



## SeaStar Medical Issued U.S. Patent with Broad Claims Covering Use of the Selective Cytopheretic Device for Multiple Clinical Indications

January 9, 2024

**DENVER, Jan. 09, 2024 (GLOBE NEWSWIRE)** -- SeaStar Medical Holding Corporation (Nasdaq: ICU), a medical device company developing proprietary solutions to reduce the consequences of hyperinflammation on vital organs, announces the issuance of U.S. Patent No. 11,866,730 with broad claims directed to methods of using the Selective Cytopheretic Device (SCD) to treat subjects with inflammatory conditions and to process activated leukocytes and platelets. The SCD is a first-in-class, cell-directed extracorporeal therapy that selectively targets highly active inflammatory cells to quell the inflammatory response.

"This patent significantly fortifies our intellectual property portfolio and is highly supportive of our strategy to validate our technology's application across multiple high-value clinical indications in which hyperinflammation plays a role," said Eric Schlorff, CEO of SeaStar Medical. "Regardless of its source, uncontrolled hyperinflammation can lead to vital organ damage and even death. Our SCD therapy works to selectively target the most highly activated cells responsible for inflammation to bring activated cells into a reparative state. This can stop the potential damage of over-activated cells and potentially reverse the damage they cause."

This newly issued patent covers methods for using SCD cartridges to treat inflammatory conditions by extracorporeally sequestering activated leukocytes and/or platelets and inhibiting or deactivating their inflammatory action, as well as methods for processing activated leukocytes and/or platelets. Treating inflammatory conditions requires controlling the number of leukocytes and/or platelets without removing too many cells, which can harm the healing process. The patent's claimed methods require the SCD cartridge to have specific ratios of surface area for sequestering activated leukocytes and/or platelets to SCD inner volume.

Unlike pathogen removal and other blood-purification tools, the SCD selectively targets the most highly activated proinflammatory neutrophils and monocytes. The Company has observed that these most highly activated immune cells are turned off in a low calcium environment. The SCD therapy mimics nature by creating a unique micro-environment, attracting these highly activated effector cells and neutralizing them in such an environment. These cells are then returned to the body through the blood, signaling the body to focus on repair.

### About SeaStar Medical

SeaStar Medical is a medical technology company that is redefining how extracorporeal therapies may reduce the consequences of excessive inflammation on vital organs. SeaStar Medical's novel technologies rely on science and innovation to provide life-saving solutions to critically ill patients. The Company is developing and commercializing cell-directed extracorporeal therapies that target the effector cells that drive systemic inflammation, causing direct tissue damage and secreting a range of pro-inflammatory cytokines that initiate and propagate imbalanced immune responses. For more information visit <https://seastarmedical.com/> or visit us on [LinkedIn](#) or [X \(formerly Twitter\)](#).

### Forward-Looking Statements

This press release contains certain forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, without limitation, SeaStar Medical's expectations with respect to the ability of SCD to treat patients with AKI and other diseases. Words such as "believe," "project," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," and similar expressions are intended to identify such forward-looking statements. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to significant risks and uncertainties that could cause the actual results to differ materially from the expected results. Most of these factors are outside SeaStar Medical's control and are difficult to predict. Factors that may cause actual future events to differ materially from the expected results include, but are not limited to: (i) the risk that SeaStar Medical may not be able to obtain regulatory approval of its SCD product candidates; (ii) the risk that SeaStar Medical may not be able to raise sufficient capital to fund its operations, including clinical trials; (iii) the risk that SeaStar Medical and its current and future collaborators are unable to successfully develop and commercialize its products or services, or experience significant delays in doing so, including failure to achieve approval of its products by applicable federal and state regulators, (iv) the risk that SeaStar Medical may never achieve or sustain profitability; (v) the risk that SeaStar Medical may not be able to access funding under existing agreements, including the equity line of credit and forward purchase agreements; (vi) the risk that third-party suppliers and manufacturers are not able to fully and timely meet their obligations, (vii) the risk of product liability or regulatory lawsuits or proceedings relating to SeaStar Medical's products and services, (viii) the risk that SeaStar Medical is unable to secure or protect its intellectual property, and (ix) other risks and uncertainties indicated from time to time in SeaStar Medical's Annual Report on Form 10-K, including those under the "Risk Factors" section therein and in SeaStar Medical's other filings with the SEC. The foregoing list of factors is not exhaustive. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and SeaStar Medical assume no

obligation and do not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise.

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Source: SeaStar Medical Holding Corporation