PROSPECTUS SUPPLEMENT (To Prospectus dated November 29, 2023)

disc)medicine

Up to \$192,832,832

Common Stock

We have entered into an amendment dated, December 5, 2023, or the amendment, to the Open Market Sale AgreementSM, or the sales agreement and the sales agreement as amended by the amendment, the amended sales agreement, with Jefferies LLC, or Jefferies, relating to the offer and sale of shares of our common stock, par value \$0.0001 per share, common stock, from time to time through Jefferies, acting as our agent, or directly to Jefferies, as principal, to increase the aggregate offering price of the shares of our common stock that we may issue and sell from time to time under the sales agreement from \$59,700,000 to \$200,000,000. As of the date of this prospectus supplement, we have issued and sold shares of our common stock having an aggregate offering price of \$7,167,167.89 pursuant to the sales agreement and a prospectus supplement dated October 10, 2023, or the prior prospectus, under our shelf registration statement on Form S-3 (Registration Statement No. 333-269272), or the prior prospectus. We suspended and terminated the prior prospectus supplement effective as of the date of this prospectus supplement. The \$192,832,832 of shares of our common stock which may be offered and sold pursuant the amended sales agreement will be offered and sold under this prospectus supplement and the accompanying base prospectus dated November 29, 2023.

Our common stock is listed on The Nasdaq Global Market under the symbol "IRON." On December 4, 2023, the closing sale price of our common stock on The Nasdaq Global Market was \$55.60 per share.

Sales of our common stock, if any, under this prospectus supplement and the accompanying base prospectus will be made by any method permitted that is deemed to be an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended (the "Securities Act"). Jefferies is not required to sell any specific number or dollar amount of securities, but will act as a sales agent using commercially reasonable efforts consistent with its normal sales and trading practices to sell on our behalf all of the shares of common stock requested to be sold by us, on mutually agreed terms between Jefferies and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Jefferies will be entitled to compensation at a commission rate of up to 3.0% of the gross proceeds of any shares of common stock sold under the amended sales agreement. In connection with the sale of our common stock on our behalf, Jefferies may be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Jefferies may be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Jefferies with respect to certain liabilities, including liabilities under the Securities Act and the Securities Exchange Act of 1934, as amended, or the Exchange Act. See "Plan of Distribution" beginning on page S-13 for additional information regarding the compensation to be paid to Jefferies.

We are an "emerging growth company" and a "smaller reporting company" under the federal securities laws and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus supplement. See "Prospectus Supplement Summary—Implications of Being an Emerging Growth Company and a Smaller Reporting Company."

Investing in our common stock involves a high degree of risk. See "<u>Risk Factors</u>" beginning on page S-7 of this prospectus supplement, and under similar headings in the other documents that are incorporated by reference into this prospectus supplement concerning factors you should consider before investing in our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying base prospectus. Any representation to the contrary is a criminal offense.

Jefferies

The date of this prospectus supplement is December 5, 2023.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process on November 20, 2023, which was declared effective on November 29, 2023.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering of shares of our common stock having an aggregate offering price of up to \$192,832,832 from time to time at prices and on terms to be determined by market conditions at the time of offering. The second part is the accompanying base prospectus, which provides more general information, some of which may not apply to this offering.

Before buying any of the shares of common stock offered hereby, we urge you to read carefully this prospectus supplement and the accompanying base prospectus, together with the information incorporated herein by reference as described below under the heading "Incorporation of Certain Information by Reference." These documents contain important information that you should consider when making your investment decision. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the accompanying base prospectus or the information contained in any document incorporated by reference in this prospectus supplement that was filed with the SEC before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus or supersedes the earlier statement.

We have not, and Jefferies has not, authorized anyone to provide you with information other than the information that we have provided or incorporated by reference in this prospectus supplement or the accompanying base prospectus and your reliance on any unauthorized information or representation is at your own risk. This prospectus supplement may be used only in jurisdictions where offers and sales of these securities are permitted. You should assume that the information appearing in this prospectus supplement is accurate only as of the date of this prospectus supplement and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement, or any sale of our common stock. Our business, financial condition and results of operations may have changed since those dates.

We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying base prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. No action is being taken in any jurisdiction outside the United States to permit a public offering of the securities or possession or distribution of this prospectus supplement or the accompanying base prospectus in that jurisdiction. Persons outside the United States who come into possession of this prospectus supplement and the accompanying base prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and pre-funded warrants and the distribution of this prospectus supplement and the accompanying base prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

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On December 29, 2022, we acquired Disc Medicine Opco, Inc. (formerly Disc Medicine, Inc.), or Private Disc, pursuant to an agreement and plan of merger, or the Merger, and we changed our name to Disc Medicine, Inc. on December 29, 2022. As used in this prospectus supplement, unless the context otherwise requires, references to "Disc," the "Company," "we," "us" and "our" refer to (i) prior to the date of the Merger, Private Disc, and its wholly owned, consolidated subsidiaries, or either or all of them as the context may require, and (ii) following the date of the Merger, Disc Medicine, Inc., and its wholly owned, consolidated subsidiaries, or either or all of them as the context may require.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying base prospectus and the documents that we incorporate by reference contain "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. All statements, other than statements of historical facts, included in this prospectus supplement and the accompanying base prospectus, including the documents that we incorporate by reference, regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth are forward-looking statements. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, among other things, statements about:

- the initiation, timing, progress, results, and cost of our research and development programs and our current and future preclinical studies and clinical trials, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available, and our research and development programs;
- our ability to efficiently discover and develop product candidates;
- our ability and the potential to successfully manufacture our drug substances and product candidates for preclinical use, for clinical trials and on a larger scale for commercial use, if approved;
- our ability to obtain funding for our operations necessary to complete further development and commercialization of our product candidates;
- our ability to obtain and maintain regulatory approval of our product candidates;
- our ability to commercialize our products, if approved;
- the pricing and reimbursement of our product candidates, if approved;
- the implementation of our business model, and strategic plans for our business and product candidates;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates;
- estimates of our future expenses, revenues, capital requirements, and our needs for additional financing;
- the potential benefits of strategic collaboration agreements, our ability to enter into strategic collaborations or arrangements, and our ability to attract collaborators with development, regulatory and commercialization expertise;
- future agreements with third parties in connection with the commercialization of product candidates and any other approved product;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- our financial performance;
- the rate and degree of market acceptance of our product candidates;
- regulatory developments in the United States and foreign countries;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- our ability to produce our products or product candidates with advantages in turnaround times or manufacturing cost;
- the success of competing therapies that are or may become available;
- our ability to attract and retain key scientific or management personnel;
- the impact of laws and regulations;
- developments relating to our competitors and our industry;
- the impact of global economic and political developments on our business, including rising inflation and capital market disruptions, the current conflict in Ukraine, economic sanctions and economic slowdowns or recessions that may result from such developments which could harm our research and development efforts as well as the value of our common stock and our ability to access capital markets;

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- our anticipated use of proceeds from this offering; and
- other risks and uncertainties, including those listed under the caption "Risk Factors."

The forward-looking statements in this prospectus supplement represent our views as of the date of this prospectus supplement. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should therefore not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus supplement.

We may from time-to-time provide estimates, projections and other information concerning our industry, our business and the markets for our programs and product candidates. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market, and other data from our own internal estimates and research as well as from reports, research surveys, studies, and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. While we are not aware of any misstatements regarding any third-party information presented in this prospectus supplement or the accompanying base prospectus, their estimates, in particular, as they relate to projections, involve numerous assumptions, are subject to risks and uncertainties and are subject to change based on various factors. You should read this prospectus supplement, the accompanying base prospectus and any related free writing prospectus and the documents that we reference therein and have filed with the SEC as exhibits thereto completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements. These estimates involve numerous assumptions, are subject to change based on various factors, including those discussed in our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K which are incorporated into this prospectus supplement and the accompanying base prospectus entitled "Risk Factors."

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us and this offering and does not contain all of the information that you should consider before investing in our common stock. You should read this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein and therein carefully, especially the discussion of the risks related to investing in our common stock discussed under "Risk Factors" beginning on page S-7 of this prospectus supplement, and in our most recent annual report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K we file after the date of this prospectus supplement, which are incorporated by reference in this prospectus supplement, along with our consolidated financial statements and notes to those consolidated financial statements and the other information incorporated by reference in this prospectus supplement, before making an investment decision.

