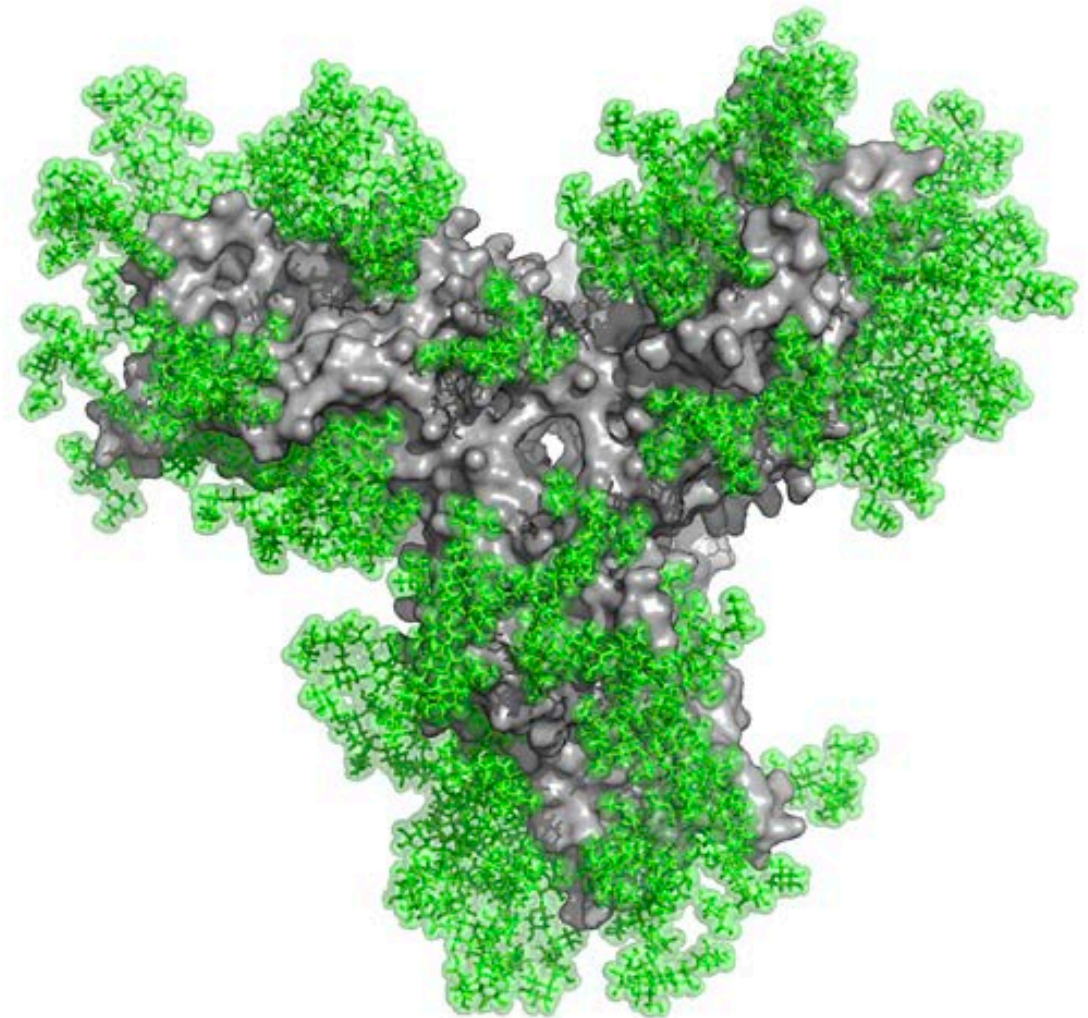
*" A GENETICALLY ENGINEERED VIRUS COULD KILL MORE PEOPLE
THAT NUCLEAR WEAPONS - AND YET NO COUNTRY ON EARTH IS
READY FOR THE THREAT"*

