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Aethlon Medical

(AEMD-NASDAQ)

Positive Results in a Range of Conditions, Including COVID-19 & Monkey Pox

Clinical trials are moving forward and expanding, as AEMD continues to demonstrate the effectiveness of the Hemopurifier in a broad range of viruses and conditions in single patient emergency use cases and in in vitro analysis, including COVID-19 and various variants and Monkey Pox, among others. The company is working to launch a broad oncology trial to study the impact of the Hemopurifier on a variety of cancerous tumors. Depending on trial results, it could have broad commercial and economic implications for AEMD, in our view.

OUTLOOK

We believe the Hemopurifier's demonstrated pre-clinical positive results in treating COVID-19 & variants, Monkey pox, tumors and other conditions warrant AEMD expanding development / clinical efforts. With a succession of COVID-19 variants emerging over the past 2+ years of the pandemic and rising cases of Monkey pox worldwide, the Hemopurifier's ability to treat COVID mutations and other viruses such as Monkey pox is important, in our view. The Hemopurifier has demonstrated effectiveness against monkey pox virus (MPV) in an *in vitro* study. Results demonstrated that within 20 hours, the Hemopurifier had removed nearly all (98%) of infectious MPV. Moreover, given the Hemopurifier's ability to remove harmful exosomes, the company expects to launch a study examining its ability to generate positive results safely with a variety of cancerous tumors.

Current Price (6/28/22) **\$1.17**
Valuation **\$8.00**

SUMMARY DATA

52-Week High **\$6.22**
52-Week Low **\$0.88**
One-Year Return (%) **-76.22**
Beta **0.81**
Average Daily Volume (sh) **354,732**

Shares Outstanding (mil) **16**
Market Capitalization (\$mil) **\$19**
Short Interest Ratio (days) **N/A**
Institutional Ownership (%) **3**
Insider Ownership (%) **1**

Annual Cash Dividend **\$0.00**
Dividend Yield (%) **0.00**

5-Yr. Historical Growth Rates
Sales (%) **N/A**
Earnings Per Share (%) **N/A**
Dividend (%) **N/A**

P/E using TTM EPS **N/A**
P/E using 2022 Estimate **N/A**
P/E using 2023 Estimate **N/A**

Zacks Rank **N/A**

Risk Level **High,**
Type of Stock **Small-Blend**
Industry **Med Products**

ZACKS ESTIMATES

Revenue

(in '000 of \$)

	Q1 (Jun)	Q2 (Sep)	Q3 (Dec)	Q4 (Mar)	Year (Mar)
2020	0.0 A	0.0 A	0.4 A	0.2 A	0.7 A
2021	0.0 A	0.0 A	0.6 A	0.0 A	0.7 A
2022	0.1 A	0.1 A	0.0 A	0.0 A	0.3 A
2023	0.0 E				

Earnings / loss per share

	Q1 (Jun)	Q2 (Sep)	Q3 (Dec)	Q4 (Mar)	Year (Mar)
2020	-\$1.63 A	-\$1.29 A	-\$0.28 A	-\$0.57 A	-\$1.87 A
2021	-\$0.15 A	-\$0.15 A	-\$0.20 A	-\$0.16 A	-\$0.65 A
2022	-\$0.16 A	-\$0.13 A	-\$0.16 A	-\$0.24 A	-\$0.71 A
2023	-\$0.24 E	-\$0.23 E	-\$0.22 E	-\$0.22 E	-\$0.91 E

Quarters might not add to annual reflecting rounding

Disclosures on page 13

KEY POINTS: EXPANDING POTENTIAL INDICATIONS FOR HEMOPURIFIER

Hemopurifier's positive treatment includes COVID-19 & variants, Monkey pox, tumors...

Aethlon Medical (NASDAQ: AEMD) reported 2021 results last night and provided a business update. Our key takeaways are:

- Clinical trials are moving forward and expanding
- AEMD continues to demonstrate the effectiveness of the Hemopurifier in a broad range of viruses and conditions, including COVID-19 and various variants and Monkey Pox
- The Hemopurifier's effectiveness has already been demonstrated in humans in single patient emergency use cases and in *in vitro* analysis
- The company is working to launch a *blanket* oncology trial to study the impact of the Hemopurifier on a variety of cancerous tumors
- We would expect AEMD to initiate the broader tumor study by late 2022 or early 2023.
- The results of such a trial, if positive, could have broad commercial and economic implications for AEMD
- With \$17.1M of cash at YE FY22, the company has funding to maintain its development efforts for the foreseeable future

AEMD's lead product, the Aethlon Hemopurifier®, is being studied in a severe COVID-19 clinical trial under the company's open IDE (Investigational Device Exemption) for life-threatening viral infections. The safety and feasibility of the Hemopurifier is being evaluated in this active Early Feasibility Study (EFS, which is comparable to a Phase 1 clinical trial for a drug or biologic) that will enroll up to 40 COVID-19 ICU patients.

The first patient was enrolled in this study in June 2022 and has completed the Hemopurifier treatment. AEMD has nine fully activated hospitals that are actively screening patients for the trial, including Louisiana State University (LSU) Shreveport, Valley Baptist Medical Center in Texas, Loma Linda Medical Center, Hoag Irvine and Newport Beach in Southern California, University of California Davis, University of Miami Medical Center, Cooper Medical and Thomas Jefferson Medical Center. The company is also in the site activation process with additional U.S. medical centers, supported by its CRO (contract research organization) for the trial, Pharmaceutical Product Development (PPD).