Company Overview

We are a clinical-stage biopharmaceutical company focused on the discovery, development, and commercialization of novel treatments for patients suffering from serious hematologic diseases. We have assembled a portfolio of clinical and preclinical product candidates that aim to modify fundamental biological pathways associated with the formation and function of red blood cells, specifically heme biosynthesis and iron homeostasis. Our current pipeline includes, bitopertin for the treatment of erythropoietic porphyrias, or EPs, including erythropoietic protoporphyria, or EPP, and X-linked protoporphyria, or XLP, and Diamond-Blackfan Anemia, or DBA; DISC-0974 for the treatment of anemia of myelofibrosis, or MF, and anemia of chronic kidney disease, or CKD; and DISC-3405 (formerly known as MWTX-003) for the treatment of polycythemia vera, or PV, and other hematologic disorders. In addition, our preclinical programs also include DISC-0998, for the treatment of anemia associated with inflammatory diseases. Our approach to product candidate development leverages well-understood molecular mechanisms that have been validated in humans. We believe that each of our product candidates, if approved, has the potential to improve the lives of patients suffering from hematologic diseases.

Bitopertin is the lead product candidate in our heme biosynthesis modulation portfolio. Bitopertin was previously evaluated by F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc., or collectively, Roche, in a comprehensive clinical program in over 4,000 individuals in other indications which demonstrated the activity of bitopertin as a glycine transporter 1, or GlyT1, inhibitor and its effect on heme biosynthesis. We are planning to initially develop bitopertin for the treatment of EPs, including EPP and XLP. In July 2022, we initiated BEACON, a Phase 2 open-label, parallel-dose clinical trial of bitopertin in EPP and XLP patients that is being conducted at sites in Australia. Separately, in July 2022, we received clearance of our Investigational New Drug application, or IND, from the U.S. Food and Drug Administration, or FDA, for, and in October 2022 we initiated, AURORA, a Phase 2, randomized, double-blind, placebo-controlled clinical trial of bitopertin in EPP patients that is being conducted at sites in the United States. We presented positive initial data from BEACON in June of 2023 at the European Hematology Association 2023 Congress, and BEACON data from all patients will be presented in December 2023 at the 65th American Society of Hematology Annual Meeting and Exposition, or ASH 2023, and we expect to present topline AURORA data in early 2024. We plan to request an end of Phase 2 meeting with the FDA in 2024. We entered into a collaborative research and development agreement with the National Institutes of Health, or NIH, to conduct an NIH-sponsored clinical trial of bitopertin in DBA. The FDA authorized the clinical trial to proceed and we announced on July 27, 2023 that the first patient was enrolled in this trial. We are planning additional trials of bitopertin in other indications.

DISC-0974 is the lead product candidate in our iron homeostasis portfolio. DISC-0974 is designed to suppress hepcidin production and increase serum iron levels. We submitted an IND to the FDA for DISC-0974 in June 2021, received clearance in July 2021, and participants completed a Phase 1 clinical trial in healthy volunteers in the U.S. in June 2022 with results showing an acceptable tolerability profile and evidence of target engagement, iron mobilization and augmented erythropoiesis. We initiated a Phase 1b/2 clinical trial in

June 2022 in patients with MF and anemia, or MF Trial, and initiated a separate Phase 1b/2 clinical trial in February 2023 in patients with non-dialysis dependent CKD and anemia, or CKD Trial. We plan to present initial data from the MF Trial at ASH 2023, and initial data from the 28 mg dose cohort of the patients of the CKD Trial in a management call in December 2023.

In addition, we are developing a preclinical anti-hemojuvelin, or HJV, monoclonal antibody, DISC-0998, which also targets hepcidin suppression and was in-licensed from AbbVie Deutschland GmbH & Co. KG. DISC-0998 is designed to increase serum iron levels and has an extended serum half-life as compared to DISC-0974. We believe this profile may be desirable in certain subsets of patients with anemia associated with inflammatory diseases.

Lastly, we are developing DISC-3405, a monoclonal antibody against Transmembrane Serine Protease 6, or TMPRSS6, that we licensed from Mabwell Therapeutics, Inc., or Mabwell. DISC-3405 is part of our iron homeostasis portfolio and is designed to induce hepcidin production and reduce serum iron levels. An IND for DISC-3405 was cleared by the FDA and we initiated a Phase 1 clinical trial in healthy adult volunteers in October 2023. We were granted fast track designation by the FDA for DISC-3405 for the treatment of PV in September 2023. We expect to develop DISC-3405 for the treatment of PV and other hematologic disorders.

Merger with Gemini

On August 9, 2022, Gemini Therapeutics, Inc., a Delaware corporation ("Gemini"), Gemstone Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Gemini ("Merger Sub"), and Disc Medicine, Inc., a Delaware corporation ("Private Disc"), entered into an Agreement and Plan of Merger and Reorganization (the "Merger Agreement"). The merger was completed on December 29, 2022. In accordance with the Merger Agreement, the Merger Sub merged with and into Private Disc, with Private Disc surviving as a wholly-owned subsidiary of the Company (the "merger"). Gemini changed its name to Disc Medicine Inc., and Private Disc, which remains as a wholly-owned subsidiary of the Company, changed its name to Disc Medicine Opco, Inc. On December 30, 2022, the combined company's common stock began trading on The Nasdaq Capital Market under the ticker symbol "IRON."

Except as otherwise indicated, references herein to "Disc," the "Company," or the "combined company", refer to Disc Medicine, Inc. on a post-merger basis, and the term "Private Disc" refers to the business of privately-held Disc Medicine, Inc., prior to completion of the merger. References to Gemini refer to Gemini Therapeutics, Inc. prior to completion of the merger.

Pursuant to the terms of the Merger Agreement, at the effective time of the merger (the "Effective Time"), each person who as of immediately prior to the Effective Time was a stockholder of record of Gemini or had the right to receive Gemini's common stock received a contractual contingent value right ("CVR") issued by Gemini subject to and in accordance with the terms and conditions of a Contingent Value Rights Agreement between Gemini, the holder's representative and the rights agent (the "CVR Agreement"), representing the contractual right to receive consideration from the post-closing combined company upon the receipt of certain proceeds from a disposition of Gemini's pre-merger assets (specifically, Gemini's intellectual property assets, which the Company assumed in the merger) during the period that is one year after the closing of the merger, calculated in accordance with the CVR Agreement. In accordance with the CVR Agreement, the holders of the CVRs would receive proceeds from any disposition of the Gemini pre-merger assets, net of costs incurred by the Company in performance of its obligations under the CVR Agreement in excess of \$250,000, paid in the form of common stock in the Company calculated based on the amount equal to such proceeds divided by the volume weighted average stock price of the Company for the five trading days prior to the issuance of the payment to the holders of the CVRs. In the event that Gemini's pre-merger assets are disposed in the one-year period after the closing of the merger, and the Company receives net proceeds from such disposition over time following the initial disposition of such assets, any such proceeds would be similarly distributed to the holders of the CVRs for a period continuing through the tenth anniversary of the closing date of the merger.

To satisfy its obligations with respect to the CVRs and the Gemini IP, the Company hired an outside firm to attempt to sell the Gemini IP, which firm previously was unsuccessful in finding a buyer for the Gemini IP.

However, in June 2023, the Company received an offer for the Gemini IP and recorded a \$1.5 million liability representing the estimated fair value of the Company's obligation to the holders of the CVRs based on the offer.

As of the date of this prospectus, a sale has not been consummated, no such proceeds have been received by the Company and no distributions have been made to the holders of the CVRs. In the event no net proceeds are received from a disposition of the Gemini pre-merger assets in the one-year period following closing of the merger, the Company's obligations under the CVR Agreement will expire and the CVRs will be valueless.

Other than pursuant to the CVR Agreement, the Company has no additional obligations or plans with respect to Gemini's pre-merger assets. The Company has generated no revenue from Gemini's pre-merger assets and has incurred approximately \$1.0 million in aggregate costs (including maintenance of license agreements, storage, legal and other fees) as of September 30, 2023, to maintain Gemini's pre-merger assets solely in order to fulfill the Company's obligations under the CVR Agreement.