*BILL GATES
MUNICH SECURITY CONFERENCE
FEBRUARY 18, 2017*

HEMOPURIFIER® ATTRIBUTES

RETHINKING THE TREATMENT OF VIRAL PATHOGENS

- STRUCTURE-SPECIFIC NOT DISEASE-SPECIFIC MECHANISM OF ACTION
- GLYCAN SHIELD (THE IMMUNE CLOAK) CAPTURE MECHANISM
- ELIMINATES HIGHLY GLYCOSYLATED VIRUSES FROM THE ENTIRE CIRCULATORY SYSTEM
- COMPANION ASSAY REINFORCES MECHANISM PERFORMANCE
- DEPLOYED ON AN ESTABLISHED GLOBAL INSTRUMENT NETWORK



*Image of HIV glycan shield in green
Courtesy of Oxford University*

THE AETHLON HEMOPURIFIER®

FROM THEORETICAL CONCEPT TO CLINICAL REALITY



- ☑ >16 *IN VITRO* VIRUS CAPTURE STUDIES
- ☑ FOUR INVESTIGATIONAL HUMAN STUDIES (OUTSIDE U.S.)
- ☑ RECENTLY CONCLUDED AN FDA APPROVED HUMAN FEASIBILITY STUDY
- ☑ RECEIVED EXPEDITED ACCESS PATHWAY (EAP) DESIGNATED FROM THE FDA

GOAL OF OUR EAP PROGRAM SUBMISSION

- TO ACCELERATE THE REGULATORY ADVANCEMENT OF OUR HEMOPURIFIER®
- TO ESTABLISH THE COMMERCIALIZATION PATHWAY AGAINST LIFE-THREATENING VIRUSES THAT ARE NOT ADDRESSED WITH APPROVED THERAPIES
- **TO DEMONSTRATE THAT FDA WILL ALLOW OUR PRODUCT "INDICATION OF USE" TO BE STRUCTURE-SPECIFIC VS. A DISEASE-SPECIFIC**



*The Center for Devices and Radiological Health (CDRH) of the Food and Drug Administration (FDA) has received the above submission dated August 11, 2017, including your request for Expedited Access Pathway (EAP) designation. The proposed indications for use includes **"The Hemopurifier is a single-use device indicated for the treatment of life-threatening highly glycosylated viruses that are not addressed with an approved treatment."** We are pleased to inform you that your combination product and proposed indication for use meets the criteria and has been granted EAP designation.*

HEMOPURIFIER® CAPTURE VALIDATIONS OF HIGHLY GLYCOSYLATED VIRUSES

Hemopurifier® in vitro capture validations

Bioterror & Pandemic Threat Viruses

- ☑ Ebola (CDC, USAMRIID & Human Experience)
- ☑ Lassa (Southwest Foundation for Biomedical Research)
- ☑ MERS-CoV (Goethe University Research Institute)
- ☑ Smallpox (Battelle Memorial Research Institute)
(based on Monkeypox & Vaccinia models)



Hemopurifier® in vitro capture validations

Mosquito-Borne Viruses

- ☑ Chikungunya (National Institute of Virology)
- ☑ Dengue (National Institute of Virology)
- ☑ West Nile (Battelle Memorial Research Institute)
- ☑ Zika (Aethlon Research Team)

