

SeaStar Medical Holding Corporation

3513 Brighton Blvd, Suite 410
Denver, CO 80216
(844) 427-8100

Prospectus Supplement No. 1

(to the Prospectus dated January 20, 2023)

This Prospectus Supplement No. 1 supplements and amends the prospectus dated January 20, 2023, (the "Prospectus"), relating to the sale from time to time of up to 6,718,842 shares of our common stock by a selling shareholder.

On February 9, 2023, we filed with the U.S. Securities and Exchange Commission the attached Current Report on Form 8-K.

This Prospectus Supplement No. 1 should be read in conjunction with the Prospectus and is qualified by reference to the Prospectus except to the extent that the information in this Prospectus Supplement No. 1 supersedes the information contained in the Prospectus.

Our common stock is traded on the Nasdaq Stock Market under the symbol "ICU". On February 10, 2023, the last reported sale price of our common stock was \$3.47 per share.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 8 of the Prospectus dated January 20, 2023.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this Prospectus Supplement No. 1 is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement No. 1 is February 13, 2023.

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): February 9, 2023

SEASTAR MEDICAL HOLDING CORPORATION

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

001-39927
(Commission
File Number)

85-3681132
(I.R.S. Employer
Identification No.)

**3513 Brighton Blvd., Suite 410
Denver, CO**
(Address of principal executive offices)

80216
(Zip Code)

Registrant's telephone number, including area code: (813) 222-8996

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2, below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.0001 par value	ICU	The Nasdaq Stock Market LLC
Warrants, each whole warrant exercisable for one share of Common Stock for \$11.50 per share	ICUCW	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01 Other Events.

On February 9, 2023, SeaStar Medical Holding Corporation (the “Company”) issued a press release announcing that the U.S. Food and Drug Administration (FDA) approved the Company’s investigational device exemption (IDE) application to conduct a pivotal study evaluating the effectiveness of its Selective Cytopheretic Device (SCD) in reducing hyperinflammation in adults with acute kidney injury (AKI) requiring continuous kidney replacement therapy (CKRT).

A copy of the press release is filed as Exhibit 99.1 to this Current Report on Form8-K and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

Exhibit No.	Description
99.1	Press Release, dated February 9, 2023
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

SEASTAR MEDICAL HOLDING CORPORATION

Date: February 9, 2023

By: /s/ Eric Schlorff

Name: Eric Schlorff

Title: Chief Executive Officer