

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

**FORM S-8
REGISTRATION STATEMENT**
*UNDER
THE SECURITIES ACT OF 1933*

SeaStar Medical Holding Corporation

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

001-39927
(I.R.S. Employer
Identification No.)

3513 Brighton Blvd., Suite 410
Denver, CO
(Address of Principal Executive Offices)

80216
(Zip Code)

SeaStar Medical Holding Corporation (f.k.a. LMF Acquisition Opportunities, Inc.) 2022 Omnibus Incentive Plan
SeaStar Medical Holding Corporation 2022 Employee Stock Purchase Plan
(Full title of the plan)

Eric Schlorff
Chief Executive Officer
3513 Brighton Blvd.
Suite 410
Denver, CO 80216
(Name and address of agent for service)

(844) 427-8100
(Telephone number, including area code, of agent for service)

With copies of all notices, orders, and communications to:

Albert Lung, Esq.
Morgan, Lewis & Bockius LLP
1400 Page Mill Road
Palo Alto, California 94304
(650) 843-4000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, anon-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
Non-accelerated filer Smaller reporting company
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 7(a)(2)(B) of the Securities Act.

PART II.
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by SeaStar Medical Holding Corporation (the “Registrant”) with the U.S. Securities and Exchange Commission (“SEC”) are hereby incorporated by reference into this registration statement (in each case excluding any information furnished and not filed according to applicable rules, such as information furnished pursuant to Item 2.02 or Item 7.01 on any Current Report on Form 8-K):

- (a) The Registrant’s Annual Report on [Form 10-K](#) for the year ended December 31, 2021, filed with the SEC on April 6, 2022;
- (b) [The Registrant’s prospectus relating to the Registration Statement on Form S-1 \(File No. 333-269338\), filed with the SEC on January 20, 2023, which contains the audited financial statements of the Company for the latest fiscal year for which such statements have been filed;](#)
- (c) The Registrant’s Quarterly Reports on Form 10-Q for the quarters ended [March 31, 2022](#), [June 30, 2022](#) and [September 30, 2022](#);
- (d) The Registrant’s Current Reports on Form 8-K, as applicable, filed with the SEC on [August 1, 2022](#), [August 24, 2022](#), [September 28, 2022](#), [October 17, 2022](#), [October 19, 2022](#), [October 27, 2022](#), [November 4, 2022](#), [November 10, 2022](#), [November 14, 2022](#), [December 21, 2022](#), [December 22, 2022](#), [December 29, 2022](#), and [January 9, 2023](#), [February 9, 2023](#), and [February 15, 2023](#); and
- (e) The description of the Registrant’s Common Stock set forth in the Registrant’s registration statement on [Form 8-A/A](#) filed with the SEC on October 31, 2022, and any amendment or report filed with the SEC for the purposes of updating such description.

All documents subsequently filed with the SEC by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1943, prior to the filing of a post-effective amendment to this registration statement which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement (in each case excluding any information furnished and not filed according to applicable rules, such as information furnished pursuant to Item 2.02 or Item 7.01 on any Current Report on Form 8-K) and to be part hereof from the date of filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this registration statement shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained in this registration statement, or in any other subsequently filed document that also is or is deemed to be incorporated by reference in this registration statement, modifies or supersedes such prior statement. Any statement contained in this registration statement shall be deemed to be modified or superseded to the extent that a statement contained in a subsequently filed document that is or is deemed to be incorporated by reference in this registration statement modifies or supersedes such prior statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law (the “DGCL”) provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent of the Registrant. The DGCL provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaws, agreement, vote of stockholders or disinterested directors or otherwise. The Registrant’s certificate of incorporation and bylaws provide for indemnification by the Registrant of its directors and officers to the fullest extent permitted by the DGCL.

Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (1) for any transaction from which the director derives an improper personal benefit, (2) for any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law, (3) for any unlawful payment of dividends or redemption of shares or (4) for any breach of a director’s duty of loyalty to the corporation or its stockholders. The Registrant’s certificate of incorporation provides for such limitation of liability to the fullest extent permitted by the DGCL.

The Registrant has entered into indemnification agreements with each of its directors and executive officers to provide contractual indemnification in addition to the indemnification provided in its certificate of incorporation. Each indemnification agreement provides for indemnification and advancements by the Registrant of certain expenses and costs relating to claims, suits or proceedings arising from his or her service to the Registrant or, at the Registrant’s request, service to other entities, as officers or directors to the maximum extent permitted by applicable law. The Registrant believes that these provisions and agreements are necessary to attract qualified directors.