To illustrate the number of shares of the Company's common stock that might be distributed under the CVR Agreement, assuming that a CVR payment were to be made on December 4, 2023, assuming (i) net proceeds to the Company of \$1.5 million, representing the estimated fair value of the Company's obligation to holders of the CVRs as of September 30, 2023, and (ii) based on the volume weighted average stock price of the Company for the five trading days prior to December 4, 2023 of \$54.68, an aggregate of 27,432 shares of the Company's common stock would have been issued to holders of CVRs in such case.

Corporate Information

Disc Medicine, Inc. was originally incorporated under the laws of the state of Delaware in October 2017, and changed its name to Disc Medicine Opco, Inc., or Disc Opco, in December 2022. On December 29, 2022, we completed our business combination with Gemini Therapeutics, Inc., or Gemini, in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of August 9, 2022, or the Merger Agreement, by and among Gemini, us and Gemstone Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Gemini, or Merger Sub, pursuant to which, among other matters, Merger Sub merged with and into Disc Opco, with Disc Opco continuing as a wholly owned subsidiary of us and the surviving corporation of the merger, or the Merger. In connection with the closing of the Merger, Gemini changed its name to Disc Medicine, Inc.

Our principal executive offices are located at 321 Arsenal Street, Suite 101, Watertown, MA 02472, and our telephone number is (617) 674-9274. We maintain an Internet website at the following address: www.discmedicine.com. The information on our website is not incorporated by reference in this Annual Report on Form 10-K or in any other filings we make with the SEC. We do not incorporate the information on or accessible through our website into this prospectus supplement, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus supplement.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended (the "JOBS Act"). As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include:

- being permitted to only disclose two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- reduced disclosure about our executive compensation arrangements;
- not being required to hold advisory votes on executive compensation or to obtain stockholder approval of any golden parachute arrangements not previously approved; and

an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We may take advantage of these exemptions until the end of the fiscal year following the fifth anniversary of our initial public offering or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenue of \$1.235 billion or more; (ii) December 31, 2025; (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (iv) the last day of the fiscal year in which we are deemed to be a large accelerated filer under the rules of the SEC, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th. We may choose to take advantage of some but not all of these exemptions. We have taken advantage of reduced reporting requirements in this prospectus supplement. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock. Subject to certain conditions, as an emerging growth company, we may rely on certain of these exemptions, including without limitation, omitting an auditor's attestation report on our system of internal controls over financial reporting otherwise required by Section 404(b) of the Sarbanes-Oxley Act of 2002.

We are also a "smaller reporting company" as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies until the fiscal year following the determination that our common stock held by non-affiliates is more than \$250 million measured on the last business day of our second fiscal quarter, or our annual revenues are less than \$100 million during the most recently completed fiscal year and our common stock held by non-affiliates is more than \$700 million measured on the last business day of our second fiscal quarter.

THE OFFERING			
Common stock offered by us	Shares of our common stock having an aggregate offering price of up to \$192,832,832.		
Common stock to be outstanding after this offering	Up to 27,607,294 shares of our common stock, assuming sales of 3,468,216 shares of our common stock in this offering at an offering price of \$55.60 per share, which was the last reported sale price of our common stock on The Nasdaq Global Market on December 4, 2023. The actual number of shares of common stock issued will vary depending on the sales price under this offering.		
Plan of Distribution	"At the market offering" that may be made from time to time on The Nasdaq Global Market or such other national securities exchange on which our common stock is then listed, through our sales agent, Jefferies. See the section entitled "Plan of Distribution" on page S-13 of this prospectus supplement.		
Use of Proceeds	We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, to fund research and clinical development of current or additional product candidates, and the remainder for working capital and other general corporate purposes. We may also use a portion of the net proceeds to in-license, acquire or invest in complementary businesses or technologies to continue to build our pipeline, research and development capabilities and our intellectual property position. See "Use of Proceeds" on page S-9 of this prospectus supplement.		
Risk Factors	You should read the "Risk Factors" section of this prospectus supplement beginning on page S-7 and the other information included in, or incorporated by reference into, this prospectus supplement and the accompanying base prospectus for a discussion of factors to consider before deciding to purchase shares of our common stock.		
Nasdaq Global Market symbol	IRON		

All information in this prospectus supplement related to the number of shares of our common stock to be outstanding immediately after this offering is based on 24,139,078 shares of our common stock outstanding as of September 30, 2023. The number of shares of our common stock outstanding as of September 30, 2023 as used throughout this prospectus supplement, unless otherwise indicated, excludes:

- 2,558,531 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2023, at a weighted average exercise price of \$15.95 per share;
- 48,730 shares of common stock issuable upon the exercise of stock options granted subsequent to September 30, 2023, at a weighted average exercise price of \$48.28 per share;
- 204,081 shares of common stock issuable upon the exercise of pre-funded warrants outstanding as of September 30, 2023, at an exercise price of \$0.0001 per share;
- 1,568,907 shares of common stock available for future issuance under our Amended and Restated 2021 Stock Option and Incentive Plan as of September 30, 2023; and

 222,953 shares of common stock available for future issuance under our Amended and Restated 2021 Employee Stock Purchase Plan as of September 30, 2023.

Unless otherwise stated, all information contained in this prospectus supplement (i) assumes no exercise of stock options after September 30, 2023 and (ii) reflects an assumed public offering price of \$55.60, which was the last reported sale price of our common stock on The Nasdaq Global Market on December 4, 2023.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before you decide to invest in our common stock, you should carefully consider the risks and uncertainties described below, in the accompanying base prospectus, and in our most recently filed Annual Report on Form 10-K, Quarterly Report on Form 10-Q and other filings we make with the SEC from time to time, which are incorporated by reference herein in their entirety, together with all other information contained in this prospectus supplement and in our filings with the SEC that we have incorporated by reference in this prospectus supplement. If any of the following risks actually occurs, our business, financial condition or results of operations could be adversely affected, which, in turn, could have a negative impact on the price of our common stock. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

Additional Risks Related To Our Common Stock And This Offering

If you purchase shares of common stock in this offering, you may suffer immediate and substantial dilution of your investment. The price per share of our common stock in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Therefore, if you purchase shares of our common stock in this offering, you may pay a price per share that substantially exceeds our net tangible book value per share after this offering. To the extent shares are issued under outstanding options at exercise prices lower than the price of our common stock in this offering, you will incur further dilution. Assuming that an aggregate of 3,468,216 shares of our common stock are sold at a price of \$55.60 per share, the last reported sale price of our common stock on The Nasdaq Global Market on December 4, 2023, for aggregate net proceeds to us of \$187.7 million, after deducting commissions and estimated aggregate offering expenses payable by us,

This dilution is due to the substantially lower price paid by some of our investors who purchased shares prior to this offering as compared to the price offered to the public in this offering and the exercise of stock options granted to our employees, directors and consultants. See the section entitled "Dilution" below for a more detailed illustration of the dilution you would incur if you participate in this offering.

investors in this offering would experience immediate dilution of \$35.80 per share. representing the difference between our as adjusted net

tangible book value per share as of September 30, 2023, after giving effect to this offering and the assumed offering price.

We have broad discretion in the use of the net proceeds from this offering and may use them in ways that you and other stockholders may not approve.

We currently expect to use the net proceeds of this offering to fund research and clinical development of current or additional product candidates, and the remainder for working capital and other general corporate purposes. We may also use a portion of the net proceeds to in-license, acquire or invest in complementary businesses or technologies to continue to build our pipeline, research and development capabilities and our intellectual property position. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our management will have broad discretion in the application of the net proceeds from this offering and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Our management might not spend the net proceeds in ways that improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value. See "Use of Proceeds."

You may experience future dilution as a result of future equity offerings.

To raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future

could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

Future sales or issuances of our common stock in the public markets, or the perception of such sales, could depress the trading price of our common stock.

The sale of a substantial number of shares of our common stock or other securities convertible into or exchangeable for our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We may sell large quantities of our common stock at any time pursuant to this prospectus supplement or in one or more separate offerings. We cannot predict the effect that future sales of common stock or other equity-related securities would have on the market price of our common stock.

The actual number of shares we will issue and gross proceeds resulting from those sales, at any one time or in total, is uncertain.

