

Aethlon Medical, Inc.

Nasdaq: AEMD

BIO INVESTOR CONFERENCE

October 18, 2016

Jim Joyce
Chairman, CEO



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 ADAPT™ and ELLSA™ platform technologies, the 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



IMMUNOTHERAPEUTIC SOLUTIONS TO COMBAT INFECTIOUS DISEASE & CANCER

SAVE LIVES

PROBLEM #1

DISEASE-SPECIFIC DRUGS AND VACCINES ARE UNABLE TO ADDRESS THE BREADTH OF VIRUSES THAT ARE INFECTIOUS TO MAN

FACTORS UNDERLYING THIS PROBLEM

- Too Many Threats
 - *Vast majority of 300+ viruses are not addressed*
 - *Just one of 13 “category A” viruses addressed*
 - *Not enough drug & vaccine candidates*
- Disease-Specific Drugs or Vaccines Can’t Be Developed
 - *In advance of a newly emerging pandemic virus*
 - *Prior to the release of man-made agent of bioterror*
- Inability to Demonstrate Treatment Efficacy
 - *Controlled human studies against virulent viruses not permissible*
 - *Reliance on animal models*
 - *Often don’t exist or equate to efficacy in humans*

OUR SOLUTION

The Aethlon Hemopurifier®



The First Broad-Spectrum Treatment Countermeasure
Being Advanced in Human Studies Approved by CDRH at FDA

About The Hemopurifier®

- Rapid real-time elimination of circulating viruses
 - Prior to cell and organ infection
 - Capture mechanism based on viral surface structure
- Combines with conventional antiviral drugs
- First-line therapeutic candidate for viral pathogens not addressed by antiviral drugs



DEPLOYED WITHIN THE GLOBAL INFRASTRUCTURE OF DIALYSIS & CRRT MACHINES

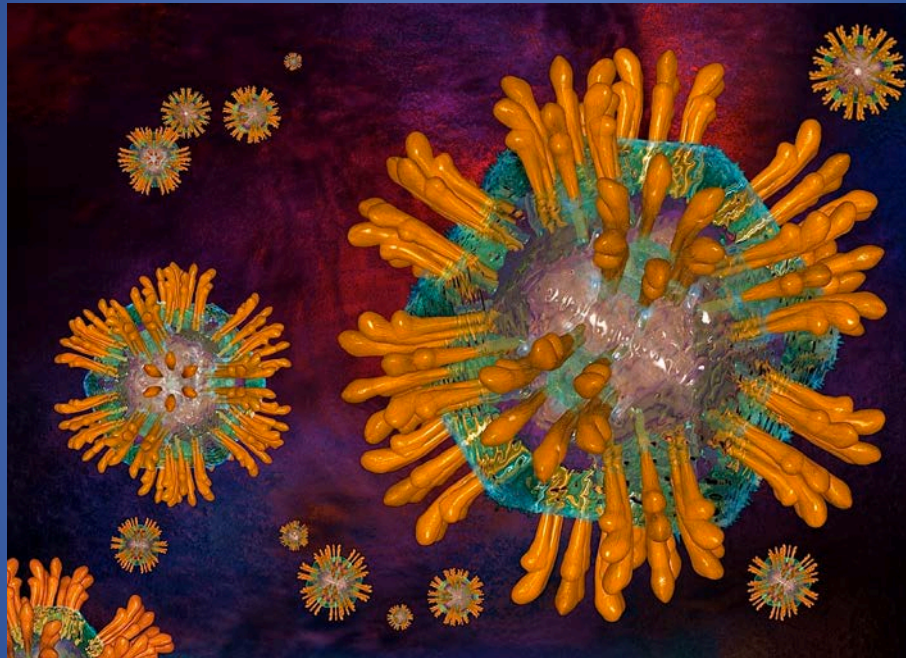
The Aethlon Hemopurifier®



Target label indication: *“The single-use removal of viral pathogens from blood” (Supported by novel elution assay)*

The Hemopurifier[®] as an Adjunct to Improve Drug Therapy?

Hepatitis C Virus (HCV)



HCV Treatment Summary

- Successfully combined with interferon-based cure strategy
- Up to 300 billion HCV copies captured during single six-hour treatments
- Undetectable HCV reported as early as day-7 after first Hemopurifier[®] administration

The Hemopurifier® Against a Life-Threatening
Virus Not Addressed with a Antiviral Drug or Vaccine?

