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Researchers Announce Plans for Study of Candidate Blood Test to Detect Chronic Traumatic Encephalopathy (CTE) in Former NFL Players

Results will add to Published Data Involving Candidate Biomarker to Identify & Monitor CTE

HOUSTON and SAN DIEGO, Jan. 25, 2017 /PRNewswire/ -- Researchers with Exosome Sciences, Inc., a diagnostic subsidiary of Aethlon Medical, Inc. (Nasdaq: AEMD), a therapeutic technology company, today announced plans to initiate a clinical study involving retired NFL players and a data-supported biomarker candidate to detect and monitor Chronic Traumatic Encephalopathy (CTE) in living individuals. CTE is a neurodegenerative disease that has often been found in American football players, boxers and other individuals with a history of repetitive head trauma. At present, CTE diagnosis is determined after death through an analysis of brain tissue.

Planned for initiation in the second quarter, the study intends to establish a clinical collaboration with up to 200 former professional football players and clinical investigators at multiple U.S. locations. If fully enrolled, the study would be the largest to date in former NFL players, who are at a high risk of suffering from CTE. The goal of the study will be to further validate a CTE biomarker candidate known as plasma exosomal tau, or a TauSome™. The biomarker was previously studied as part of the first NIH-funded CTE research program (The DETECT Study), which was managed by the Boston University (BU) CTE Center.

Kendall Van Keuren-Jensen, Ph.D., Co-Director of the Translational Genomics Research Institute's (TGen) Center for Noninvasive Diagnostics in Phoenix, will serve as principal investigator for the study. Dr. Van Keuren-Jensen is neurodegenerative disease thought leader whose research includes discovery and detection of biomarkers for central nervous system disorders.

"This study provides researchers an opportunity to potentially change how doctors diagnose CTE, which today can only be diagnosed post-mortem," said Dr. Van Keuren-Jensen. "Validating plasma exosomal tau as the basis for a non-invasive test to detect and monitor CTE in living individuals will expand significantly the body of clinical data available for

analysis and may provide a starting point for early intervention."

In the previous DETECT Study, researchers examined 78 former NFL players and a control group of 16 former non-contact sport athletes. The researchers observed that plasma TauSome levels were significantly elevated in the NFL group as compared to the control group and that, within the former NFL player group, TauSome plasma levels correlated with performance on standardized tests of memory and psychomotor speed; the higher the TauSome level, the worse the performance. The preliminary results were subsequently published in the *Journal of Alzheimer's Disease*. Access to the online version of the publication is available at http://tinyurl.com/zvyd23h. Based on these preliminary findings, the authors concluded that TauSome levels in blood plasma could be an accurate, noninvasive CTE biomarker. Since the publication, an ongoing analysis of the study data revealed that TauSome levels were approximately 9x higher on average in the NFL group as compared to control subjects.

Jim Joyce, Chairman and CEO of Aethlon Medical, Founder of Exosome Sciences and a former professional football player, said, "Our goal is to collect further evidence that supports the possibility that CTE can be diagnosed in the living. If the studies are successful, the door then opens for therapeutic candidates to be tested against this horrific disease that has impacted the lives of former players and their families. The original inspiration for our research was the death of Tom McHale, a former teammate who was also from my hometown in Maryland. It was at Super Bowl XLIII in 2009 that researchers from the BU team announced that Tom had suffered from CTE when he died at the age of 45. Therefore, in the week leading up to Super Bowl LI in Houston, we will conduct a series of activities to raise awareness of the current study plans among prospective participants."

Activities planned for Houston include Joyce's participation in the Global Brain Health Coalition's annual meeting as well as interviews on Super Bowl Radio Row. In addition, the Aethlon/Exosome Sciences team will be hosting informal discussions with former players about the establishment of an advisory council. To schedule a meeting, contact Charlene Owen at Aethlon Medical at 858-251-1848 or via email at cowen@aethlonmedical.com.

Joyce concluded: "We are grateful for the opportunity that was provided though the BU DETECT study to gather evidence that TauSome plasma levels may serve as a biomarker to detect CTE. Beyond the advancement of our new study, we have agreed to provide continued TauSome analysis to support the clinical initiatives of our colleague at BU."

In addition to CTE, the researchers plan to investigate the potential for TauSome plasma levels to serve as a biomarker to monitor Alzheimer's disease and other neurological diseases that involve the abnormal aggregation of tau protein in the brain.

About Exosomes

Exosomes are very small vesicles released from all types of cells throughout the body, including brain cells. They can be isolated in all body fluids, including plasma, a component of blood. Exosomes carry within them the proteins from their cells of origin. Because exosomes can cross the blood-brain-barrier (a selective barrier that separates the circulating blood from the brain's extracellular fluid), they can provide a unique method of measuring certain aspects of the contents of brain cells through a blood test. That is, if the brain-derived exosomes can be isolated in plasma and then be stained for specific proteins found in the

brain cells, researchers can potentially measure brain proteins through a blood test.

About Exosome Sciences

Exosome Sciences, Inc., in collaboration with majority shareholder Aethlon Medical (Nasdaq: AEMD), is focused on discovering exosomal biomarkers to diagnose and monitor Alzheimer's disease (AD), Chronic Traumatic Encephalopathy (CTE) and other neurological disorders. Our TauSome™ biomarker (also referred to as exosomal tau) is being clinically evaluated as the basis for a blood-based test to identify CTE in living individuals. Visit www.exosomesciences.com for additional details.

About Aethlon Medical, Inc.

Aethlon Medical (Nasdaq: AEMD) is a leading developer of immunotherapeutic technologies to combat infectious disease and cancer. The Aethlon Hemopurifier® is a first-in-class medical technology currently being advanced in FDA approved studies as a broad-spectrum treatment countermeasure against infectious viral pathogens. Named a "Top 25 Invention" and one of the "Eleven Most Remarkable Advances in Healthcare," by TIME Magazine, the Hemopurifier® has previously been administered to individuals infected with Ebola virus, Hepatitis C virus and the Human Immunodeficiency virus. Aethlon is also the majority owner of Exosome Sciences, Inc., a company focused on the discovery of exosomal biomarkers to diagnose and monitor neurological disorders. Aethlon is part of the Russell Microcap® Index. Additional information can be found online at www.AethlonMedical.com or you can connect with us on Twitter, LinkedIn, Facebook and Google+.

About Dr. Van Keuren-Jensen and TGen

Dr. Kendall Van Keuren-Jensen is a neurobiologist with the Phoenix-based Translational Genomics Research Institute (TGen). Translational Genomics Research Institute (TGen), a non-profit biomedical research organization, focuses on medical advancements through cutting edge translational processes. Working with collaborators in the scientific and medical communities, TGen makes a substantial contribution to both the scientific and medical fields. For additional information, visit https://www.tgen.org

Dr. Van Keuren-Jensen received her Ph.D. from Stonybrook University at Cold Spring Harbor Laboratory in New York where she studied the role of activity-regulated genes in synaptic transmission and neuronal morphology. Following her Ph.D., she was a postdoctoral fellow at Harvard Medical School for a short time before joining TGen. She also has a Master's degree in Pharmacology and Toxicology from the University of Kansas and a B.A. from Boston University.

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, including any CTE-related 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 clearance through the 21st Century Cures Act, 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, 2016, 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.

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