September 16, 2019

Aethlon Medical Receives National Cancer Institute Contract Award

$1.86 Million Over Two Years to Develop Device for Isolating Exosomes

SAN DIEGO, Sept. 16, 2019 /PRNewswire/ -- Aethlon Medical, Inc. (Nasdaq: AEMD), a therapeutic technology company focused on unmet needs in global health, announced today that the National Cancer Institute (NCI) has awarded the Company an SBIR Phase 2 contract for Topic 359, a solicitation entitled "Technologies for Differential Isolation of Exosomes and Oncosomes." This solicitation prioritized the advancement of technologies for isolating exosomes from biofluids for applications in oncology research and clinical care. This contract will be funded with Federal funds from the NCI, National Institutes of Health, Department of Health and Human Services, under Contract No. 75N91019C00042

Exosomes are nanoparticles that are abundantly released from cancer cells and carry the complement of a tumor's genetic and protein cargo, making them important targets for non-invasive liquid biopsies in cancer. Aethlon is actively developing assays in this area through its majority-owned subsidiary, Exosome Sciences, Inc. However, there remains a need for high-throughput and selective technologies which isolate exosomes from various bodily fluids that could be adopted in clinical workflows. A technology that resolves the bottleneck in methods for obtaining pure populations of exosomes is anticipated to have wide applicability to be paired with downstream genomic sequencing, proteomic profiling tests and, potentially, for the development of therapeutic products.

Aethlon's contract, entitled "*A Device Prototype for Isolation of Melanoma Exosomes for Diagnostics and Treatment Monitoring*", will potentially advance a device having the capabilities of isolating exosomes derived from cancer cells and from the bulk of other vesicles and complex proteins present in fresh and archived biofluids. The work to be performed will focus on melanoma exosomes, with anticipated wider applicability to other cancer types. This work follows from Aethlon's successful completion of a Phase I contract for the Topic 359 solicitation that ran from September 2017 through June 2018. The Phase I work demonstrated the capabilities of a laboratory version of Aethlon's proprietary technology, the Hemopurifier, as an exosome-isolation device by processing biofluid samples to obtain intact preparations of melanoma exosomes. Following on the Phase I work, the deliverables in the Phase II program will involve the design and testing of a pre-commercial prototype of a more advanced version of the exosome isolation platform. The goal is for the device platform to be optimized for applicability in workflows to leverage the untapped potential of exosomes for diagnostic and therapeutic monitoring in melanoma.

The NCI Phase II contract period runs from September 16, 2019 through September 15, 2021. The total amount of the firm fixed price contract is $1,860,561. Under this contract, Aethlon plans to collaborate with researchers at the University of Pittsburgh Medical Center

in Pittsburgh, PA and Massachusetts General Hospital in Boston, MA.

Aethlon Medical, Inc. also is continuing the development of its proprietary Hemopurifier, which is a first in class therapeutic device designed for the single use depletion of circulating viruses and cancer-promoting exosomes. The Hemopurifier has previously been designated a Breakthrough Device by the FDA for the treatment of glycosylated viruses, including Ebola and other hemorrhagic fever viruses, and in late 2018 was additionally designated as a Breakthrough Device "…for the treatment of individuals with advanced or metastatic cancer who are either unresponsive to or intolerant of standard of care therapy, and with cancer types in which exosomes have been shown to participate in the development or severity of the disease….". Following discussions and a meeting with FDA, the Company is now preparing for the initiation of clinical trials in cancer.

About Aethlon Medical, Inc.

Aethlon Medical, Inc. is focused on addressing unmet needs in global health. The Aethlon Hemopurifier® is a clinical-stage immunotherapeutic device designed to combat cancer and life-threatening viral infections. In cancer, the Hemopurifier® depletes the presence of circulating tumor-derived exosomes that promote immune suppression, seed the spread of metastasis and inhibit the benefit of leading cancer therapies. The Hemopurifier® is an FDA designated "Breakthrough Device" related to the treatment of individuals with advanced or metastatic cancer who are either unresponsive to or intolerant of standard of care therapy, and with cancer types in which exosomes have been shown to participate in the development or severity of the disease cancer. The Hemopurifier also holds a Breakthrough Device designation related to life-threatening viruses that are not addressed with approved therapies.

Additionally, Aethlon owns 80% of Exosome Sciences, Inc., which is focused on the discovery of exosomal biomarkers to diagnose and monitor cancer and neurological disease progression. Additional information can be found online at www.AethlonMedical.com and www.ExosomeSciences.com.

Forward Looking Statements

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," "potentially" 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 successfully complete the contract with the NIH, or raise additional funds and maintain its listing on the Nasdaq Capital Market, or any other national securities exchange, the risk that the Company's 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, the Company's ability to complete the development of the Hemopurifier and other 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, 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, 2019, and in the Company's other filings with the Securities and Exchange Commission, including its quarterly Reports on Form 10-Q. 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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