The Treatment of Ebola Virus

Frankfurt University Hospital



Special approval from The Federal Institute for Drugs and Medical Devices (BfArM)



Hemopurifier® therapy administration to a comatose Ebola patient with multiple-organ failure



Dr. Stefan Büttner
Holding Hemopurifier®
After Ebola Treatment

Ebola Treatment Data

Presented By Dr. Helmut Geiger

American Society of Nephrology Annual Meeting

- 6.5 hour Hemopurifier[®] therapy administration
- Pre-treatment viral load: 400,000 copies/ml
- Post-treatment viral load: 1,000 copies/ml
- Patient recovered and returned home
 - Hemopurifier[®] since approved in United States & Canada under Emergency-Use provisions

TIME

“Top 25 Best Inventions”

“11 Most Remarkable Advances in Healthcare”

U.S. Clinical Progression Plan

- Completion of human feasibility study
 - DaVita Med Center Dialysis, Houston, TX.
- Submit pivotal study IDE to FDA (2017)
 - Chronic viral indication
- Humanitarian Use Device submissions (2017)
 - Indications under 4000 per year
- Emergency-Use submissions for pandemic outbreaks
- Goal is U.S. Strategic National Stockpile
 - Broad-spectrum bioterror & pandemic threat countermeasure

Focused on fulfilling the broad-spectrum medical countermeasure goal of the 2015 U.S. Department of Health and Human Services (HHS) Public Health Emergency Medical Countermeasure Enterprise (PHEMCE) Strategy and Implementation Plan.

Broad-Spectrum Virus Capture Validations

Chronic Viral Pathogen Validations

- Virus Capture
 - Human Immunodeficiency Virus (HIV)
 - Hepatitis C Virus (HCV)
- Related Viral Toxin Capture
 - HIV gp120
 - HIV NEF-Exosome

Pandemic Influenza Virus Validations

- H1N1 Swine Flu Virus
- H5N1 Bird Flu Virus
- Reconstructed Spanish Flu of 1918 Virus

Mosquito-Born Virus Validations

- Cikungunya Virus
- Dengue Virus
- West Nile Virus
- Zika Virus

Bioterror/Pandemic Threat Virus Validations

- Ebola Virus (multiple strains including Zaire)
 - Ebola Glycoprotein Toxin
- Lassa Virus
- Smallpox Virus Models
 - Monkeypox
 - Vaccinia

What's New

- Confirmed Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Capture
 - First reported in 2012
 - 35% mortality rate
 - No antiviral drug or vaccine
 - Conducted under DOD DARPA DLT Contract
 - Achieved 29 of 29 milestones (\$5.9 million in revenues)
 - Program goal: A Therapy to Treat Sepsis

What's Next

- Introduction of Sepsis treatment strategy
 - #1 cause of death in the ICU
 - No approved therapy in the U.S.
- Introduction of prototype cerebral spinal fluid (CSF) therapeutic platform
 - First-in-class CSF strategy to address viral, neurological and central nervous system disorders

PROBLEM #2

CANCER PROGRESSION IS PROMOTED BY TUMOR-DERIVED EXOSOMES, WHICH ARE NOT ADDRESSED WITH DRUG THERAPIES

FACTORS UNDERLYING THIS PROBLEM

- The seeds of cancer metastasis
 - Metastasis contributes to 90% of cancer deaths
- Tumor-derived exosomes also promote:
 - Immune suppression and evasion
 - Angiogenesis
 - Resistance to chemotherapeutic agents
 - Resistance to immuno-oncology drugs
 - Express HER2, CD20, PDL-1 and other markers to decoy drugs
- Tumor-derived exosome levels = stage of cancer