AEMD selected PPD as CRO to supervise the domestic COVID-19 clinical trial reflecting PPD's substantial experience and prior work history with some members of AEMD senior management over the years. A CRO helps supervise the planning, logistics and daily operation and management of clinical trials, including data collection. AEMD is optimistic that PPD will move the study forward in an efficient and expedient way. Working with PPD, which the company believes has assembled a strong team to facilitate the U.S. COVID-19 study, AEMD continues to advance *site readiness* at medical centers participating in the study. Although in recent quarters, COVID-19 has had an impact on patient enrollments for both the COVID-19 and cancer study – often because hospital staffing in many venues has been reduced – the outlook has improved as hospital staff levels and patient populations return to normal. [PPD](#) is a publicly-traded, leading CRO that has extensive experience and a global footprint.

In addition to this study, the Hemopurifier has demonstrated positive results in two severely ill patients (discussed below) under individual emergency use and in *in vitro* analysis. The Hemopurifier has produced positive results in binding seven variants of the SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) virus *in vitro*. AEMD's CEO Dr. Charles J. Fisher Jr. and the company's Chief Medical Officer Dr. Steven LaRosa contributed to an [article](#)¹ laying out data showing that the Hemopurifier's proprietary GNA (Galanthus nivalis agglutinin) affinity resin successfully was able to bind seven clinically relevant SARS-CoV-2 variants, including the Delta and Omicron variants that have been responsible for recent spikes in cases in multiple regions, *in vitro*.

In simple terms, the Hemopurifier was able to leverage the GNA affinity resin to secure and remove a majority of harmful material of the virus variants. The Hemopurifier is an extracorporeal (i.e. outside of the body) blood filtration device that is designed to selectively remove harmful particles from the circulatory system, using lectin affinity agents. The GNA affinity resin is a key component of the Hemopurifier®. GNA is a plant lectin that attaches to alpha 1,3 mannose sugar units in enveloped viruses. As blood flows through the Hemopurifier, it uses the lectin affinity

¹ Removal of Clinically Relevant SARS-CoV-2 Variants by An Affinity Resin Containing Galanthus nivalis Agglutinin, published in bioRxiv

agents to trap viruses and other target pathogens using the capability of the lectins to specifically bind to the unique high mannose structures of viral glycoproteins. This process, in turn, removes the virus and harmful viral glycoproteins from the body while allowing healthy cells to pass through and back into the circulatory system.

The recent *in vitro* study supports AEMD's hypothesis that the Hemopurifier's viral binding would be unaffected by spike protein mutations. In other words, the company believed the Hemopurifier would be effective treating most, if not all, COVID-19 virus mutations because the mutations all contain sugar mannose structures which the Hemopurifier can bind and remove without harming healthy cells. To test this hypothesis, known concentrations of seven clinically relevant SARS-CoV-2 variants were spiked in medium and passed three times over columns containing 1 gm of GNA affinity resin.

Viral capture efficiency 53% to 89% for all variants tested; 70%+ in four

When the percent decrease in viral solution was compared with the control sample, the viral capture efficiency with the GNA affinity resin ranged from 53% to 89% for all variants tested. For four of the seven variants tested, the resin columns eliminated more than 70% of the SARS-COV-2 load in a single cycle and more than 69% for six of the seven. The company believes this supports its hypothesis about the versatility of the Hemopurifier (HP) in treating variations of COVID-19 and other viruses.

Variant ID	Capture Efficiency (%)
NR 54009 (South Africa)	69.3 ± 11.4
NR 54000 (UK)	69.8 ± 4.7
NR 54982 (Brazil)	89.0 ± 3.7
NR 55672 (B.1.672 Delta)	78.8 ± 1.9
NR 55654 (Lambda)	70.5 ± 3.6
NR 55691 (AY.1 Delta)	53.2 ± 11.6
NR 56461 (Omicron)	89.9 ± 2.1

Source: [Article](#)

With a succession of COVID-19 variants emerging over the past 2+ years of the pandemic, the Hemopurifier's ability to treat mutations is particularly important. A key takeaway is that the device can treat existing and future mutations by binding and removing the sugar mannose structures in the viral material. The manuscript discussing the *in vitro* results is being submitted to a journal for peer review.

Hemopurifier benefits

- The Hemopurifier's binding capacity is more than sufficient to treat viral loads seen in adult patients who have severe COVID-19 infections
- Data supports the ability of the Hemopurifier to treat existing and potentially future COVID-19 variants
- Much of the global population remains at risk to severe infection as a result of many factors, including pre-conditions and vaccine hesitancy, among others
- Antivirals have not demonstrated strong evidence of effectiveness in severe disease

Growing database on the efficacy and benefits of the Hemopurifier

The *in vitro* data adds to data supporting the efficacy of the Aethlon Hemopurifier® in binding and eliminating SARS-CoV-2 from the blood *in vivo*. The *in vitro* results add to a growing database on the efficacy and benefits of the HP, including in treating patients with the COVID-19 virus. In 2021, AETH was asked to use the Hemopurifier to treat two patients who were critically ill with COVID-19² following other treatment therapies. Neither patient was expected to survive. The Hemopurifier therefore was used under the FDA emergency use authorization (EUA). In other words, the use of a treatment that has not yet been fully approved by the FDA was implemented because the doctors were out of options.