Subject to certain limitations in the amended sales agreement and compliance with applicable law, we have the discretion to deliver a placement notice to Jefferies at any time throughout the term of the amended sales agreement. The number of shares that are sold by Jefferies after delivering a placement notice will fluctuate based on the market price of our common stock during the sales period and limits we set with Jefferies in any instruction to sell shares, and the demand for our common stock during the sales period. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period, it is not possible at this stage to predict the number of shares or the gross proceeds to be raised in connection with those sales, if any, that will be ultimately issued.

The common stock offered hereby will be sold in "at the market offerings," and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience a decline in the value of their shares as a result of share sales made at prices lower than the prices they paid.

Unstable market and economic conditions may have serious adverse consequences on our business, financial condition and stock price.

As widely reported, global credit and financial markets have experienced extreme volatility and disruptions in the past several years, including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates and uncertainty about economic stability, including most recently in connection with the COVID-19 pandemic. There can be no assurance that further deterioration in credit and financial markets and confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, volatile business environment or continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate, or do not improve, it may make any necessary debt or equity financing more difficult, more costly, and more dilutive. Furthermore, our stock price may decline due in part to the volatility of the stock market and the general economic downturn.

Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay, scale back or discontinue the development and commercialization of one or more of our product candidates or delay our pursuit of potential in-licenses or acquisitions. In addition, there is a risk that one or more of our current service providers, manufacturers and other partners may not survive these difficult economic times, which could directly affect our ability to attain our operating goals on schedule and on budget.

USE OF PROCEEDS

Pursuant to the amended sales agreement, we may issue and sell shares of our common stock having aggregate sales proceeds of up to \$192,832,832 (before deducting sales agent commissions and expenses) from time to time under this prospectus supplement and the accompanying base prospectus. The amount of the net proceeds to us from this offering will depend upon the number of shares of our common stock sold and the price at which they are sold. There can be no assurance that we will be able to sell any shares under or fully utilize the amended sales agreement with Jefferies.

We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, to fund research and clinical development of current or additional product candidates, and the remainder for working capital and other general corporate purposes. We may also use a portion of the net proceeds to in-license, acquire or invest in complementary businesses or technologies to continue to build our pipeline, research and development capabilities and our intellectual property position. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

The expected use of net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the actual net proceeds from this offering (which will depend on the market price of our common stock during the sales period, any limits we may set with Jefferies in any applicable placement notice and the demand for our common stock), the progress of our development, the status of and results from clinical trials and collaborations that we may enter into with third parties for our product candidates and any unforeseen cash needs, including the factors described under "Risk Factors" in this prospectus supplement and the accompanying base prospectus and in the documents incorporated by reference herein. We may find it necessary or advisable to use the net proceeds from this offering for other purposes. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

We do not expect that the net proceeds from this offering, together with our existing cash and cash equivalents, will be sufficient to enable us to fund the completion of development of any of our product candidates.

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Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DILUTION

If you invest in this offering, your ownership interest will be diluted immediately to the extent of the difference between the public offering price per share and the as adjusted net tangible book value per share of our common stock after giving effect to this offering.

As of September 30, 2023, we had a net tangible book value of approximately \$359.0 million, or \$14.87 per share of our common stock, based upon 24,139,078 shares of our common stock outstanding as of that date. Net tangible book value per share is equal to our total tangible assets, less total liabilities, divided by the number of outstanding shares of our common stock. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the as adjusted net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale of our common stock pursuant to this prospectus supplement in the aggregate amount of \$192,832,832 at an assumed offering price of \$55.60 per share, the last reported sale price of our common stock on The Nasdaq Global Market on December 4, 2023, and after deducting sales agent commissions and estimated aggregate offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2023 would have been \$546.7 million, or \$19.80 per share of common stock. This represents an immediate increase in the net tangible book value of \$4.93 per share to our existing stockholders and an immediate dilution in net tangible book value of \$35.80 per share of common stock to investors in this offering based on the assumed offering price. Dilution per share to investors is determined by subtracting as adjusted net tangible book value per share after this offering from the assumed public offering price per share paid by investors. The following table illustrates this per share dilution:

Assumed offering price per share		\$55.60
Historical net tangible book value per share as of September 30, 2023	\$14.87	
Increase in net tangible book value per share attributable to sale of shares of common stock in this offering	4.93	
As adjusted net tangible book value per share as of September 30, 2023, after this offering		19.80
Dilution in net tangible book value per share to investors purchasing shares in this offering		\$35.80

The table above assumes for illustrative purposes that an aggregate of 3,468,216 shares of our common stock are sold pursuant to this prospectus supplement at a price of \$55.60 per share, the last reported sale price of our common stock on The Nasdaq Global Market on December 4, 2023, for aggregate gross proceeds of \$192,832,832. The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price to \$56.60 per share, assuming all of our common stock in the aggregate amount of \$192,832,832 million is sold at that price, would result in an as adjusted net tangible book value per share after the offering of \$19.85 per share and would increase the dilution in net tangible book value per share to investors in this offering to \$36.75 per share, after deducting sales agent commissions and estimated aggregate offering expenses payable by us. A decrease of \$1.00 per share in the price, would result in an as adjusted net tangible book value per share after the offering of \$19.85 per share and would increase the dilution in net tangible book value per share to investors in this offering to \$36.75 per share, after deducting sales agent commissions and estimated aggregate offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price to \$54.60 per share, assuming all of our common stock in the aggregate amount of \$192,832,832 is sold at that price, would result in an as adjusted net tangible book value per share after the offering of \$19.76 per share and would decrease the dilution in net tangible book value per share to investors in this offering to \$34.84 per share, after deducting sales agent commissions and estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only.

The above discussion and table are based on 24,139,078 shares of our common stock outstanding as of September 30, 2023 and excludes:

- 2,558,531 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2023, at a weighted average exercise price of \$15.95 per share;
- 48,730 shares of common stock issuable upon the exercise of stock options granted subsequent to September 30, 2023, at a weighted average exercise price of \$48.28 per share;

- 204,081 shares of common stock issuable upon the exercise of pre-funded warrants outstanding as of September 30, 2023, at an exercise price of \$0.0001 per share;
- 1,568,907 shares of common stock available for future issuance under our Amended and Restated 2021 Stock Option and Incentive Plan as of September 30, 2023; and
- 222,953 shares of common stock available for future issuance under our Amended and Restated 2021 Employee Stock Purchase Plan as of September 30, 2023.

To the extent that options outstanding as of September 30, 2023 have been or may be exercised or settle, as applicable, or other shares issued, investors purchasing our common stock in this offering may experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We currently plan to retain all of our future earnings, if any, to finance the operation, development and growth of our business. We do not expect to pay any cash dividends on our common stock in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, restrictions contained in current or future financing instruments, provisions of applicable law and other factors the board deems relevant. Our ability to pay dividends on our common stock may be restricted by the terms of any of our future indebtedness.

PLAN OF DISTRIBUTION

We entered into the sales agreement with Jefferies on October 10, 2023, under which we could offer and sell shares of our common stock having an aggregate offering price of up to \$59,700,000 from time to time through Jefferies, acting as our agent, or directly to Jefferies, as principal. On December 5, 2023, we entered into the amendment to increase the aggregate offering price of the shares of common stock that we may issue and sell from time to time under the sales agreement from \$59,700,000 to \$200,000,000. As of the date of this prospectus supplement, we have issued and sold shares of our common stock having an aggregate offering price of \$7,167,167.89 pursuant to the sales agreement and the prior prospectus. We suspended and terminated the prior prospectus supplement effective as of the date of this prospectus supplement. The \$192,832,832 of shares of our common stock which may be offered and sold pursuant the amended sales agreement will be offered and sold under this prospectus supplement and the accompanying base prospectus dated November 29, 2023. Sales of our shares of common stock, if any, under this prospectus supplement and the accompanying base prospectus will be made by any method that is deemed to be an "at the market offering" as defined in Rule 415(a)(4) under the Securities Act.

