

August 11, 2016



Aethlon Medical Announces Zika Virus Data

SAN DIEGO, Aug. 11, 2016 /PRNewswire/ -- Aethlon Medical, Inc. (Nasdaq: AEMD), a developer of immunotherapeutic technologies to combat infectious disease and cancer, announced today that its researchers have completed *in vitro* studies that demonstrate the rapid capture of Zika virus by the Aethlon Hemopurifier®. The Hemopurifier® is a leading broad-spectrum treatment countermeasure against viral pathogens that are untreatable with or resistant to antiviral drug therapies. At present, the immunotherapeutic technology is being advanced through an FDA approved human feasibility study. The Zika studies, which were conducted with small-scale versions of the Hemopurifier®, demonstrated a 95% clearance of Zika virus from cell culture fluid in 5.5 hours and an approximate 50% clearance of Zika from human blood serum in 5 hours.

The studies were conducted with the Zika viral strain that has recently spread from South America to ravage Puerto Rico and likely responsible for the first wave of infections that have begun to occur in the United States. Zika has been declared a global health threat by the World Health Organization and is not addressed with a proven drug or vaccine therapy. According to the CDC, more than 7,300 Americans have been diagnosed with Zika virus infection, including 1,825 individuals in the continental U.S. and Hawaii. Researchers have linked Zika virus infection with Guillain-Barre syndrome, a severe neurological disorder that can cause paralysis. In pregnant women, Zika can cause Microcephaly, which results in babies being born with a small head and underdeveloped brain. Zika infection has also been associated with Arthrogryposis, a condition that results in deformities of joints in the arms and legs of newborns.

"As a result of our research team's validation of Zika capture, we have further reinforced the potential of our Hemopurifier® to be a first line of defense against the growing list of infectious viral pathogens that are not addressed with traditional drug or vaccine therapies," stated Aethlon Chairman and CEO, Jim Joyce.

Aethlon also disclosed that it entered into an agreement with the Defense Advanced Research Projects Agency (DARPA) to validate the *in vitro* capture of the Middle East Respiratory Syndrome Coronavirus (MERS-CoV), which was discovered to be infectious to man in 2012 and has an approximate 30% mortality rate. Like Zika virus, MERS-CoV is not addressed with a proven drug or vaccine. The agreement is based on the modification of a contract milestone underlying the Company's participation in DARPA's Dialysis-Like Therapeutics program.

Broad-Spectrum Virus Capture Validations

Zika virus is the most recent of four significant arboviruses that have spread to the Western Hemisphere. It follows Dengue, which first emerged aggressively in the 1990s; West Nile

virus, which emerged in 1999; and Chikungunya, which emerged in 2013. "Arbovirus" is a descriptive term applied to hundreds of predominantly RNA viruses that are transmitted by arthropods, most notably through mosquitoes. As a result of the Zika study, the Hemopurifier® has now demonstrated the capture of each of these four arboviruses.

Beyond Zika, Dengue, Chikungunya and West Nile virus, the Hemopurifier has also been validated to capture Monkey pox, which serves as models for human Smallpox infection. Specific to pandemic influenza threats, the Hemopurifier has been validated to capture the H5N1 avian flu virus, H1N1 swine flu virus, and the reconstructed 1918 influenza virus, which represents a model for the strain of influenza that killed an estimated 50 million victims.

Human Treatment Experiences

In regards to human studies, Hemopurifier therapy has previously been administered to individuals infected with Ebola, Hepatitis C and HIV. In the case of Ebola, the successful treatment of a comatose physician with multiple organ failure contributed to the emergency use clearance of the Hemopurifier® by the FDA and the government of Canada.

About Aethlon Medical

Aethlon Medical (Nasdaq: AEMD) is a leading developer of immunotherapeutic technologies to combat infectious disease and cancer. To augment the body's natural immune defenses, the Aethlon Hemopurifier® eliminates life-threatening disease targets that are often shielded from the immune system and not well addressed by traditional drug therapies. The technology captures circulating viruses, bacterial toxins and cancer promoting exosomes through affinity attachment to a unique structure that cloaks these targets from immune detection. At present, the Hemopurifier® is being advanced under an FDA approved clinical study. Aethlon is also the majority owner of Exosome Sciences, Inc., a company focused on the discovery of exosomal biomarkers to diagnose and monitor life-threatening diseases. Additional information can be found online at www.AethlonMedical.com or you can connect with us on Twitter, LinkedIn, Facebook and Google+.

The Hemopurifier® in Cancer

Upwards of ninety percent of all cancer-related deaths are attributed to metastasis; the spread of cancer from a primary site of origin to other organs or areas of the body. The mechanism of how tumors metastasize to distant sites in the body has long been one of cancer's greatest mysteries. That mystery was recently solved when circulating particles known as tumor-derived exosomes were discovered to be the seeds that promote the spread and growth of cancer metastasis.

Aethlon initiated its tumor-derived exosome research at a time when the medical community believed exosomes were merely cellular debris with no biological function. Today, a therapeutic to address tumor-derived exosomes represents a significant unmet need in cancer care. Aethlon has demonstrated that the affinity mechanism of the Hemopurifier® can capture tumor-derived exosomes underlying several forms of cancer, including breast, ovarian and metastatic melanoma.