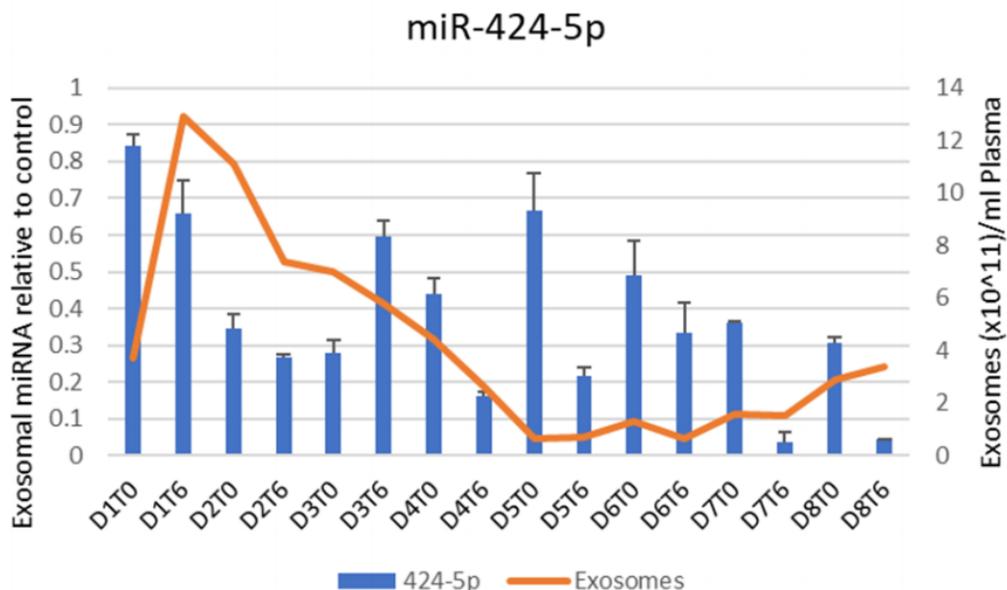
² See [Removal of COVID-19 Spike Protein, Whole Virus, Exosomes and Exosomal microRNAs by the Hemopurifier® Lectin-Affinity Cartridge in Critically Ill Patients with COVID-19 Infection](#)

Case #1

Case #1 involved a 59-year-old female patient with a medical history of obesity, hypertension, hyperlipidemia, alcohol abuse, and heart valve replacement. She was admitted to the hospital in July 2020 with COVID-19 pneumonia for treatment with oxygen and other therapies. Her respiratory failure worsened. She developed acute respiratory distress syndrome (ARDS) and was transferred to the ICU for intubation. Her oxygenation did not improve after intubation, mechanical ventilation and prone positioning.

After about three weeks, her doctors requested Hemopurifier treatment under EUA. She received daily Hemopurifier treatment for four days (hospital days 22-25). Importantly, she tolerated the procedure well, with no evidence of allergic reaction, thrombotic complications or hemolysis.

Following Hemopurifier treatment, the patient was observed without demonstrable COVID-19 viremia. The presence of viremia – or the active virus circulating in the blood – has been associated with disease severity and the development of multi-organ failure.



Source: Company reports

Following the initial four treatments, she showed improvement in COVID-19-associated coagulopathy³ (CAC), lung injury, inflammation, and tissue injury. AEMD believes that the improvements reflected the Hemopurifier's removal of exosomes with noxious microRNA cargo and that the removal of exosomes contributed to the patient's recovery. MicroRNAs are involved in mRNA degradation and inhibition of protein translation.

There were observed decreases in total exosomal concentration in the patient compared to prior to the Hemopurifier treatment from days 2-to-7 of treatment. The concentration of exosomal miR-16 dropped over the first four Hemopurifier treatments and then remained at low levels, while the patient's acute lung injury improved. At the beginning of Hemopurifier treatment, the total exosome concentration increased on the first day. Concentration also increased on the eighth day of treatment, which requires further study.

The patient received eight Hemopurifier treatments without complications and eventually was weaned from a ventilator and discharged from the hospital. The findings suggest that benefits from the Hemopurifier in COVID-19 may extend beyond viral removal and might also reflect the elimination of exosomes. Just as the Hemopurifier is being evaluated for the ability to remove exosomes to treat cancer patients (see below), treatment in Case #1 demonstrates that exosomes are also involved in the cell to cell spread of COVID-19 infection and its associated inflammation, coagulopathy and complement activation.

³ Coagulopathy is a condition where blood clotting is impaired.

Case #2

The second patient was a 67-year-old man with a history of coronary artery disease and newly diagnosed diabetes, among other disorders, who also had acute kidney injury. The case is notable for the first-ever demonstration of *in vivo* removal of SARS-CoV-2 virus from the blood stream of an infected patient. The patient completed a six hour Hemopurifier® treatment without complications and was placed on Continuous Renal Replacement Therapy (CRRT). Although the patient ultimately died after CRRT because his disease was at an advanced stage, the Hemopurifier treatment showed that it could be beneficial.

The patient received 6 hours and 15 minutes of Aethlon Hemopurifier treatment in series with CRRT. The patient had fluctuations in his oxygenation and blood pressure during the completed HP session. The patient was disconnected from the Hemopurifier without incident.