OUR SOLUTION

The Aethlon Hemopurifier®



The Capture of Circulating Tumor-Derived Exosomes

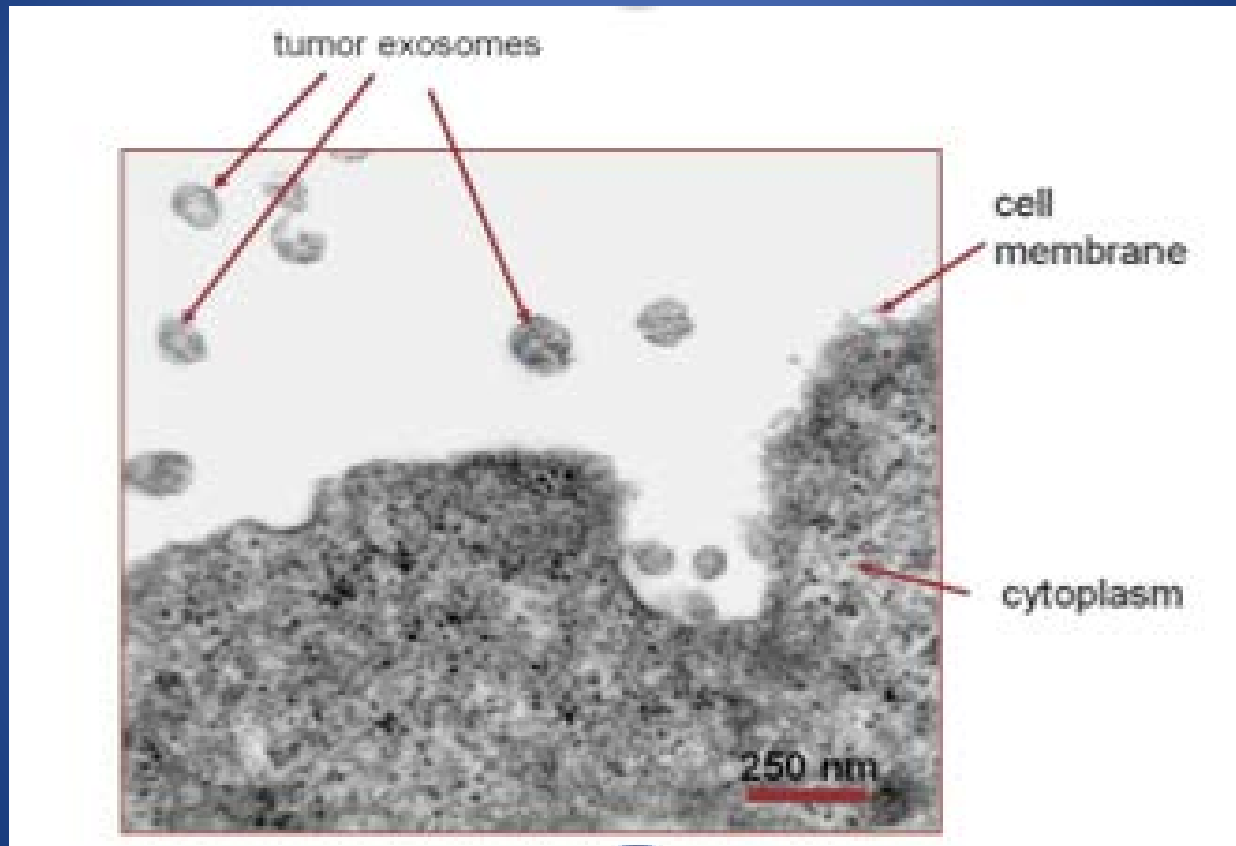


CANCER

Initiated our exosome research a decade ago

Considered cellular debris with no biological function at the time

Tumor-Derived Exosomes



The Hemopurifier® provides an adjunct strategy to optimize emerging immuno-oncology drugs or improve the benefit of chemotherapeutic regimens

Cancer IDE Submission Upon Completion of our FDA Approved Human Feasibility Study