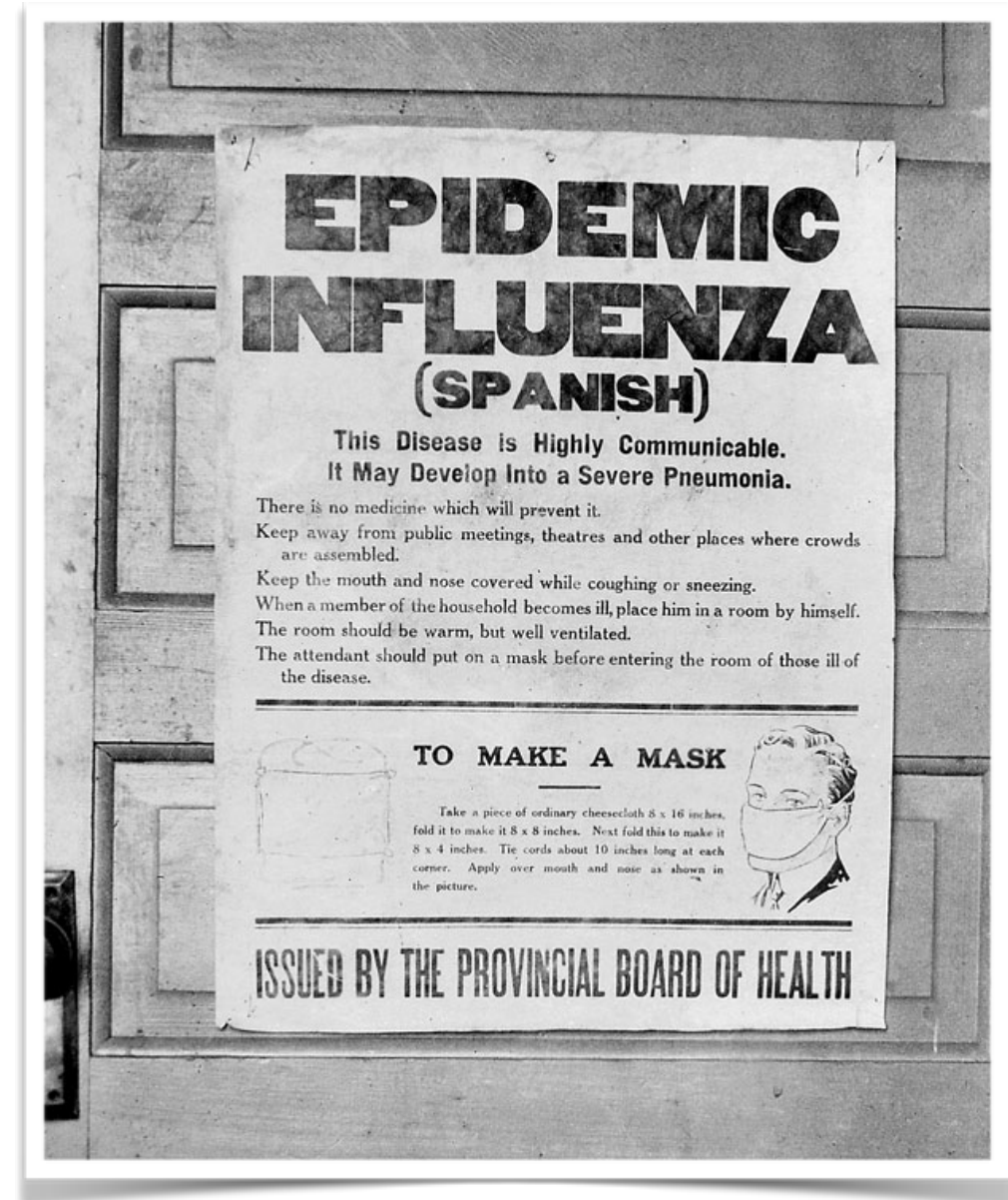


Hemopurifier® in vitro capture validations

Pandemic Influenza Viruses

- ☑ H1N1 Swine Flu (Aethlon Research Team)
- ☑ H5N1 Bird Flu (Battelle Memorial Research Institute)
- ☑ Spanish Flu of 1918-R (Battelle MRI)

