August 27, 2024

Aethlon Medical Announces Publication of Preclinical Data Showing Ability of the Hemopurifier® to Remove Extracellular Vesicles and microRNAs from Renal Perfusates Following Controlled Oxygenated Rewarming of Discarded Donor Kidneys

Results Support Future Study of the Hemopurifier® as Part of a Machine Perfusion Circuit to Further Assess its Association with Function of Retrieved Kidneys

SAN DIEGO, Aug. 27, 2024 /PRNewswire/ -- Aethlon Medical, Inc. (Nasdaq: AEMD), a medical therapeutic company focused on developing products to treat cancer and life-threatening infectious diseases, today announced the publication in preprint of an in vitro study in bioRxiv on August 24, 2024, entitled, "The Hemopurifier® Removes Extracellular Vesicles and microRNAs From Renal Perfusates Following Controlled Oxygenated Rewarming of Discarded Donor Kidneys."

Aethlon Medical's Hemopurifier® is a therapeutic blood filtration system designed to bind and remove harmful exosomes and life-threatening viruses from blood and other biological fluids, qualities which have potential applications in oncology and infectious diseases, as well as in the organ transplant setting.

"Kidney transplantation provides the highest quality of life for those afflicted with end stage renal disease, yet a significant shortage in the number of donor kidneys currently exists," stated Steven LaRosa, MD, Senior Author of the paper and Chief Medical Officer of Aethlon Medical. "To bridge the gap between recipients and donors, the criteria for the use of kidneys from deceased brain death and diseased circulatory death donors has been extended. However, kidneys from extended criteria donors are associated with higher rates of poor graft function and acute rejection in recipients. The release of extracellular vesicles (EVs) and microRNAs from the donor kidney are hypothesized to play a role in these complications and are targets for the, Hemopurifier®."

Given that one approach to lessen these complications and potentially increase the time of assessment of organ viability is to use machine perfusion on recovered kidneys, and, based on Aethlon Medical's prior data in COVID-19 and oncology, it was hypothesized that the Hemopurifier® could remove EVs and microRNAs from renal perfusates. In this proof-of-

concept study, the company obtained four perfusates from discarded donor kidneys that had undergone a type of machine perfusion called Controlled Oxygenated Rewarming (COR). These perfusates were then pumped over the Hemopurifier® and analyzed for EV counts and microRNA levels. The results confirmed the removal of both small and larger size EVs and a significant reduction in microRNAs.

"While our primary focus is to conduct our planned clinical trials of the Hemopurifier® in India and Australia, in patients with solid tumors who have stable or progressive disease during anti-PD-1 monotherapy, the data generated by this proof-of-concept study is encouraging and provides evidence for adding the transplant indication to our product pipeline," added James Frakes, Interim Chief Executive Officer and Chief Financial Officer of Aethlon Medical. "Next steps to consider would be an additional pre-clinical study comparing mediator removal, renal function and histopathology in a machine perfusion circuit performed both with and without incorporation of the Hemopurifier® on discarded kidneys. Ultimately, a clinical trial designed to demonstrate that incorporation of the Hemopurifier® into renal perfusion improves important clinical endpoints in transplant recipients such as delayed graft function, graft survival or rejection rates would likely be required."

About Aethlon and the Hemopurifier®
Aethlon Medical is a medical therapeutic company focused on developing the Hemopurifier, a clinical stage immunotherapeutic device which is designed to combat cancer and life-threatening viral infections and for use in organ transplantation. In human studies, the Hemopurifier has demonstrated the removal of life-threatening viruses and in pre-clinical studies, the Hemopurifier has demonstrated the removal of harmful exosomes from biological fluids, utilizing its proprietary lectin-based technology. This action has potential applications in cancer, where exosomes may promote immune suppression and metastasis, and in life-threatening infectious diseases. The Hemopurifier is a U.S. Food and Drug Administration (FDA) designated Breakthrough Device 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. The Hemopurifier also holds an FDA Breakthrough Device designation and an open Investigational Device Exemption (IDE) application related to the treatment of life-threatening viruses that are not addressed with approved therapies.

Additional information can be found at 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 raise additional capital and to successfully complete development of the Hemopurifier; the Company's ability to

successfully demonstrate the utility of the Hemopurifier in removing EVs and microRNAs from renal perfusates; the Company's ability to conduct its planned oncology clinical trials in Australia and India; the Company's ability to manage and successfully complete its clinical trials, if initiated; the Company's ability to conduct clinical trial(s) designed to demonstrate benefits of the incorporation of the Hemopurifier® into renal perfusion; the Company's ability to successfully manufacture the Hemopurifier in sufficient quantities for its clinical trials, 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, 2024, 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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