Each time we wish to issue and sell our shares of common stock under the amended sales agreement, we will notify Jefferies of the number of shares to be issued, the dates on which such sales are anticipated to be made, any limitation on the number of shares to be sold in any one day and any minimum price below which sales may not be made. Once we have so instructed Jefferies, unless Jefferies declines to accept the terms of such notice, Jefferies has agreed to use its commercially reasonable efforts consistent with its normal sales and trading practices to sell such shares up to the amount specified on such terms. The obligations of Jefferies under the amended sales agreement to sell our shares of common stock are subject to a number of conditions that we must meet.

The settlement of sales of shares between us and Jefferies is generally anticipated to occur on the second trading day following the date on which the sale was made, or on some other date that is agreed upon by us and Jefferies or that is required by SEC rule or industry practice. Sales of our shares of common stock as contemplated in this prospectus supplement and the accompanying base prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and Jefferies may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will pay Jefferies a commission equal to up to 3% of the aggregate gross proceeds we receive from each sale of our shares of common stock. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. In addition, we have agreed to reimburse Jefferies for the fees and disbursements of its counsel, payable upon execution of the amended sales agreement, in an amount not to exceed \$75,000, in addition to certain ongoing disbursements of its legal counsel. We estimate that the total expenses for the offering, excluding any commissions or expense reimbursement payable to Jefferies under the terms of the amended sales agreement, will be approximately \$340,000. The remaining sale proceeds, after deducting any other transaction fees, will equal our net proceeds from the sale of such shares.

Jefferies will provide written confirmation to us before the open on the Nasdaq Global Market on the next trading day following each day on which our shares of common stock are sold under the amended sales agreement. Each confirmation will include the number of shares sold on that day, the aggregate gross proceeds of such sales and the proceeds to us.

In connection with the sale of our shares of common stock on our behalf, Jefferies may be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation of Jefferies may be deemed to be underwriting commissions or discounts. We have agreed to indemnify Jefferies against certain civil liabilities, including liabilities under the Securities Act and the Exchange Act. We have also agreed to contribute to payments Jefferies may be required to make in respect of such liabilities.

The offering of our shares of common stock pursuant to the amended sales agreement will terminate upon the earlier of (i) the sale of all shares of common stock subject to the amended sales agreement and (ii) the termination of the amended sales agreement as permitted therein. We and Jefferies may each terminate the amended sales agreement at any time upon ten trading days' prior notice.

This summary of the material provisions of the amended sales agreement does not purport to be a complete statement of its terms and conditions. A copy of the sales agreement was filed as Exhibit 1.1 to a Current Report on Form 8-K filed with the SEC under the Exchange Act on October 10, 2023, which is incorporated by reference in this prospectus supplement and the accompanying base prospectus. A copy of the amendment will be filed as an exhibit to a Current Report on Form 8-K filed with the SEC under the Exchange Act and incorporated by reference in this prospectus supplement and the accompanying base prospectus.

Jefferies and its affiliates have in the past and may in the future provide various investment banking, commercial banking, financial advisory and other financial services for us and our affiliates, for which services they may in the future receive customary fees. In the course of its business, Jefferies may actively trade our securities for its own account or for the accounts of customers, and, accordingly, Jefferies may at any time hold long or short positions in such securities.

This prospectus supplement and the accompanying base prospectus in electronic format may be made available on a website maintained by Jefferies, and Jefferies may distribute this prospectus supplement and the accompanying base prospectus electronically.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Jefferies LLC is being represented in connection with this offering by Wilmer Cutler Pickering Hale and Dorr LLP, New York, New York.

EXPERTS

The consolidated financial statements of Disc Medicine, Inc. appearing in Disc Medicine, Inc.'s Annual Report (Form 10-K) for the years ended December 31, 2022 and 2021, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the reports of Ernst & Young LLP pertaining to such financial statements (to the extent covered by consents filed with the Securities and Exchange Commission) given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Gemini Therapeutics, Inc. appearing in Gemini Therapeutics, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2021, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov and on our investor website at www.discmedicine.com. Our website is not a part of this prospectus supplement and is not incorporated by reference in this prospectus supplement or the accompanying base prospectus.

This prospectus supplement is part of a registration statement that we have filed with the SEC. Certain information in the registration statement has been omitted from this prospectus supplement in accordance with the rules of the SEC. For more detail about us and any securities that may be offered by this prospectus supplement, you may examine the registration statement of which this prospectus supplement forms a part, including its exhibits and schedules. Statements contained in this prospectus supplement and the accompanying base prospectus as to the contents of any contract or other document are not necessarily complete, and in each instance we refer you to the copy of the contract or document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference in this prospectus supplement much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus supplement and the accompanying base prospectus is considered to be part of this prospectus supplement. Because we are incorporating by reference future filings with the SEC, this prospectus supplement is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus supplement. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus supplement or in any document previously incorporated by reference have been modified or superseded. This prospectus supplement incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except as to any portion of any future report or document that is not deemed filed under such provisions, between the date of the initial registration statement of which this prospectus supplement or sell all of the securities offered hereby:

- Annual Reports on Form 10-K for the fiscal years ended <u>December 31, 2021</u> and <u>December 31, 2022</u>, filed with the SEC on March 10, 2022 and March 31, 2023, respectively;
- Quarterly Reports on Form 10-Q for the quarters ended September 30, 2022, March 31, 2023, June 30, 2023 and September 30, 2023, filed with the SEC on <u>November 10, 2022, May 15, 2023</u>, <u>August 11, 2023</u> and <u>November 9, 2023</u>, respectively;
- Current Reports on Form 8-K filed with the SEC on <u>December 29, 2022</u>, <u>January 23, 2023</u> (excluding information furnished pursuant to Item 7.01), <u>January 25, 2023</u>, <u>February 14, 2023</u> (excluding information furnished pursuant to Item 2.02), <u>April 19, 2023</u>, <u>June 9, 2023</u> (excluding information furnished pursuant to Item 2.02), <u>April 19, 2023</u>, <u>June 9, 2023</u> (excluding information furnished pursuant to Item 7.01), <u>June 9, 2023</u>, <u>June 12, 2023</u>, <u>June 16, 2023</u>, <u>September 29, 2023</u>, <u>October 10, 2023</u>, <u>October 23, 2023</u> and <u>November 2, 2023</u> (excluding information furnished pursuant to Item 7.01); and
- The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on <u>August 10, 2020</u>, and as set forth by the description of the Registrant's common stock set forth in <u>Exhibit 4.4</u> to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on <u>March 10, 2022</u>, and as further supplemented by the description of the Registrant's common stock set forth in the Registrant's Registration Statement on Form S-4/A, filed with the SEC on <u>December 1</u>, 2022, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

Disc Medicine, Inc. 321 Arsenal Street, Suite 101 Watertown, MA 02472 Attn: Investor Relations (617) 674-9274

You may also access these documents, free of charge on the SEC's website at *www.sec.gov* or on our website at *www.discmedicine.com*. Information contained on our website is not incorporated by reference into this prospectus supplement or the accompanying base prospectus, and you should not consider any information on, or that can be accessed from, our website as part of this prospectus supplement or the accompanying base prospectus.

Notwithstanding the foregoing, unless specifically stated to the contrary, information that we furnish (and that is not deemed "filed" with the SEC) under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits under Item 9.01, is not incorporated by reference into this prospectus supplement or the accompanying base prospectus.

In accordance with Rule 412 of the Securities Act, any statement contained in a document incorporated by reference herein shall be deemed modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

PROSPECTUS

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\$400,000,000

Common Stock Preferred Stock Debt Securities Warrants Units

From time to time, we may offer and sell up to \$400,000,000 in aggregate principal amount of our Common Stock, Preferred Stock, Debt Securities, Warrants or Units, in each case in one or more issuances and at prices and on terms that we will determine at the time of the offering.

This prospectus describes the general manner in which any of these securities may be offered using this prospectus. We will specify in an accompanying prospectus supplement the terms of the securities offered and other details regarding the offering thereof. The supplement may also add, update or change information contained in this prospectus with respect to that offering.

Our common stock is listed on The Nasdaq Global Market under the symbol "IRON." On November 16, 2023, the closing price of our common stock, as reported on The Nasdaq Global Market, was \$48.36 per share.

Investing in our securities involves risks. You should review carefully the risks and uncertainties described under the heading "<u>Risk Factors</u>" on page 11 of this prospectus and under any similar heading in the documents that are incorporated by reference into this prospectus, as well as "*Special Note Regarding Forward-Looking Statements*" on page 4 of this prospectus. You should read the entire prospectus and any applicable prospectus supplement carefully before you make your investment decision.

