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# **Aethlon Medical Announces Peer-Reviewed Publication of Two Case Studies of Critically Ill COVID-19 Patients Treated with the Hemopurifier®**

SAN DIEGO, Oct. 12, 2021 /PRNewswire/ -- Aethlon Medical, Inc. (Nasdaq: AEMD), a company developing medical technology to treat cancer and life-threatening infectious disease, today announced the publication of a manuscript in the peer-reviewed journal *Frontiers in Medicine* describing two cases of critically ill COVID-19 patients treated with the Hemopurifier®, Aethlon's therapeutic blood filtration system. The publication, titled "Removal of COVID-19 spike protein, whole virus, exosomes and exosomal microRNAs by the Hemopurifier® lectin-affinity cartridge in critically ill patients with COVID-19 infection," is available here: <https://www.frontiersin.org/articles/10.3389/fmed.2021.744141/full>

The publication documents two critically ill COVID-19 patients receiving a combined total of nine, six-hour Hemopurifier® treatment sessions. These two patient case studies are notable because they are the first descriptions of the Hemopurifier® successfully removing exosomes, exosomal microRNAs, and SARS-CoV-2 virus in patients with COVID-19. In the first patient, exosome and exosomal microRNA removal was associated with improved coagulopathy, oxygenation, and clinical recovery. In the second patient, SARS-CoV-2 virus removal by the Hemopurifier® was demonstrated, but the patient expired because the disease was advanced and had triggered multiple organ system failures. The patient had completed Hemopurifier® treatment and passed away while receiving Continuous Renal Replacement Therapy (CRRT). Hemopurifier® treatment sessions were well tolerated by both patients without side effects.

"The emergence of COVID-19 variants has prompted an even greater need for innovative COVID-19 treatments. These results demonstrate that the Hemopurifier® can remove exosomes and viral particles related to COVID-19 from the blood stream in humans," said Charles J. Fisher, Jr., M.D., CEO of Aethlon Medical and an author of the manuscript. "We remain optimistic about our ongoing studies of the Hemopurifier® as a treatment for critical COVID-19 patients."

The safety and feasibility of the Aethlon Hemopurifier® is being evaluated in an active Early Feasibility Study, analogous to a Phase 1 clinical trial for a drug or biologic, that is designed to enroll up to 40 COVID-19 ICU patients [NCT04595903].

## **About Aethlon and the Hemopurifier®**

Aethlon Medical is a medical technology company developing the Hemopurifier®, a blood filtration system targeting life-threatening viral diseases and cancer. The Hemopurifier® has

demonstrated the ability to remove exosomes and viral particles from the blood stream in human studies. The Hemopurifier® has potential applications in cancer and in severe viral diseases, where exosomes may promote immune suppression and tumor metastasis in cancer, and organ dysfunction in viral diseases. The Hemopurifier® holds two U.S. Food and Drug Administration (FDA) Breakthrough Device designations for the treatment of individuals with advanced or metastatic cancer and also for the treatment of life-threatening viral diseases that are not addressed with approved therapies.

The breakthrough device designation in cancer is indicated 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. Under an Investigational Device Exemption (IDE) application, the FDA approved a single site, open-label Early Feasibility Study (EFS) to evaluate the Hemopurifier® for reducing cancer-associated exosomes prior to the administration of standard-of-care pembrolizumab (KEYTRUDA®) in patients with recurrent and/or metastatic squamous cell carcinoma of the head and neck. The EFS is being conducted at the University of Pittsburgh Medical Center Hillman Cancer Center.

The breakthrough device designation in viral disease is for an open IDE application related to the treatment of life-threatening viruses that are not addressed with approved therapies. The Company is conducting a clinical trial approved by the FDA to treat up to 40 COVID-19 patients at up to 20 clinical sites in the U.S. In two case studies of patients treated under Emergency Use Authorization (EUA), the Hemopurifier® demonstrated binding of SARS-CoV-2 spike protein and removal of SARS-CoV-2 virus and exosomal microRNAs associated with organ dysfunction from the circulation of human patients.

Additional information can be found at [www.AethlonMedical.com](http://www.AethlonMedical.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. These forward-looking statements are based upon Aethlon's current expectations and involve assumptions that may never materialize or may prove to be incorrect. Factors that may contribute to such differences include, without limitation, the Company's ability to enroll patients in and successfully complete trials in the Early Feasibility Studies in COVID-19 patients, the Company's ability to successfully treat patients under any Emergency Use pathway, the Company's ability to successfully complete development of its Hemopurifier, the Company's ability to raise additional funds, and other potential risks. 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, 2021, and in the Company's other filings with the Securities and Exchange Commission, including its quarterly Reports on Form 10-Q. All forward-looking statements contained in this press release speak only as of the date on which they were made. 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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