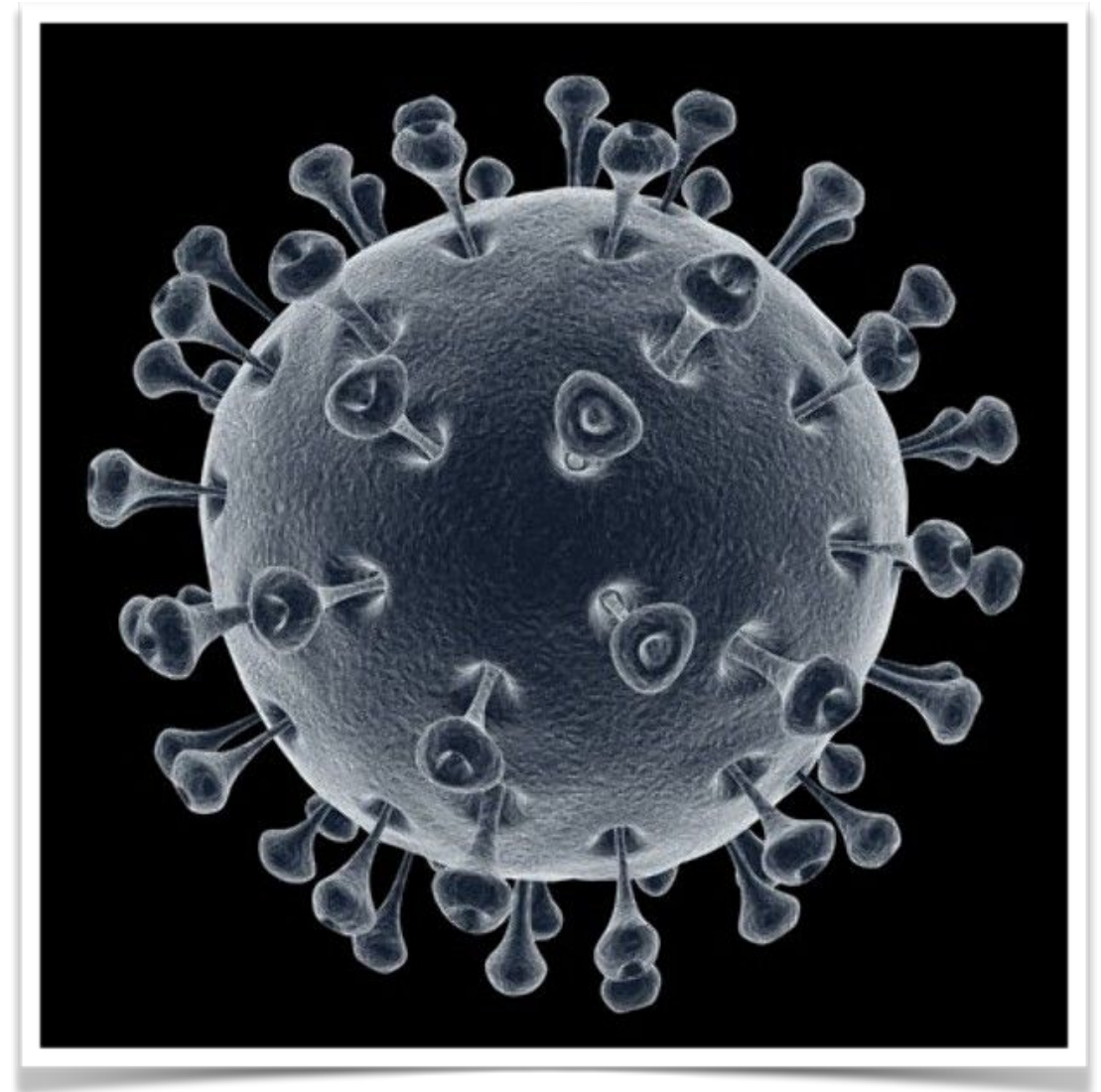
Actual Spanish Flu of 1918 pandemic resulted in approximately 50 million deaths worldwide.