The securities covered by this prospectus may be sold directly by us to investors, through agents designated by us from time to time or through underwriters or dealers at prices and on terms to be determined at the time of offering. We will include in an applicable prospectus supplement the names of any underwriters or agents and any applicable commissions or discounts. Additional information on the methods of sale appears under "*Plan of Distribution*" in this prospectus. We will also describe in an applicable prospectus supplement the way(s) in which we expect to use the net proceeds we receive from any sale.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.

The date of this prospectus is November 29, 2023.

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You should rely only on the information contained or incorporated by reference in this prospectus and in an applicable prospectus supplement to this prospectus. We have not authorized any other person to provide you with different or additional information. If anyone provides you with different, additional or inconsistent information, you should not rely on it. We do not take responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are not making an offer to sell these securities or soliciting any offer to buy these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus, any applicable prospectus supplement or any free writing prospectus we authorize to be delivered to you is accurate only as of the date of that document or any other date set forth in that document. Additionally, any information we have incorporated by reference in this prospectus or in any applicable prospectus supplement is accurate only as of the date of the document incorporated by reference or other date set forth in that document, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any sale of securities. Our business, financial condition, results of operations, cash flow and prospects may have changed since that date.

On December 29, 2022, we acquired Disc Medicine Opco, Inc. (formerly Disc Medicine, Inc.), or Private Disc, pursuant to an agreement and plan of merger, or the Merger, and we changed our name to Disc Medicine, Inc. on December 29, 2022. As used in this prospectus, unless the context otherwise requires, references to "Disc," the "Company," "we," "us" and "our" refer to (i) prior to the date of the Merger, Private Disc, and its wholly owned, consolidated subsidiaries, or either or all of them as the context may require, and (ii) following the date of the Merger, Disc Medicine, Inc., and its wholly owned, consolidated subsidiaries, or either or all of them as the context may require.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we have filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process.

Under this process, we may sell the securities described in this prospectus in one or more offerings for an aggregate offering amount of up to \$400,000,000. This prospectus describes the general manner in which we may offer the securities described in this prospectus. Each time we sell securities pursuant to this registration statement, we will provide a prospectus supplement that will contain specific information about the offering and the securities offered, and may also add, update or change information contained in this prospectus. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. If there is any inconsistency between information in this prospectus and any accompanying prospectus supplement or free writing prospectus, you should rely on the information in the most recent applicable prospectus supplement or free writing prospectus and documents incorporated by reference herein and therein. This prospectus may not be used to offer to sell, solicit an offer to buy or consummate a sale of our securities unless it is accompanied by a prospectus supplement.

This prospectus, together with any accompanying prospectus supplement together with any additional information incorporated by reference, contains important information you should know before investing in our securities, including important information about us and the securities being offered. You should carefully read both documents, as well as the additional information contained in the documents described under "*Where You Can Find More Information*" and "*Incorporation of Certain Information by Reference*" in both this prospectus and the applicable prospectus supplement, and in particular the annual, quarterly and current reports and other documents we file with the SEC. Neither this prospectus nor any accompanying prospectus supplement is an offer to sell these securities or is soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act of 1933, as amended, or the Securities Act, with respect to the securities offered by this prospectus and any applicable prospectus supplement. This prospectus and the applicable prospectus supplement do not contain all of the information set forth in the registration statement and its exhibits and schedules in accordance with SEC rules and regulations. For further information with respect to us and the securities being offered by this prospectus and the applicable prospectus supplement, you should read the registration statement, including its exhibits and schedules. Statements contained in this prospectus and the applicable prospectus supplement, including documents that we have incorporated by reference, as to the contents of any contract or other document referred to are not necessarily complete, and, with respect to any contract or other document filed as an exhibit to the registration statement or any other such document, each such statement is qualified in all respects by reference to the corresponding exhibit. You should review the complete contract or other document to evaluate these statements. You may obtain copies of the registration statement and its exhibits via the SEC's EDGAR database or our website.

We file annual, quarterly and current reports, proxy statements and other documents with the SEC under the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act. The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers, including us, that file electronically with the SEC. You may obtain documents that we file with the SEC at *www.sec.gov*.

We also make these documents available on our website at *www.discmedicine.com*. Our website and the information contained or connected to our website is not incorporated by reference in this prospectus or any prospectus supplement, and you should not consider it part of this prospectus or any prospectus supplement.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

SEC rules permit us to incorporate information by reference in this prospectus and any applicable prospectus supplement. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus and any applicable prospectus supplement, except for information superseded by information contained in this prospectus or the applicable prospectus supplement itself or in any subsequently filed incorporated document. This prospectus and any applicable prospectus supplement incorporate by reference the documents set forth below that we have previously filed with the SEC, other than information in such documents that is deemed to be furnished and not filed. These documents contain important information about us and our business and financial condition.

- Annual Reports on Form 10-K for the fiscal years ended <u>December 31, 2021</u> and <u>December 31, 2022</u>, filed with the SEC on March 10, 2022 and March 31, 2023, respectively;
- Quarterly Reports on Form 10-Q for the quarters ended September 30, 2022, March 31, 2023, June 30, 2023 and September 30, 2023, filed with the SEC on <u>November 10, 2022, May 15, 2023, August 11, 2023</u> and <u>November 9, 2023</u>, respectively;
- Current Reports on Form 8-K filed with the SEC on <u>December 29, 2022</u>, <u>January 23, 2023</u> (excluding information furnished pursuant to Item 7.01), <u>January 25, 2023</u>, <u>February 14, 2023</u> (excluding information furnished pursuant to Item 7.01), <u>March 31, 2023</u> (excluding information furnished pursuant to Item 2.02), <u>April 19, 2023</u>, <u>June 9, 2023</u> (excluding information furnished pursuant to Item 7.01), <u>June 9, 2023</u>, <u>June 12, 2023</u>, <u>June 16, 2023</u>, <u>September 29, 2023</u>, <u>October 10, 2023</u>, <u>October 23, 2023</u> and <u>November 2, 2023</u> (excluding information furnished pursuant to Item 7.01); <u>June 9, 2023</u>, <u>June 12, 2023</u>, <u>June 16, 2023</u>, <u>September 29, 2023</u>, <u>October 10, 2023</u>, <u>October 23, 2023</u> and <u>November 2, 2023</u> (excluding information furnished pursuant to Item 7.01); and
- The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on <u>August 10, 2020</u>, and as set forth by the description of the Registrant's common stock set forth in <u>Exhibit 4.4</u> to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on <u>March 10, 2022</u>, and as further supplemented by the description of the Registrant's Registrant's Registration Statement on Form S-4/A, filed with the SEC on <u>December 1, 2022</u>, including any amendments or reports filed for the purpose of updating such description.

All documents that we file (but not those that we furnish) pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act, after the date of the initial registration statement of which this prospectus is a part and prior to the effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus and will automatically update and supersede the information in this prospectus, and any previously filed documents. All documents that we file (but not those that we furnish) pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus and prior to the termination of the offering of any of the securities covered under this prospectus shall be deemed to be incorporated by reference into this prospectus and will automatically update and supersede the information in this prospectus, the applicable prospectus supplement and any previously filed documents.

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

Documents incorporated by reference are available from us without charge, excluding all exhibits unless specifically incorporated by reference as an exhibit to this prospectus and the applicable prospectus supplement.