The Registrant also maintains standard policies of insurance under which coverage is provided (1) to its directors and officers against loss arising from claims made by reason of breach of duty or other wrongful act, while acting in their capacity as directors and officers of the Registrant, and (2) to the Registrant with respect to payments which may be made by the Registrant to such officers and directors pursuant to any indemnification provision contained in the Registrant’s certificate of incorporation and bylaws or otherwise as a matter of law.

The foregoing summaries are necessarily subject to the complete text of the statute, the Registrant’s certificate of incorporation and bylaws, as amended to date, and the arrangements referred to above and are qualified in their entirety by reference thereto.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

A list of exhibits filed herewith is contained in the Exhibit Index that immediately precedes such exhibits and is incorporated herein by reference.

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

EXHIBIT INDEX

Exhibit No.	Document
4.1	<u>Third Amended and Restated Certificate of Incorporation of SeaStar Medical Holding Corporation, filed with the Secretary of State of Delaware on October 28, 2022 (incorporated by reference to Exhibit 3.1 of the Registrant's Current Report on Form 8-K filed with the SEC on November 4, 2022).</u>
4.2	<u>Amended and Restated Bylaws of SeaStar Medical Holding Corporation (incorporated by reference to Exhibit 3.2 of the Registrant's Current Report on Form 8-K filed with the SEC on November 4, 2022).</u>
4.3	<u>SeaStar Medical Holding Corporation 2022 Omnibus Incentive Plan (incorporated by reference to Annex D of the Registrant's Form S-4 filed with the SEC on May 16, 2022).</u> ⁺
4.4	<u>SeaStar Medical Holding Corporation 2022 Employee Stock Purchase Plan (incorporated by reference to Annex E of the Registrant's Form S-4 filed with the SEC on May 16, 2022).</u> ⁺
5.1	<u>Opinion of Morgan, Lewis & Bockius LLP.</u> [*]
23.1	<u>Consent of Independent Registered Public Accounting Firm of LMF Acquisition Opportunities, Inc.</u> [*]
23.2	<u>Consent of Independent Registered Public Accounting Firm of SeaStar Medical, Inc.</u> [*]
23.3	<u>Consent of Morgan, Lewis & Bockius LLP (included in Exhibit 5.1 hereto).</u> [*]
24.1	<u>Power of Attorney (included in the signature page to this Registration Statement).</u> [*]
107	<u>Filing Fee Table.</u>

* Filed herewith

+ Denotes compensatory plan or arrangement

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Denver, State of Colorado on this 27th day of February, 2023.

SeaStar Medical Holding Corporation

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

POWER OF ATTORNEY

Each of the undersigned, whose signature appears below, hereby constitutes and appoints Eric Schlorff as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any or all amendments to this registration statement and to file the same with all exhibits thereto and other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing necessary or appropriate to be done with respect to this registration statement or any amendments hereto in the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or his or their substitute or substitutes, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement on Form S-8 has been signed by the following persons in the capacities indicated below on February 27, 2023.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Eric Schlorff</u> Eric Schlorff	Chief Executive Officer and Director (Principal Executive Officer)	February 27, 2023
<u>/s/ Caryl Baron</u> Caryl Baron	Interim Chief Financial Officer (Principal Financial and Accounting Officer)	February 27, 2023
<u>/s/ Rick Barnett</u> Rick Barnett	Chairman of the Board of Directors	February 27, 2023
<u>/s/ Kenneth Van Heel</u> Kenneth Van Heel	Director	February 27, 2023
<u>/s/ Andres Lobo</u> Andres Lobo	Director	February 27, 2023
<u>/s/ Allan Collins</u> Allan Collins	Director	February 27, 2023
<u>/s/ Bruce Rodgers</u> Bruce Rodgers	Director	February 27, 2023
<u>/s/ Richard Russell</u> Richard Russell	Director	February 27, 2023

February 27, 2023

SeaStar Medical Holding Corporation
3513 Brighton Blvd., Suite 410
Denver, Colorado 80216

RE: SeaStar Medical Holding Corporation Registration Statement on Form S-8 Filed on February 27, 2023

Ladies and Gentlemen:

We have acted as counsel to SeaStar Medical Holding Corporation, a Delaware corporation (the "Company"), in connection with the filing of the referenced Registration Statement (the "Registration Statement") under the Securities Act of 1933, as amended (the "Act"), with the Securities and Exchange Commission (the "SEC") on the date hereof. The Registration Statement relates to the registration by the Company of the offer and sale of (i) an additional 1,270,000 shares of the Company's common stock, par value \$0.0001 per share (the "Common Stock") under the Company's 2022 Omnibus Incentive Plan (the "2022 Omnibus Plan") and (ii) an additional 380,000 shares of Common Stock (collectively with the shares referenced in clause (i), the "Shares") under the Company's 2022 Employee Stock Purchase Plan (the "2022 ESPP").