In summary, the two case studies indicate that the Hemopurifier® successfully cleared SARS-CoV-2 virus and associated exosomes from the blood stream. This resulted in a potential benefit for one of the critical COVID-19 patients that were treated. The two patients tolerated a total of nine 6-hour Hemopurifier treatments without side effects. For the first time, AEMD demonstrated the removal of COVID-19 from a viremic patient by the Hemopurifier. Additionally, total exosome concentrations and noxious exosomal microRNAs associated with coagulopathy and acute lung injury decreased with Hemopurifier treatments was associated with clinical improvement in one patient.

Hemopurifier® benefits

- Successfully cleared SARS-CoV-2 virus from the blood stream of an infected patient.
- Successfully cleared associated exosomes from the blood stream of an infected patient.
- Patients tolerated Hemopurifier treatment without side effects
- Lowered noxious exosomal microRNAs associated with coagulopathy and acute lung injury

AEMD also conducting a study of the Hemopurifier in COVID-19 patients in India. The company obtained ethics review board approval and entered into an agreement with Medanta Medicity Hospital in Delhi NCR, India, to initiate a COVID-19 clinical trial. AEMD has completed all site initiation activities there and the site is now open for enrollment and actively screening patients, with one patient recently completing participation in the study.

We believe the company continues to build its database of positive outcomes using the Hemopurifier. The growing database is expected to, in turn, contribute to potential FDA regulatory approval. Moreover, given the several beneficial outcomes noted with the two EUA patients also point to the potential versatility of the Hemopurifier that could also imply a growing commercial opportunity.

POSITIVE RESULTS IN A RANGE OF VIRAL AGENTS, INCLUDING MONKEY POX

Examples of successful use of the Hemopurifier

The company has already demonstrated that the Hemopurifier can be used to treat other viruses and harmful agents, including West Nile virus and Monkey pox, among many others. A laboratory version of the Hemopurifier has also been shown to clear multiple other viruses *in vitro*, including a model version of the Middle Eastern Respiratory Syndrome (MERS) virus that is a coronavirus from the same family as the SARS-CoV-2 virus that causes COVID-19. The Hemopurifier has previously been tested in patients with hepatitis C virus (HCV) infection and in one patient with Ebola virus infection. Given the demonstrated ability of the technology to bind and clear other coronavirus diseases, such as the recent MERS strain, and shown effectiveness against all highly glycosylated viruses with which it has been validated, it is conceivable that the device could have utility against COVID-19, as well. Importantly, COVID-19 potentially represents a new opportunity to provide additional proof-of-concept and validate the Hemopurifier against another deadly disease, as well as a possible revenue opportunity for the company.

Monkey pox cases on the rise

Recently, Monkey pox cases have been on the rise. The [WHO](#) (World Health Organization) is monitoring MPV closely, given that cases have been reported in multiple countries and case numbers are increasing. In Nigeria, there has been an ongoing outbreak since 2017, according to the [Harvard](#) School of Public Health. In 2Q22, one death was reported in Nigeria. The International Health Regulations Emergency Committee met regarding the multi-

country monkey pox outbreak on June 23, 2022. Cases have been reported in about 50 countries, with the majority (over 85%) reported in Europe and about 11% in North America.

Moreover, AEMD believes that actual case numbers might be under-reported, as the disease and symptoms are not well-known by diagnosing physicians at this point. According to WHO, the “unexpected appearance of monkey pox and the wide geographic spread of cases indicate that the monkey pox virus might have been circulating below levels detectable by the surveillance systems and ... might have been undetected for a period of time.”

Routes of monkey pox virus transmission include human-to-human via direct contact with infectious skin or mucocutaneous lesions, respiratory droplets (and possibly short-range aerosols) or indirect contact from contaminated objects or materials. Close physical contact can lead to transmission. The WHO notes that “the likelihood of sustained community transmission cannot be ruled out.”

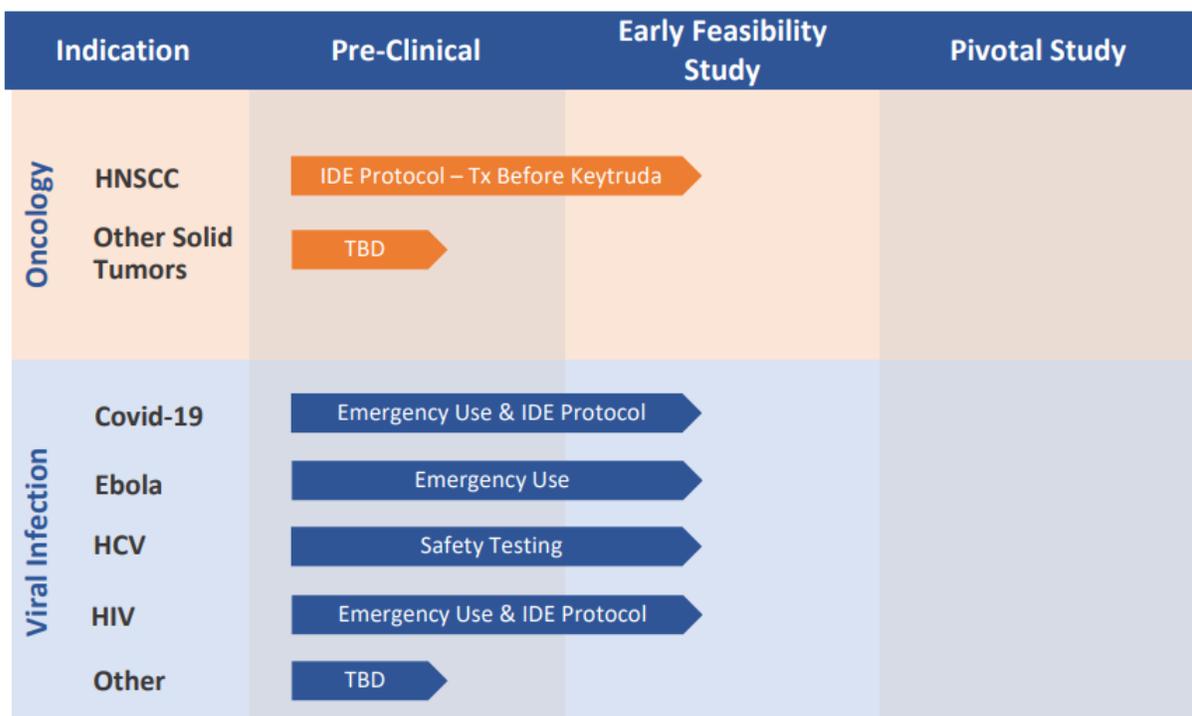
Importantly, the Hemopurifier has demonstrated effectiveness against monkey pox. In 2008, AEMD commissioned Battelle Memorial Institute to run a monkey pox virus (MPV) *in vitro* study. Results of that study demonstrated that high concentrations of MPV (approximately 35 thousand cpu/ml) were rapidly depleted from cell culture fluids that were circulated through the Hemopurifier. Within 20 hours, the Hemopurifier had removed nearly all (98%) of infectious MPV.