Prospective investors may obtain documents incorporated by reference in this prospectus and the applicable prospectus supplement at no cost by requesting them in writing or by telephone from us at our executive offices at:

Disc Medicine, Inc. 321 Arsenal Street, Suite 101 Watertown, MA 02472 Attention: Investor Relations (617) 674-9274

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, together with any accompanying prospectus supplement, includes and incorporates by reference "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and releases issued by the SEC and within the meaning of Section 27A of the Securities Act, and Section 21E of the Exchange Act. All statements other than statements of historical facts contained in this prospectus, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plan, objectives of management and expected market growth, are forward-looking statements. You can identify these forward-looking statements by the use of words such as "aim," "anticipate," "assume," "believe," "contemplate," "could," "design," "due," "estimate," "expect," "goal," "intend," "may," "objective," "plan," "positioned," "potential," "predict," "seek," "should," "target," "will," "would" and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. Such forward-looking statements are subject to various risks and uncertainties. Accordingly, there are or will be important factors that could cause actual outcomes or results to differ materially from those indicated in these statements. We believe these factors include, but are not limited to, those described under "*Risk Factors*" and include, among other things:

- the initiation, timing, progress, results, and cost of our research and development programs and our current and future preclinical studies and clinical trials, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available, and our research and development programs;
- our ability to efficiently discover and develop product candidates;
- our ability and the potential to successfully manufacture our drug substances and product candidates for preclinical use, for clinical trials and on a larger scale for commercial use, if approved;
- our ability to obtain funding for our operations necessary to complete further development and commercialization of our product candidates;
- our ability to obtain and maintain regulatory approval of our product candidates;
- our ability to commercialize our products, if approved;
- the pricing and reimbursement of our product candidates, if approved;
- the implementation of our business model, and strategic plans for our business and product candidates;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates;
- estimates of our future expenses, revenues, capital requirements, and our needs for additional financing;
- the potential benefits of strategic collaboration agreements, our ability to enter into strategic collaborations or arrangements, and our ability to attract collaborators with development, regulatory and commercialization expertise;
- future agreements with third parties in connection with the commercialization of product candidates and any other approved product;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- our financial performance;
- the rate and degree of market acceptance of our product candidates;
- regulatory developments in the United States and foreign countries;

- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- our ability to produce our products or product candidates with advantages in turnaround times or manufacturing cost;
- the success of competing therapies that are or may become available;
- our ability to attract and retain key scientific or management personnel;
- the impact of laws and regulations;
- developments relating to our competitors and our industry;
- the impact of global economic and political developments on our business, including rising inflation and capital market disruptions, the current conflict in Ukraine, economic sanctions and economic slowdowns or recessions that may result from such developments which could harm our research and development efforts as well as the value of our common stock and our ability to access capital markets; and
- other risks and uncertainties, including those listed under the caption "Risk Factors."

These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. In evaluating such forward-looking statements, you should specifically consider various factors that may cause actual results to differ materially from current expectations, including the risks outlined under the heading "*Risk Factors*" contained in this prospectus and any related prospectus supplement or free writing prospectus, and in any other documents incorporated herein or therein (including in our most recent annual report on Form 10-K, subsequent quarterly reports on Form 10-Q and other filings we make with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act). Any forward-looking statement in this prospectus or any related prospectus supplement or free writing prospectus reflects our current view with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, industry and future growth. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

Market and Industry Data and Estimates

This prospectus, together with any accompanying prospectus supplement and the information incorporated herein or therein by reference, also contains estimates, projections and other information concerning our industry, our business and the markets for our product candidates, including data regarding the estimated size of those markets, their projected growth rates and the incidence of certain medical conditions. Information that is based on estimates, forecasts, projections or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained these industry, business, market and other data from reports, research surveys, studies and similar data prepared by third parties, industry, medical and general publications, government data and similar sources. We have not independently verified the accuracy and completeness of such data, and in some cases, we do not expressly refer to the sources from which these data are derived.

Trademarks

Disc Medicine, Inc., the Disc logo and our other registered or common law trademarks, trade names or service marks appearing in this prospectus are owned by us. This prospectus, any applicable prospectus supplement or any information incorporated herein or therein may contain references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus,

including logos, artwork and other visual displays, generally appear without the [®] or TM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies. All trademarks, service marks and trade names included or incorporated by reference in this prospectus, any applicable prospectus supplement or any related free writing prospectus are the property of their respective owners.

ABOUT THE COMPANY

The following highlights information about the Registrant and our business contained elsewhere or incorporated by reference in this prospectus. It is not complete and does not contain all of the information that you should consider before investing in any of our securities. You should carefully read this prospectus together with the more detailed information incorporated by reference in this prospectus.

Overview

We are a clinical-stage biopharmaceutical company focused on the discovery, development, and commercialization of novel treatments for patients suffering from serious hematologic diseases. We have assembled a portfolio of clinical and preclinical product candidates that aim to modify fundamental biological pathways associated with the formation and function of red blood cells, specifically heme biosynthesis and iron homeostasis. Our current pipeline includes, bitopertin for the treatment of erythropoietic porphyrias, or EPs, including erythropoietic protoporphyria, or EPP, and X-linked protoporphyria, or XLP, and Diamond-Blackfan Anemia, or DBA; DISC-0974 for the treatment of anemia of myelofibrosis, or MF, and anemia of chronic kidney disease, or CKD; and DISC-3405 (formerly known as MWTX-003) for the treatment of polycythemia vera, or PV, and other hematologic disorders. In addition, our preclinical programs also include DISC-0998, for the treatment of anemia associated with inflammatory diseases. Our approach to product candidate development leverages well-understood molecular mechanisms that have been validated in humans. We believe that each of our product candidates, if approved, has the potential to improve the lives of patients suffering from hematologic diseases.

Bitopertin is the lead product candidate in our heme biosynthesis modulation portfolio. Bitopertin was previously evaluated by F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc., or collectively, Roche, in a comprehensive clinical program in over 4,000 individuals in other indications which demonstrated the activity of bitopertin as a glycine transporter 1, or GlyT1, inhibitor and its effect on heme biosynthesis. We are planning to initially develop bitopertin for the treatment of EPs, including EPP and XLP. In July 2022, we initiated BEACON, a Phase 2 open-label, parallel-dose clinical trial of bitopertin in EPP and XLP patients that is being conducted at sites in Australia. Separately, in July 2022, we received clearance of our Investigational New Drug application, or IND, from the U.S. Food and Drug Administration, or FDA, for, and in October 2022 we initiated, AURORA, a Phase 2, randomized, double-blind, placebo-controlled clinical trial of bitopertin in EPP patients that is being conducted at from BEACON in June of 2023 at the European Hematology Association 2023 Congress, and BEACON data from all patients will be presented in December 2023 at the 65th American Society of Hematology Annual Meeting and Exposition, or ASH 2023, and we expect to present topline AURORA data in early 2024. We plan to request an end of Phase 2 meeting with the FDA in 2024. We entered into a collaborative research and development agreement with the National Institutes of Health, or NIH, to conduct an NIH-sponsored clinical trial of bitopertin in DBA. The FDA authorized the clinical trial to proceed and we announced on July 27, 2023 that the first patient was enrolled in this trial. We are planning additional trials of bitopertin in other indications.

DISC-0974 is the lead product candidate in our iron homeostasis portfolio. DISC-0974 is designed to suppress hepcidin production and increase serum iron levels. We submitted an IND to the FDA for DISC-0974 in June 2021, received clearance in July 2021, and participants completed a Phase 1 clinical trial in healthy volunteers in the U.S. in June 2022 with results showing an acceptable tolerability profile and evidence of target engagement, iron mobilization and augmented erythropoiesis. We initiated a Phase 1b/2 clinical trial in June 2022 in patients with MF and anemia, or MF Trial, and initiated a separate Phase 1b/2 clinical trial in February 2023 in patients with non-dialysis dependent CKD and anemia, or CKD Trial. We plan to present initial data from the MF Trial at ASH 2023, and initial data from the 28 mg dose cohort of the patients of the CKD Trial in a management call in December 2023.

In addition, we are developing a preclinical anti-hemojuvelin, or HJV, monoclonal antibody, DISC-0998, which also targets hepcidin suppression and was in-licensed from AbbVie Deutschland GmbH & Co. KG. DISC-0998

is designed to increase serum iron levels and has an extended serum half-life as compared to DISC-0974. We believe this profile may be desirable in certain subsets of patients with anemia associated with inflammatory diseases.

Lastly, we are developing DISC-3405, a monoclonal antibody against Transmembrane Serine Protease 6, or TMPRSS6, that we licensed from Mabwell Therapeutics, Inc., or Mabwell. DISC-3405 is part of our iron homeostasis portfolio and is designed to induce hepcidin production and reduce serum iron levels. An IND for DISC-3405 was cleared by the FDA and we initiated a Phase 1 clinical trial in healthy adult volunteers in October 2023. We were granted fast track designation by the FDA for DISC-3405 for the treatment of PV in September 2023. We expect to develop DISC-3405 for the treatment of PV and other hematologic disorders.