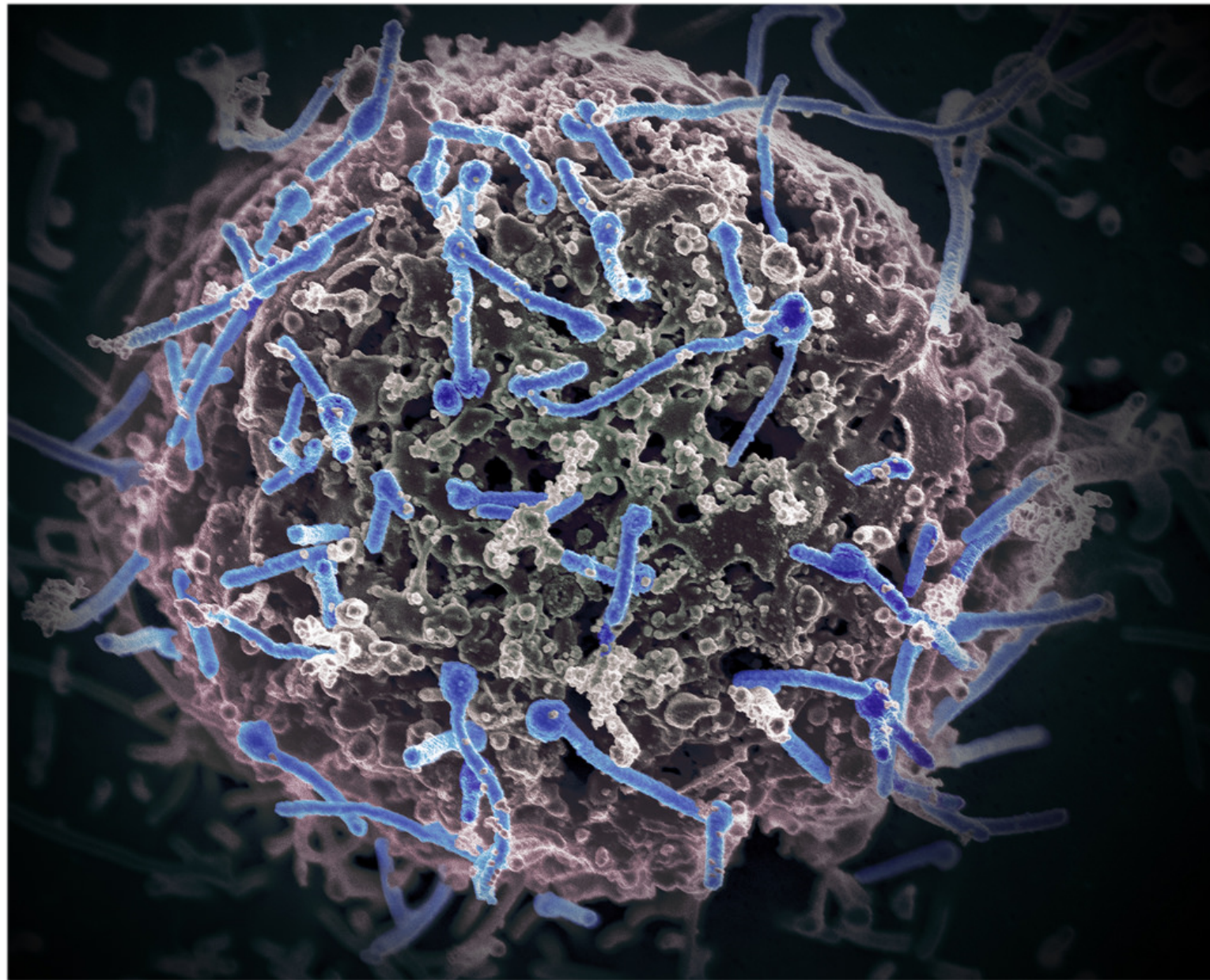


Hemopurifier® in vitro capture validations

Chronic & Latent Viruses

- ☑ Human Immunodeficiency Virus (Aethlon Research Team & Human Treatment Outcomes)
- ☑ Hepatitis C Virus (Aethlon Research Team & Human Treatment Outcomes)
- ☑ Cytomegalovirus (DOD-DARPA)
- ☑ Epstein-Barr Virus (DOD-DARPA)
- ☑ Herpes Simplex Virus-1 (DOD-DARPA)





Ebola Image Courtesy of NIAID

THE TREATMENT OF EBOLA VIRUS

A CASE STUDY AGAINST A LIFE-THREATENING
HIGHLY GLYCOSYLATED VIRUS WITHOUT AN
APPROVED THERAPY



THE TREATMENT OF EBOLA VIRUS



A SINGLE 6.5-HOUR ADMINISTRATION OF HEMOPURIFIER® THERAPY WAS DELIVERED TO THE PATIENT, WHO WAS COMATOSE WITH MULTIPLE ORGAN FAILURE.

EBOLA TREATMENT RESULTS

PRESENTED AT THE AMERICAN SOCIETY OF NEPHROLOGY ANNUAL MEETING BY
HELMUT GEIGER, M.D., CHIEF OF NEPHROLOGY AT FRANKFURT UNIVERSITY HOSPITAL

- HEMOPURIFIER® THERAPY WAS WELL TOLERATED WITH NO ADVERSE EVENTS
- PRE-TREATMENT VIRAL LOAD PRIOR WAS MEASURED TO BE 400,000 COPIES/ML
- POST-TREATMENT VIRAL LOAD WAS MEASURED AT 1,000 COPIES/ML
- PATIENT MADE A FULL RECOVERY