PROBLEM #3

NO BIOMARKER TO DIAGNOSE CHRONIC TRAUMATIC
ENCEPHALOPATHY (CTE) IN LIVING INDIVIDUALS

FACTORS UNDERLYING THIS PROBLEM

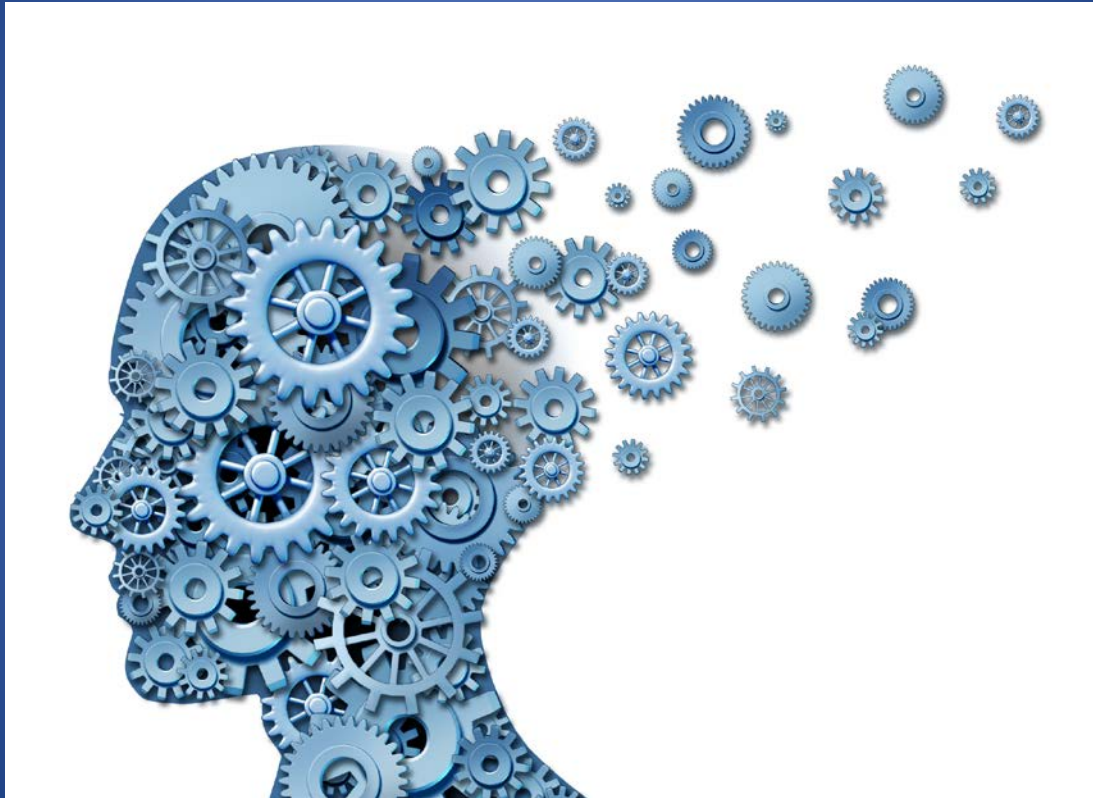
- CTE is a recently defined neurological disorder
 - Promotes dementia and memory loss
 - Caused by repetitive sub-concussive blows to the head
 - Definitively diagnosed through post-mortem autopsy
 - Identified in 91 of 95 former NFL players