Specifically, the data indicated that the Hemopurifier removed 44% of infectious MPV in the first hour of testing, 82% after six hours, and 98% after 20 hours. The studies were conducted in triplicate and data verification was provided by real-time polymerase chain reaction.

Monkey pox study: Hemopurifier infectious MPV removal

- 44% in the first hour of testing
- 82% after six hours
- 98% after 20 hours

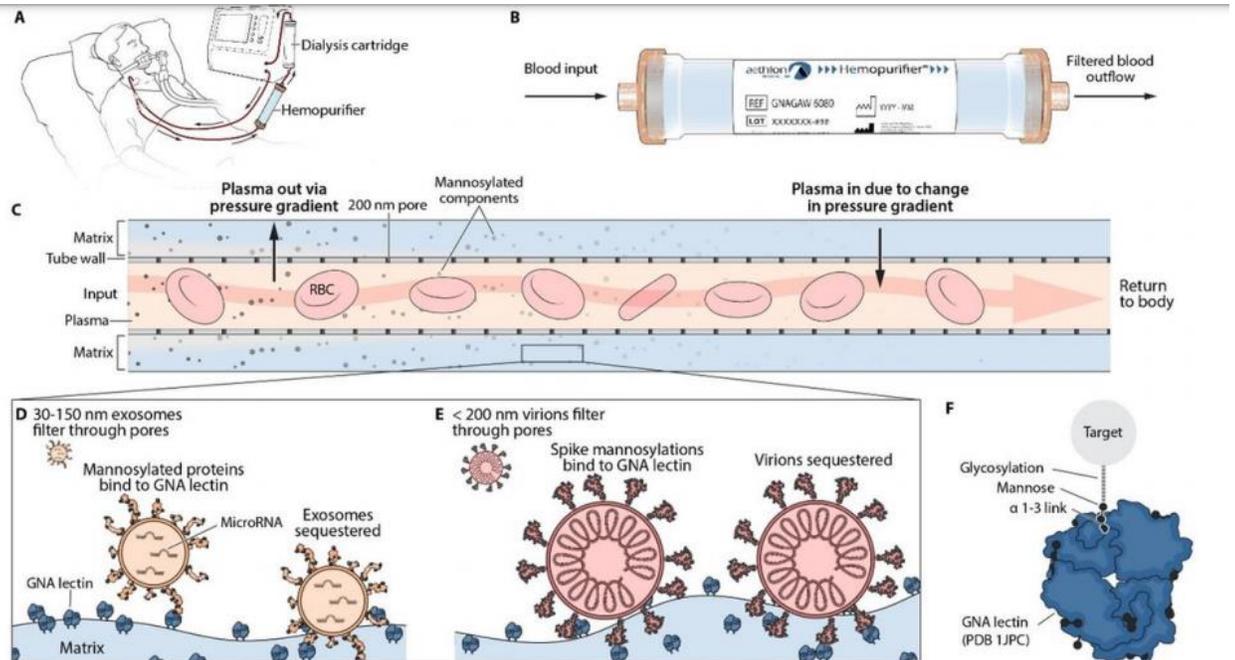
These in vitro and human treatment results demonstrate the potential versatility of the Hemopurifier in treating a range of infections and tumors. We believe they support the company’s expanding development and clinical trial efforts around the HP.



Source: Company investor [presentation](#)

The Hemopurifier is an extracorporeal blood filtration device designed to selectively remove harmful particles from the circulatory system. It is a single-use cylindrical cartridge containing immobilized lectin affinity agents that surround approximately 2,800 hollow fibers. Lectins are sugar-binding proteins that attach themselves to the glycoprotein structure of cell membranes or the membranes of sub-cellular particles. Certain viruses envelop themselves with glycoproteins, disguising them from the body's immune system. These viral glycoproteins are also often shed by the virus, which can bind to antibodies and suppress the body's immune response. As blood flows through it, the Hemopurifier uses the lectin affinity agents to trap viruses and other target pathogens. The device uses immobilized lectins that specifically bind to the unique high mannose structures of viral glycoproteins that are derived from the host. This process, in turn, removes the virus and harmful viral glycoproteins from the body while allowing for healthy cells to pass through and back into the circulatory system. The Hemopurifier pores are 200 nanometers so any particles smaller than 200 nanometers will flow through.

