

SeaStar Medical Holding  
Corporation  
3513 Brighton Blvd, Suite 410  
Denver, CO 80216 (844) 427-8100

Prospectus Supplement No. 3  
(to the Prospectus dated January 20, 2023)

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This Prospectus Supplement No. 3 supplements and amends the prospectus dated January 20, 2023, as amended by Prospectus Supplement No. 1 dated February 13, 2023 and Prospectus Supplement No. 2 dated February 15, 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 March 16, 2023, we filed with the U.S. Securities and Exchange Commission the attached Current Report on Form 8-K.

This Prospectus Supplement No. 3 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. 3 supersedes the information contained in the Prospectus.

Our common stock is traded on the Nasdaq Stock Market under the symbol “ICU”. On March 15, 2023, the last reported sale price of our common stock was \$2.16 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.

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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. 3 is truthful or complete. Any representation to the contrary is a criminal offense.

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The date of this Prospectus Supplement No. 3 is March 16, 2023.

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

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**FORM 8-K**

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

**Date of Report (Date of earliest event reported): March 15, 2023**

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**SEASTAR MEDICAL HOLDING CORPORATION**

(Exact name of registrant as specified in its charter)

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**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**

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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. ☐

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**Item 1.01. Entry into a Material Definitive Agreement.**

On March 15, 2023, SeaStar Medical Holding Corporation (the “Company”) entered into a Securities Purchase Agreement (the “Purchase Agreement”) with an institutional investor (the “Purchaser”), pursuant to which the Company agreed to sell and issue to the Purchaser, in a series of up to four closings, senior unsecured convertible notes (the “Notes”), convertible into shares of the Company’s common stock, par value \$0.0001 per share (the “Common Stock”), in a principal amount of up to approximately \$9.8 million and warrants (the “Warrants”) to purchase shares of the Company’s Common Stock. On March 15, 2023 (the “Initial Closing Date”), the Company issued a Note, convertible into 1,207,729 shares of Common Stock at an initial conversion price of \$2.70, in a principal amount of \$3,260,869.57, and a Warrant to purchase up to 328,352 shares of Common Stock.

At the second closing, the Company will issue and sell to the Purchaser (i) an additional Note in a principal amount of \$2,173,913.04 and (ii) additional Warrants to purchase up to 218,901 shares of Common Stock. At each of the third and fourth closings, the Company may, at its option, issue and sell to the Purchaser (i) additional Notes, each in a principal amount of \$2,173,913.04 and (ii) additional Warrants to purchase shares of Common Stock equal to 25% of the Purchaser’s shares of Common Stock issuable upon conversion of the Notes on the applicable closing date. Pursuant to the Purchase Agreement, the Company must satisfy certain additional conditions in order to sell and issue the additional Notes and additional Warrants at the second, third and fourth closings. Such additional conditions include, but are not limited to, the effectiveness of a registration statement to be filed by the Company with the SEC to register shares of Common Stock issuable upon conversion of the Notes and exercise of the Warrants, and for the third and fourth closings, the approval by stockholders of the Company to issue more than 19.99% of issued and outstanding shares pursuant to applicable Nasdaq Rules. If the third closing and fourth closing do not occur within the one-year anniversary of the Initial Closing Date, the Company’s right to effect the third and fourth closings shall automatically terminate.

The Notes will be issued at an 8% original issue discount and bear an interest rate of 7%. The Notes mature fifteen (15) months after their issuance, or June 15, 2024 unless accelerated due to an event of default. The Notes are redeemable, in whole or in part, at any time at the discretion of the Company. At the Initial Closing Date, the Company received net proceeds, after the original issue discount and the Purchaser’s counsel fees, of \$2,370,000.00.

The Notes contain standard and customary covenants and events of default. Such events of default include, but are not limited to, failure to make payments when due, failure to observe or perform covenants or agreements contained in the Notes, the breach of any material representation or warranty contain therein, the bankruptcy or insolvency of the Company, the suspension of trading of Common Stock, and the Company’s failure to file required reports with the SEC. If any such event of default occurs, subject to any cure period, the Purchaser shall have the right to redeem any portion of the Note for a redemption price, with a certain dollar amount available for conversion, at the Purchaser’s option, into shares of Common Stock.

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The Warrants have an initial exercise price of \$2.97 per share of Common Stock, are exercisable at any time before the close of business on the day five (5) years after their issuance and contain cashless exercise provisions.

The Notes, Warrants, and shares of Common Stock issuable upon conversion of the Notes and upon exercise of such Warrants (the “Underlying Securities”), have not been registered under the Securities Act of 1933, as amended (the “Securities Act”) and were issued and sold to an accredited investor in reliance upon the exemption from registration contained in Regulation D promulgated under the Securities Act. The Notes, Warrants and Underlying Securities may not be offered or sold in the absence of an effective registration statement or exemption from the registration requirements under the Securities Act.

#### Registration Rights Agreement

On March 15, 2023, in connection with the sale and issuance of the Notes and Warrants, the Company entered into a Registration Rights Agreements (the “Registration Rights Agreement”) with the Purchaser. Under the terms of the Registration Rights Agreement, the Company has agreed to file a resale registration statement with the SEC and to use commercially reasonable efforts to cause such registration statement to be declared effective by the SEC within certain time frames. Under certain circumstances, if the Company fails to meet its obligations under the Registration Rights Agreement, it would be required to pay liquidated damages.

The foregoing descriptions of the Purchase Agreement, the Notes, the Warrants and the Registration Rights Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of the Form of Purchase Agreement, the Form of Note, the Form of Warrant, and the Form of Registration Rights Agreement, which are filed as Exhibits 4.1, 10.1, 10.2, and 10.3, respectively, hereto and are incorporated herein by reference.

#### Amendments of Promissory Notes

Also on March 15, 2023, the Company entered into certain amendment and waiver with each of Maxim Group LLC, LM Funding America, Inc. and LMFAO Sponsor, LLC (each, a “Lender”), with respect to certain promissory notes issued to each Lender, pursuant to which the maturity dates of such promissory notes are extended to June 15, 2024, the same maturity date as the Notes.

#### **Item 2.03. Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.**

The disclosure provided under Item 1.01 is hereby incorporated by reference into this Item 2.03.

#### **Item 3.02. Unregistered Sales of Equity Securities.**

The information set forth under Item 1.01 is incorporated by reference into this Item 3.02.

#### **Item 7.01. Regulation FD.**

On March 16, 2023, the Company released the press release furnished herewith as Exhibit 99.1.

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**Item 9.01. Financial Statements and Exhibits.**

(d) Exhibits

<b>Exhibit No.</b>	<b>Description</b>
4.1	<a href="#"><u>Form of Common Stock Purchase Warrant.</u></a>
10.1	<a href="#"><u>Securities Purchase Agreement.</u></a>
10.2	<a href="#"><u>Registration Rights Agreement.</u></a>
10.3	<a href="#"><u>Form of Senior Unsecured Convertible Note.</u></a>
99.1	<a href="#"><u>Press Release issued by SeaStar Medical Holding Corporation, dated March 16, 2023.</u></a>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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**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: March 16, 2023

By: /s/ Eric Schlorff  
Eric Schlorff  
Chief Executive Officer