OUR SOLUTION



Discovery of TauSome™

A Candidate Biomarker to Diagnose CTE in the Living





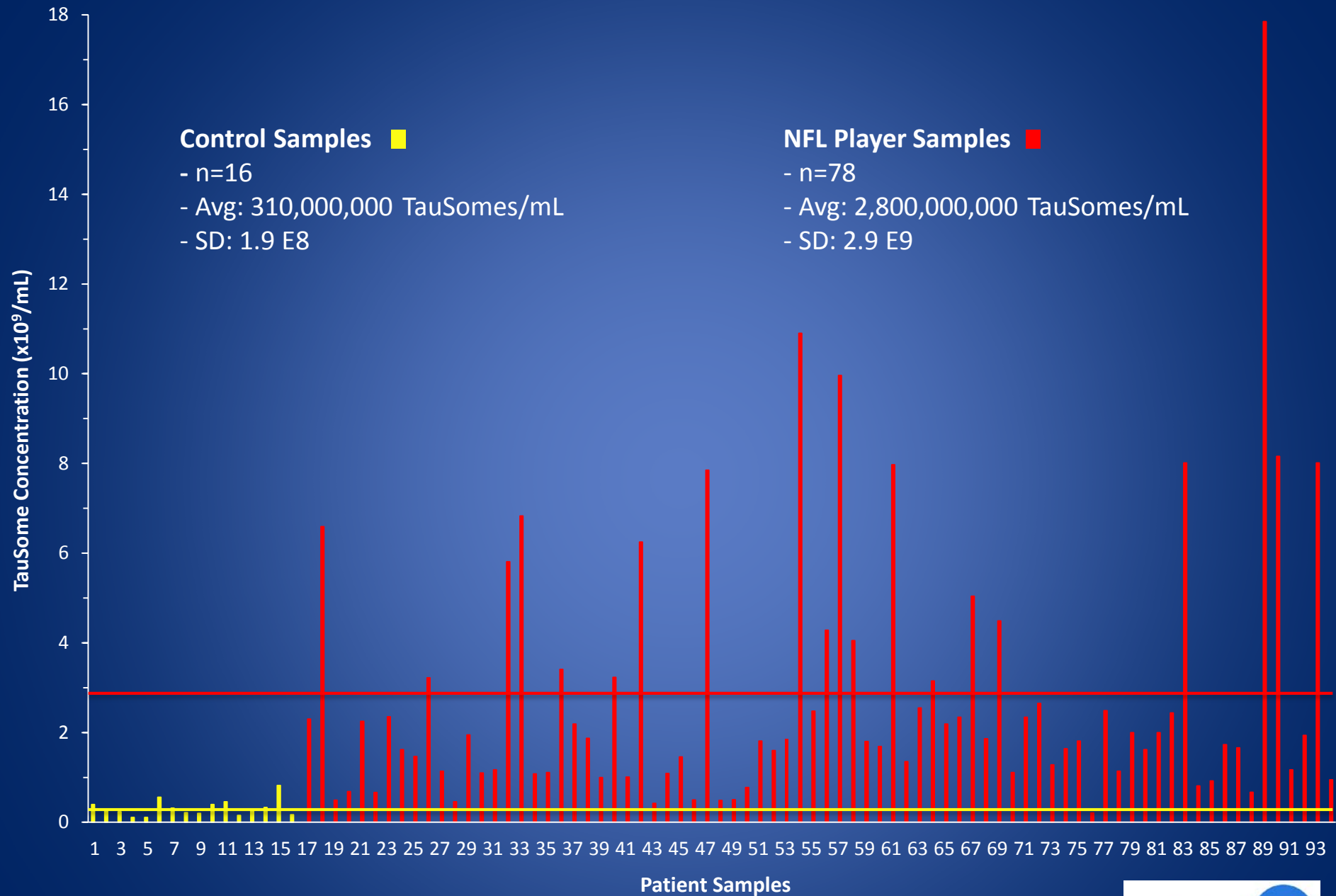
- TauSome testing was conducted in the DETECT study
 - In collaboration with the Boston University CTE Center
 - Principal Investigator: Robert Stern Ph.D.
 - 78 former NFL players (high risk CTE group)
 - 16 athlete controls (low risk CTE group)

Preliminary Study of Plasma Exosomal Tau as a Potential Biomarker for Chronic Traumatic Encephalopathy

Stern, Tripodis, Baugh, Fritts, Martin, Chaisson, Cantu, Joyce, Shah, Ikezu, Zhang, Gercel-Taylor, & Taylor

J Alzheimer's Disease, 2016

- Findings suggest that TauSome plasma levels may be an accurate, noninvasive CTE biomarker
 - TauSome levels significantly higher in the NFL group
 - TauSome levels correlated with cognitive decline



*Horizontal lines represent average TauSome concentration for each group.



- TauSome™ Next Steps
 - Validate that TauSomes are brain-derived
 - Study underway with BU CTE team
 - Follow-on TauSome testing initiated in new (up to a 17-sites) CTE study funded by a \$16 million NIH grant

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SAVE LIVES

Solutions to Significant Problems in Healthcare

- Infectious Disease
 - Broad-spectrum countermeasure solution to treat life-threatening viruses not addressed with drugs or vaccines
- Cancer
 - First candidate to address tumor-derived exosomes that promote cancer progression and resistance to drug therapies
- Exosome Sciences (*An Aethlon Medical Subsidiary*)
 - Discovery of TauSome™ biomarker candidate to diagnose CTE in the living

Acknowledgement and Thanks

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- DaVita Med Center Dialysis
- Defense Advanced Research Projects Agency (DARPA)
- Frankfurt University Hospital
- Medanta Medicity, Fortis and Apollo Hospitals
- National Institute of Virology (NIV) Pune, India
- Philipps University Marburg
- U.S. Army Medical Research Institute for Infectious Diseases (USAMRIID)
- U.S. Centers for Disease Control (CDC)

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