Hemopurifier Mechanism



Source: Company reports

The Hemopurifier targets the elimination of infectious viruses and cancer-promoting exosomes from the blood system. It is a cylindrical cartridge encased with hollow fibers and affinity (i.e. - lectin protein that can bind any particle, virus or exosome, that has mannose sugars on its surface membrane) binding agents. The device is used on existing blood circulatory equipment such as dialysis and CRRT machines that are already installed in hospitals and clinics. This makes the Hemopurifier essentially a plug & play device that can be leveraged easily. The Hemopurifier is designed to aid the body's ability to fight disease by removing viruses and other injurious substances from the blood. After the blood is cleansed, it is then returned to the bloodstream, as illustrated above.

The Hemopurifier is used with existing dialysis, blood pump and continuous renal replacement therapy (CRRT) equipment. It is important to note that use of the Hemopurifier does not require dialysate - chemicals used in dialysis to pull fluids out of the bloodstream and to replenish the body. As the Hemopurifier discriminately captures harmful agents, it reduces loss of essential blood components and therefore does not require the use of replacement fluids. This is a key differentiator compared to other extracorporeal pathogen clearing technologies that are focused on molecule size that remove the healthy blood components as they eliminate infected ones. A patient's entire circulatory system can flow through the Hemopurifier in about 15 minutes. Clinical programs have demonstrated safety of the Hemopurifier in four-hour and six-hour treatment studies. The device is covered by five U.S. and 33 international patents. AEMD has 17 patent applications pending.

STUDYING THE HEMOPURIFIER EFFECTIVENESS ON TUMORS

Oncology study moving forward

AEMD is studying the impact of the Hemopurifier on patients with head and neck cancer. AEMD also continues to screen patients for its IDE clinical trial in Head and Neck Cancer. The company is looking to expand this trial to one or more additional sites to accelerate patient recruitment. With a greater number of medical centers participating in the study, the company expects patient enrollments to accelerate.

AEMD intends to evaluate the Hemopurifier in *blanket* study of multiple tumor types

Based on management's comments, we expect AEMD to initiate additional trials domestically and internationally to study the Hemopurifier as a treatment for other forms of cancer. Given the Hemopurifier's demonstrated ability to remove exosomes, management believes the device can be used to affect improved outcomes in a number of cancers. Moreover, Keytruda, the standard of care with which the Hemopurifier is being evaluated (see below), has been used to treat 25+ different types of cancer, further illustrating the potential to use the Hemopurifier to treat a range of cancers. Management expects a CRO can help the company expand its clinical efforts to study the Hemopurifier in a range of cancers, given the Hemopurifier's demonstrated ability to remove exosomes. The company will also try to evaluate dosing and dosing intervals in upcoming studies.

The company expects an anticipated blanket study to demonstrate proof of concept for other solid tumors and has an ambitious timeline. In October of 2019, the FDA approved AEMD's IDE application to initiate the above-noted EFS of the Hemopurifier in patients with head and neck cancer in combination with Keytruda. We expect AEMD to submit a proposed supplement to the oncology IDE to the FDA shortly. If the IDE supplement is approved, we would expect AEMD to initiate a *blanket* tumor study by late 2022 or early 2023.

RECENT RESULTS

AEMD reported roughly \$294,000 of revenue related to NIH government contracts in FY 2022, compared to roughly \$659,000 in FY 2021. Aethlon had about \$345,000 of deferred revenue related to those NIH contracts at year-end FY 2022, as a result of not achieving certain milestones. FY 2022 operating expenses were roughly \$10.72 million, up from about \$8.55 million for FY 2021. The roughly x% increase reflects higher payroll and related expenses and G&A, as the company has expanded its team to support its development efforts and growth initiatives. These increased costs were partially offset by a roughly \$4,000 decrease in professional fees. The higher payroll-related costs also included non-recurring expense of roughly \$203,000 in relocation-related compensation to two senior executives that relocated to San Diego, California to work for the company. In FY 2021, AEMD recorded about \$452,000 related to the separation agreement with its former CEO and those expenses did not recur in FY 2022.

The \$1.0 million increase in FY 2022 in G&A expenses primarily reflect increases of \$453k in clinical trial expenses, as well as a combined roughly \$404k in rent and insurance expense AEMD reported a net loss before non-controlling interests of roughly \$10.4 million for FY 2022, compared to a net loss before non-controlling interests of roughly \$7.9 million in FY 2021. We expect higher operating expenses in FY 2023 to support the expanded scope of AEMD's clinical and development efforts.

VALUATION

Historically, we have valued AEMD shares based on estimated fair value of the Hemopurifier in cancer, virus, pathogen and other applications at about \$90 million. Additionally, we value AEMD's majority position in Exosome Sciences, Inc. (ESI) at about \$30 million. ESI is focused on the discovery of exosomal biomarkers to diagnose and monitor life-threatening diseases, including in patients who are at risk or have been diagnosed with a range of cancers.