Beyond their role in metastasis, researchers have also published mounting evidence that

tumor-derived exosomes contribute to tumorigenesis (the formation of cancer), cancer progression, angiogenesis (creation of blood vessels to fuel tumor growth), immune evasion, and resistance to radiation and chemotherapeutic drugs. Recent discoveries also reveal that exosomes may contribute to bacterial and viral pathogenesis, the progression of Alzheimer and Parkinson's diseases, the spread of prion proteins, and numerous inflammatory conditions.

The Hemopurifier® in Infectious Disease

Emerging pathogens pose a significant threat to mankind. Of the hundreds of viral pathogens known to be infectious to man, only a few are addressed with proven antiviral drug or vaccine therapies. Beyond the looming threat of bioterrorism, a proliferation of international travel, urban crowding and global warming is expected to accelerate the emergence of future pandemics. In response, the U.S. Department of Health and Human Services (HHS) has established an initiative to support platform technology medical countermeasures with broad-spectrum capabilities. Based on preclinical studies and human treatment experiences, the Aethlon Hemopurifier® defines this initiative.

To date, Hemopurifier therapy has been administered to individuals infected with Ebola virus, Hepatitis C virus (HCV) and the Human Immunodeficiency virus (HIV). In the case of Ebola, a remarkable response to a single administration of Hemopurifier therapy (comatose physician with multiple organ failure at the time), led to Time Magazine naming the Hemopurifier to be one of the "Top 25 Inventions" as well as one of the "Eleven Most Remarkable Advances in Healthcare."

Beyond human treatment experiences, pre-clinical Hemopurifier studies have validated the broad-spectrum capture of numerous viral threats. These include: Chikungunya, Dengue and West Nile virus, as well as Vaccinia and Monkey pox, which serve as models for human Smallpox infection. Specific to pandemic influenza threats, Aethlon has validated the capture of H5N1 avian flu, H1N1 swine flu, and the reconstructed 1918 influenza virus, which represents a model for the strain of influenza that killed an estimated 50 million victims in 1918 and 1919. *In vitro* studies of other viral threats are ongoing.

Aethlon has also demonstrated that the Hemopurifier captures the bacteria toxins lipopolysaccharide (LPS) and lipoteichoic acid (LTA). These studies were conducted under a contract with the Defense Advanced Research Projects Agency (DARPA) related to the treatment of sepsis.

About Exosome Sciences

Exosome Sciences, Inc., in collaboration with majority shareholder Aethlon Medical (Nasdaq: AEMD), is focused on the discovery of exosomal biomarker candidates to diagnose and monitor life-threatening diseases. The proprietary Enzyme-Linked Lectin-Specific Assay (ELLSA™) serves as a platform to isolate exosomal biomarkers from a wide-range of bodily fluids. In preliminary studies, ELLSA™ demonstrated the ability to isolate exosomes from urine, which resulted in high-sensitivity detection of HIV-infection. Specific to neurological disorders, Exosome Sciences discovered TauSome™, an exosomal biomarker that may be the first non-invasive candidate to detect Chronic Traumatic Encephalopathy (CTE) in living individuals. In a study of former National Football League (NFL) players, TauSome levels were found to be significantly higher as compared to athlete control subjects

who participated in non-contact sports. TauSome levels also correlated with cognitive decline based standardized tests of memory and psychomotor speed. Visit www.exosomesciences.com for additional details.

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 that involve risks and uncertainties. Statements containing words such as "may," "believe," "anticipate," "expect," "intend," "plan," "project," "will," "projections," "estimate," or similar expressions constitute forward-looking statements. Such forward-looking statements are subject to significant risks and uncertainties and actual results may differ materially from the results anticipated in the forward-looking statements. Factors that may contribute to such differences include, without limitation, the Company's ability to maintain its listing on the Nasdaq Capital Market, or any other national securities exchange, that the Company or its subsidiary will not be able to commercialize its products, that the FDA will not approve the initiation or continuation of the Company's clinical programs or provide market clearance of the Company's products, including any products relating to the Zika virus, the Company's ability to raise capital when needed, the Company's ability to complete the development of its planned products, the Company's ability to manufacture its products either internally or through outside companies, the impact of government regulations, patent protection on the Company's proprietary technology, the ability of the Company to meet the milestones contemplated in its contract with DARPA, product liability exposure, uncertainty of market acceptance, competition, technological change, and other risk factors. The foregoing list of risks and uncertainties is illustrative, but is not exhaustive. Additional factors that could cause results to differ materially from those anticipated in forward-looking statements can be found under the caption "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended March 31, 2015, and in the Company's other filings with the Securities and Exchange Commission. Except as may be required by law, the Company does not intend, nor does it undertake any duty, to update this information to reflect future events or circumstances.

Contacts:

Mike Smargiassi/Brad Edwards
Brainerd Communicators, Inc.
212-986-6667
smarg@braincomm.com
edwards@braincomm.com

To view the original version on PR Newswire, visit <http://www.prnewswire.com/news-releases/aethlon-medical-announces-zika-virus-data-300312282.html>

SOURCE Aethlon Medical, Inc.