THE TREATMENT OF EBOLA VIRUS

DR. STEFAN BÜTTNER HOLDING THE
HEMOPURIFIER® AFTER TREATMENT



VIRUS CAPTURE ASSAY RESULT

242 MILLION COPIES OF EBOLA
VIRUS CAPTURED WITHIN THE
HEMOPURIFIER® DURING THE 6.5
HOUR TREATMENT



Analysis: BSL4 Lab
Philipps University Marburg
(O. Dolnik/M. Eickmann/S. Becker)

Extracorporeal Virus Elimination for the Treatment of Severe Ebola Virus Disease - First Experience with Lectin Affinity Plasmapheresis

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February 2015

Abstract

Therapeutic options for Ebola virus disease (EVD) are currently limited to (1) best supportive care, and (2) evolving virus-specific therapies, resulting from decades of analyzing one of the world's deadliest diseases. Supportive care ranges from oral or intravenous rehydration therapy and anti-emetics in developing countries to much more extensive life-support interventions in resource-rich countries. Current EVD-specific therapies attempt to either interfere with the earliest steps of viral replication or to elicit a strong immune response against the virus. An entirely new approach is the extracorporeal elimination of viruses and viral glycoproteins by lectin affinity plasmapheresis. Herein, we report for the first time the successful and safe use of lectin affinity plasmapheresis in a patient with severe Ebola virus disease.

A SIGNIFICANT UNMET NEED IN GLOBAL HEALTH & BIODEFENSE

A LEADING CANDIDATE TO TREAT LIFE-THREATENING VIRUSES
THAT ARE NOT ADDRESSED WITH ANTIVIRAL DRUGS



A LEADING CANDIDATE TO FULFILL U.S. GOVERNMENT INITIATIVES TO
PROTECT CITIZENS FROM BIOTERROR & PANDEMIC THREATS

2016 Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) Strategy and Implementation Plan



THE AETHLON HEMOPURIFIER®

ALIGNS TO MEET 5 DIFFERENT PHEMCE OBJECTIVES



MEETING THE PHEMCE OBJECTIVES

PHEMCE goal is to procure medical countermeasures (MCMs)
for the strategic national stockpile

- ☑ PHEMCE seeks broad-spectrum MCMs that address high-priority threats and also have commercial viability in other medical applications
- ☑ Broad-spectrum approach to address both known and unknown threats
- ☑ Broad-spectrum MCM against emerging threats, including Ebola, Zika and MERS-CoV
- ☑ MCM against pandemic influenza, including non-pharmaceutical MCMs
- ☑ MCMs for at-risk children, pregnant women and older adults for whom first line treatment countermeasures are not recommended



NEXT STEPS

LEVERAGE EAP PATHWAY DESIGNATION TO ESTABLISH
COMMERCIALIZATION PATHWAY FOR VIRUSES THAT ARE;

- LIFE-THREATENING
- HIGHLY-GLYCOSYLATED
- NOT ADDRESSED WITH AN APPROVED THERAPY
- AND, HAVE BEEN VALIDATED TO BE CAPTURED BY THE AETHLON HEMOPURIFIER®

NEXT STEPS

CONTINUED

- EXPAND HEMOPURIFIER® PRODUCTION CAPABILITIES
- ADVANCE THE HEMOPURIFIER® TO FULFILL U.S. GOVERNMENT PHEMCE OBJECTIVES
 - GOAL IS THE STRATEGIC NATIONAL STOCKPILE
- ADVANCE RESEARCH PROGRAMS AGAINST OTHER GLYCOSYLATED DISEASE TARGETS
 - TUMOR-DERIVED EXOSOMES
 - NEUROLOGICAL TAUOPATHY ASSOCIATED EXOSOMES
- ADVANCE EXOSOME BIOMARKER PROGRAMS TO DIAGNOSE AND MONITOR CANCER AND TAUOPATHY TREATMENT TARGETS



Focused on diagnosing diseases that are current or future therapeutic targets for Aethlon Medical



80% Owned by Aethlon Medical

Preparing to launch follow-on study to diagnose Chronic Traumatic Encephalopathy in the living

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MISSION

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