We believe there could be upside to the valuation, based on management's view and early discussions regarding the potential benefits of the Hemopurifier in other types of cancers. Given the unfortunate prevalence of cancer and lack of truly effective therapies, we think that there is reason to believe that a cancer indication for the Hemopurifier is an eventual realistic outcome. Clinical evidence supports the role of exosomes in the progression of cancer and, similarly, that removing tumor-derived exosomes from circulation might inhibit tumor growth and/or potentially improve the effectiveness of immunotherapies. As this describes the basis for Aethlon's pursuit of the Hemopurifier in a potential cancer indication, we think a growing database of evidence could have important consequences, including potentially influencing key opinion leaders and regulators alike.

Additionally, the ongoing COVID-19 outbreak could represent a new opportunity in this space for AEMD to generate data that offers proof-of-concept of the Hemopurifier's efficacy. As more is learned about the disease, answers to key questions related to the possibility of even testing the Hemopurifier against the virus should become more apparent. So, while COVID-19 potentially represents a new opportunity to validate Hemopurifier against another deadly disease, we believe it might also present a nearer-term revenue opportunity for the company than we originally forecast, depending on the success of the EFS testing the Hemopurifier against the virus.

Our sum-of-the-parts analysis therefore values AEMD at approximately \$120 million, or over \$8 per share at this stage. We reiterate that our valuation is based on the company's current preliminary development state and could change with achievement of certain milestones. Moreover, we believe that there could be a more meaningful revenue opportunity associated with treating COVID-19 patients with the Hemopurifier than we originally expected.

RECENT NEWS

- The company announced 4Q21 results and provided a business update, including the Hemopurifier's prior *in vitro* effectiveness in treating Monkey pox, on June 28, 2022.
- The company announced results of the Hemopurifier on *in vitro* COVID-19 variants on May 2, 2022.
- Aethlon Medical, Inc. appointed Angela Rossetti to its board on Mar 28, 2022.
- Aethlon reported 3Q FY22 results on February 14, 2022.
- On October 12, 2021, AEMD announced the peer-reviewed publication of two case studies of critically ill COVID-19 patients who were treated with the Hemopurifier®.
- Aethlon Medical Announces Contracting with PPD to Advance Hemopurifier Clinical Programs on September 30, 2021.
- On June 3, 2021, Aethlon published case studies of two critically ill COVID-19 patients who were treated with the Hemopurifier®.
- Aethlon expanded its leadership team with the appointment of two key positions on January 6, 2021.
- On December 16, 2020, Aethlon announced the first patient treated in its first-in-human clinical trial of the Hemopurifier in head and neck cancer.
- AMED appointed Charles J. Fisher, Jr., M.D. as CEO on November 3, 2020.

RISKS

Risks to Aethlon achieving its objectives, and to our valuation, include the following.

- AEMD might need to raise additional capital earlier than expected.
- COVID-19 might delay the company's clinical and subsequent commercialization timelines.
- The clinical trials might not produce the results that management anticipates.
- Despite receiving two FDA Breakthrough Device designations, the FDA approval might take longer than expected or might not come at all.
- The company might not be able to advance the Hemopurifier in various programs.