In connection with this opinion letter, we have examined the Registration Statement and originals, or copies certified or otherwise identified to our satisfaction, of (i) the Third Amended and Restated Certificate of Incorporation of the Company (ii) the Amended and Restated Bylaws of the Company, (iii) certain resolutions of the Company's Board of Directors relating to the Registration Statement, (iv) the 2022 Omnibus Plan, (v) the 2022 ESPP, and (vi) such other documents, records and other instruments as we have deemed appropriate for purposes of the opinion set forth herein.

We have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of the documents submitted to us as originals, the conformity with the originals of all documents submitted to us as certified, facsimile or photostatic copies and the authenticity of the originals of all documents submitted to us as copies. With respect to matters of fact relevant to our opinions as set forth below, we have relied upon certificates of officers of the Company, representations made by the Company in documents examined by us, and representations of officers of the Company. We have also obtained and relied upon such certificates and assurances from public officials as we have deemed necessary for the purposes of our opinions set forth below.

Subject to the foregoing and the other matters set forth herein, we are of the opinion, as of the date hereof, that the Shares have been duly authorized by the Company and, when issued by the Company in accordance with the provisions of the 2022 Omnibus Plan and the 2022 ESPP, will be validly issued, fully paid and non-assessable.

The opinions expressed herein are limited to the federal laws of the United States and the Delaware General Corporation Law.

We hereby consent to the use of this opinion as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Act or the rules or regulations of the SEC thereunder.

Very truly yours,

/s/ Morgan, Lewis & Bockius LLP



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on FormS-8 of our report dated April 6, 2022 with respect to the audited financial statements of LMF Acquisition Opportunities, Inc. (the "Company") for the year ended December 31, 2021 and for the period from October 28, 2020 (inception) to December 31, 2020.

/s/ MaloneBailey, LLP
www.malonebailey.com
Houston, Texas
February 24, 2023

10370 Richmond Avenue, Suite 600, Houston, Texas 77042 713.343.4286

Zhongzhou Holdings Financial Center (Tower B) #2205 No. 88, Haide Yi Road, Nanshan District, Shenzhen 518054, P.R. China 86.755.86278659

Room 707, 7th Floor, SK Tower, No.6A Jianguomenwai Avenue, Chaoyang District, Beijing 100022, P.R. China 86.010.85563995

www.malonebailey.com

Public Company Accounting Oversight Board Registered AICPA
An Independently Owned and Operated Member of Nexia International





CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on FormS-8 of SeaStar Medical Holding Corporation of our report dated April 14, 2022 relating to the financial statements of SeaStar Medical, Inc.

/s/ Armanino^{LLP}
Bellevue, Washington

February 27, 2023



CALCULATION OF FILING FEE TABLES

Form S-8
(Form Type)SeaStar Medical Holding Corporation
(Exact Name of Registrant as Specified in Its Charter)

Table 1 – Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered (1)	Proposed Maximum Offering Price per Unit (2)	Maximum Aggregate Offering Price	Fee Rate	Amount Registration Fee
Equity	Common Stock, \$0.0001 par value per share	Rule 457(c) and Rule 457(h)	1,270,000 (3)	\$2.77	\$3,517,900.00	\$110.20 per \$1,000,000	\$387.68
Equity	Common Stock, \$0.0001 par value per share	Rule 457(c) and Rule 457(h)	380,000 (4)	\$2.77	\$1,052,600.00	\$110.20 per \$1,000,000	\$116.00
Total Offering Amounts					\$ 4,570,500.00		\$ 503.68
Total Fee Offsets							\$ 0.00
Net Fee Due							\$ 503.68

- (1) This Registration Statement shall also cover any additional shares of Common Stock which become issuable under the Registrant's 2022 Omnibus Incentive Plan and 2022 Employee Stock Purchase Plan by reason of any share dividend, share split, recapitalization or other similar transaction effected without the Registrant's receipt of consideration which results in an increase in the number of the outstanding shares of Registrant's Common Stock.
- (2) Calculated solely for purposes of this offering under Rule 457(h) of the Securities Act of 1933, as amended, on the basis of the average of the high and low prices per share of Registrant's Common Stock on February 22, 2023 as reported by the NASDAQ Capital Market.
- (3) Represents shares of Common Stock issuable under the Registrant's 2022 Omnibus Incentive Plan.
- (4) Represents shares of Common Stock issuable under the Registrant's 2022 Employee Stock Purchase Plan.