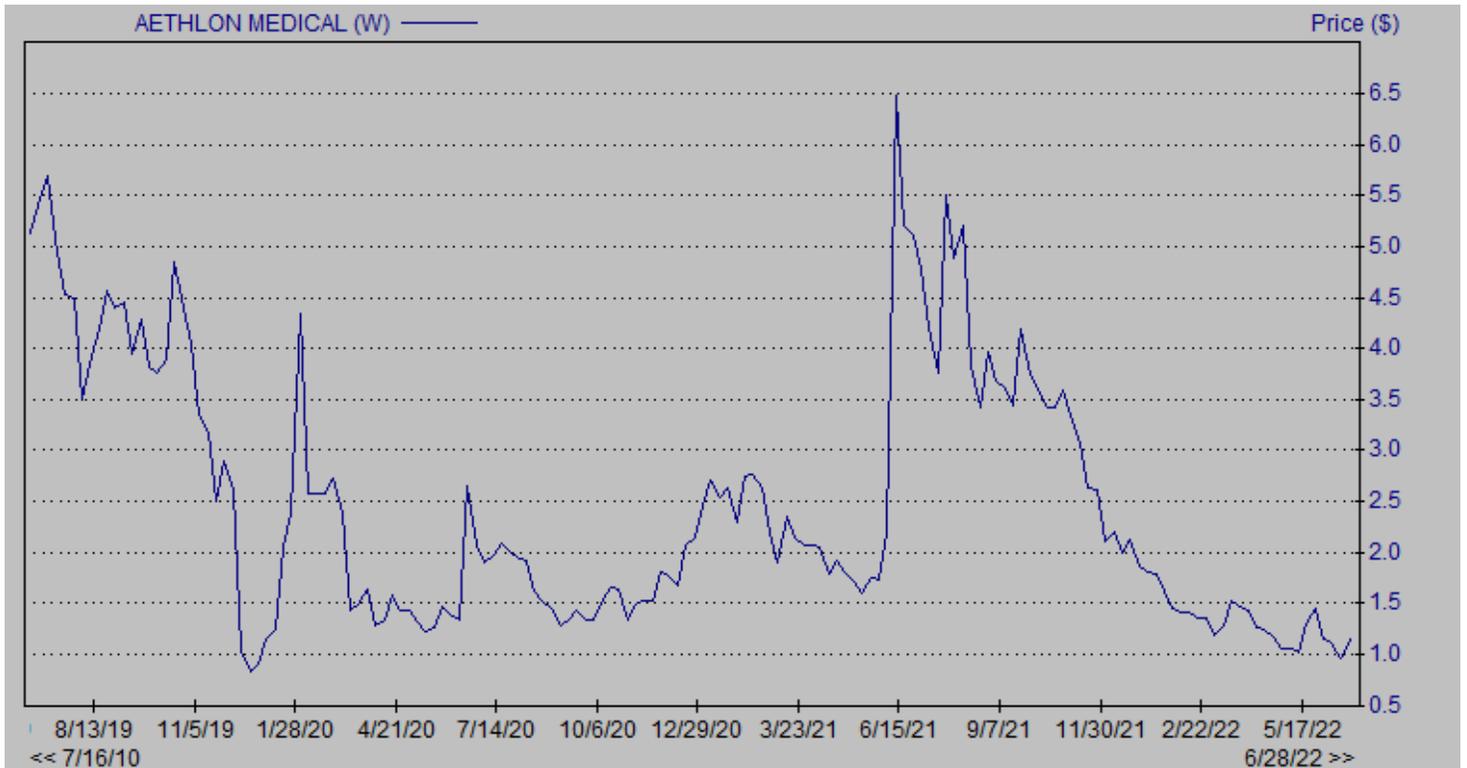
FINANCIAL MODEL

Aethlon Medical Inc.

AEMD (\$000s)	2018 A	2019 A	2020 A	2021 A	1Q22 A	2Q22 A	3Q22 A	4Q22 A	2022 A	1Q23 E	2Q23 E	3Q23 E	4Q23 E	2023 E
<i>Year ends March 31</i>														
Revenue	\$149.6	\$229.6	\$650.2	\$659.1	\$132.0	\$132.0	\$17.1	\$13.1	\$294.2	\$13.6	\$14.1	\$14.7	\$15.3	\$57.8
<i>YOY Growth</i>		53.5%	183.2%	14%	NM	NM	-97.3%	-618%	-54.8%	-89.7%	-89.3%	-14.0%	17.0%	-912%
Cost of Goods Sold	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Gross Income	\$149.6	\$229.6	\$650.2	\$659.1	\$132.0	\$132.0	\$17.1	\$13.1	\$294.2	\$13.6	\$14.1	\$14.7	\$15.3	\$57.8
<i>Gross Margin</i>	100.0%	100.0%	100.0%	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
OpEx	\$4,394.7	\$5,332.6	\$5,653.2	\$6,477.02	\$1,642.59	\$1,662.6	\$2,190.5	\$2,878.4	\$8,374.1	\$2,907.15	\$2,936.2	\$2,965.6	\$2,995.2	\$11,804.2
<i>SG&A %of Prod Sales</i>	NM	NM	NM	NM	NM	NM								
R&D	\$586.0	\$896.0	\$927.0	\$2,072.0	\$587.7	\$478.2	\$354.6	\$920.5	\$2,341.0	\$929.7	\$939.0	\$948.4	\$957.9	\$3,775.1
<i>R&D %Tot Sales</i>	391.7%	390.2%	142.6%	314.4%	445.3%	362.3%	2071.5%	7036.7%						
Operating Income	(\$4,831.1)	(\$5,999.0)	(\$5,930.0)	(\$7,889.9)	(\$2,098.3)	(\$2,008.8)	(\$2,527.9)	(\$3,785.8)	(\$10,420.9)	(\$3,823.3)	(\$3,861.1)	(\$3,899.3)	(\$3,937.9)	(\$15,521.6)
<i>Operating Margin</i>														
Total Other Expense	\$868.7	\$220.5	\$450.1	\$1.6	\$0.1	\$0.0	\$0.0	\$0.8	\$0.0	\$0.5	\$0.5	\$0.5	\$0.5	\$2.0
Pre-Tax Income	(\$5,699.8)	(\$6,219.5)	(\$6,380.1)	(\$7,891.5)	(\$2,098.4)	(\$2,008.8)	(\$2,527.9)	(\$3,786.6)	(\$10,420.9)	(\$3,823.8)	(\$3,861.6)	(\$3,899.8)	(\$3,938.4)	(\$15,523.6)
Taxes (benefit)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<i>Tax Rate</i>	0.0%	0.0%	0.0%	0.0%	100.0%	200.0%	300.0%	400.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Minority interest	(\$20.3)	(\$24.8)	(\$6.1)	(\$4.8)	\$1.1	(\$0.8)	(\$2.2)	(\$2.9)	(\$4.8)	(\$2.0)	(\$2.0)	(\$2.0)	(\$2.0)	(\$8.0)
Net Income	(\$5,679.6)	(\$6,194.8)	(\$6,374.0)	(\$7,886.7)	(\$2,099.6)	(\$2,008.0)	(\$2,525.7)	(\$3,783.7)	(\$10,416.1)	(\$3,821.8)	(\$3,859.6)	(\$3,897.8)	(\$3,936.4)	(\$15,515.6)
<i>Net Margin</i>			-980.3%											
EPS	(\$6.92)	(\$5.13)	(\$1.87)	(\$0.65)	(\$0.16)	(\$0.13)	(\$0.16)	(\$0.24)	(\$0.71)	(\$0.24)	(\$0.23)	(\$0.22)	(\$0.22)	(\$0.91)
Diluted Shares O/S	821	1,208	3,415	12,091	12,829	15,386	15,397	15,447	14,757	15,947	16,447	17,647	18,202	18,757

Source: Zacks Pro forma for 10/2019 reverse stock split

HISTORICAL STOCK PRICE



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