Merger with Gemini

On August 9, 2022, Gemini Therapeutics, Inc., a Delaware corporation ("Gemini"), Gemstone Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Gemini ("Merger Sub"), and Disc Medicine, Inc., a Delaware corporation ("Private Disc"), entered into an Agreement and Plan of Merger and Reorganization (the "Merger Agreement"). The merger was completed on December 29, 2022. In accordance with the Merger Agreement, the Merger Sub merged with and into Private Disc, with Private Disc surviving as a wholly-owned subsidiary of the Company (the "merger"). Gemini changed its name to Disc Medicine Inc., and Private Disc, which remains as a wholly-owned subsidiary of the Company, changed its name to Disc Medicine Opco, Inc. On December 30, 2022, the combined company's common stock began trading on The Nasdaq Capital Market under the ticker symbol "IRON."

Except as otherwise indicated, references herein to "Disc," the "Company," or the "combined company", refer to Disc Medicine, Inc. on a post-merger basis, and the term "Private Disc" refers to the business of privately-held Disc Medicine, Inc., prior to completion of the merger. References to Gemini refer to Gemini Therapeutics, Inc. prior to completion of the merger.

Pursuant to the terms of the Merger Agreement, at the effective time of the merger (the "Effective Time"), each person who as of immediately prior to the Effective Time was a stockholder of record of Gemini or had the right to receive Gemini's common stock received a contractual contingent value right ("CVR") issued by Gemini subject to and in accordance with the terms and conditions of a Contingent Value Rights Agreement between Gemini, the holder's representative and the rights agent (the "CVR Agreement"), representing the contractual right to receive consideration from the post-closing combined company upon the receipt of certain proceeds from a disposition of Gemini's pre-merger assets (specifically, Gemini's intellectual property assets, which the Company assumed in the merger) during the period that is one year after the closing of the merger, calculated in accordance with the CVR Agreement. In accordance with the CVR Agreement, the holders of the CVRs would receive proceeds from any disposition of the Gemini pre-merger assets, net of costs incurred by the Company in performance of its obligations under the CVR Agreement in excess of \$250,000, paid in the form of common stock in the Company calculated based on the amount equal to such proceeds divided by the volume weighted average stock price of the Company for the five trading days prior to the issuance of the payment to the holders of the CVRs. In the event that Gemini's pre-merger assets are disposed in the one-year period after the closing of the merger, and the Company receives net proceeds from such disposition over time following the initial disposition of such assets, any such proceeds would be similarly distributed to the holders of the CVRs for a period continuing through the tenth anniversary of the closing date of the merger.

To satisfy its obligations with respect to the CVRs and the Gemini IP, the Company hired an outside firm to attempt to sell the Gemini IP, which firm previously was unsuccessful in finding a buyer for the Gemini IP. However, in June 2023, the Company received an offer for the Gemini IP and recorded a \$1.5 million liability representing the estimated fair value of the Company's obligation to the holders of the CVRs based on the offer.

As of the date of this prospectus, a sale has not been consummated, no such proceeds have been received by the Company and no distributions have been made to the holders of the CVRs. In the event no net proceeds are

received from a disposition of the Gemini pre-merger assets in the one-year period following closing of the merger, the Company's obligations under the CVR Agreement will expire and the CVRs will be valueless.

Other than pursuant to the CVR Agreement, the Company has no additional obligations or plans with respect to Gemini's pre-merger assets. The Company has generated no revenue from Gemini's pre-merger assets and has incurred approximately \$1.0 million in aggregate costs (including maintenance of license agreements, storage, legal and other fees) as of September 30, 2023, to maintain Gemini's pre-merger assets solely in order to fulfill the Company's obligations under the CVR Agreement.

To illustrate the number of shares of the Company's common stock that might be distributed under the CVR Agreement, assuming that a CVR payment were to be made on November 17, 2023, assuming (i) proceeds to the Company of \$1.5 million, representing the estimated fair value of the Company's obligation to holders of the CVRs as of September 30, 2023, and (ii) based on the volume weighted average stock price of the Company for the five trading days prior to November 17, 2023 of \$50.37, an aggregate of 29,780 shares of the Company's common stock would have been issued to holders of CVRs in such case.

Corporate Information

Disc Medicine, Inc. was originally incorporated under the laws of the state of Delaware in October 2017, and changed its name to Disc Medicine Opco, Inc., or Disc Opco, in December 2022. On December 29, 2022, we completed our business combination with Gemini, in accordance with the terms of the Merger Agreement, pursuant to which, among other matters, Merger Sub merged with and into Disc Opco, with Disc Opco continuing as a wholly owned subsidiary of us and the surviving corporation of the merger, or the Merger. In connection with the closing of the Merger, Gemini changed its name to Disc Medicine, Inc.

Our principal executive offices are located at 321 Arsenal Street, Suite 101, Watertown, MA 02472, and our telephone number is (617) 674-9274. Our website address is www.discmedicine.com. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus. Our common stock is listed on Nasdaq under the symbol "IRON."

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are available, free of charge, on or through our website as soon as reasonably practicable after such reports and amendments are electronically filed with or furnished to the SEC. The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding our filings at *www.sec.gov*.

For additional information about our Company, please refer to other documents we have filed with the SEC and that are incorporated by reference into this prospectus, as listed under the heading "Incorporation of Certain Information by Reference."

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended (the "JOBS Act"). As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include:

 being permitted to only disclose two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;

- reduced disclosure about our executive compensation arrangements;
- not being required to hold advisory votes on executive compensation or to obtain stockholder approval of any golden parachute arrangements not previously approved; and
- an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We may take advantage of these exemptions until the end of the fiscal year following the fifth anniversary of our initial public offering or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenue of \$1.235 billion or more; (ii) December 31, 2025; (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (iv) the last day of the fiscal year in which we are deemed to be a large accelerated filer under the rules of the SEC, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th. We may choose to take advantage of some but not all of these exemptions. We have taken advantage of reduced reporting requirements in this prospectus supplement. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock. Subject to certain conditions, as an emerging growth company, we may rely on certain of these exemptions, including without limitation, omitting an auditor's attestation report on our system of internal controls over financial reporting otherwise required by Section 404(b) of the Sarbanes-Oxley Act of 2002.

We are also a "smaller reporting company" as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies until the fiscal year following the determination that our common stock held by non-affiliates is more than \$250 million measured on the last business day of our second fiscal quarter, or our annual revenues are less than \$100 million during the most recently completed fiscal year and our common stock held by non-affiliates is more than \$700 million measured on the last business day of our second fiscal quarter.

RISK FACTORS

Investing in our securities involves certain risks. Before you invest in any of our common stock, preferred stock, debt securities, warrants or units, in addition to the other information included in, or incorporated by reference into, this prospectus, you should carefully consider the risk factors contained in our (i) our most recent Annual Report on Form 10-K, which is on file with the SEC and is incorporated herein by reference, (ii) our most recent Quarterly Reports on Form 10-Q, which are on file with the SEC and are incorporated herein by reference, and (iii) other documents we file with the SEC that are deemed incorporated by reference into this prospectus. See "*Where You Can Find More Information*" for information about how to obtain a copy of these documents. You should also carefully consider the risks and other information that may be contained in, or incorporated by reference into, any prospectus supplement relating to specific offerings of securities.

SELECTED FINANCIAL DATA

Reverse Stock Split

On December 29, 2022, we effected a 1-for-10 reverse stock split of our common stock. The total number of authorized shares of capital stock was amended from 260,000,000 to 110,000,000. The par value per common share remained unchanged. The audited consolidated financial statements of Gemini Therapeutics, Inc. included in the Annual Report on Form 10-K for the year ended December 31, 2021, and the unaudited condensed consolidated financial statements included in our Quarterly Reports on Form 10-Q for the periods ended March 31, 2022, June 30, 2022, and September 30, 2022, that are incorporated by reference into this prospectus are presented without giving effect to the reverse stock split. Except where the context otherwise requires, share numbers in this prospectus reflect the 1-for-10 reverse stock split of our common stock.

The following selected financial data has been derived from our audited consolidated financial statements included in our Annual Report on Form 10-K filed with the SEC on March 10, 2022, and our unaudited condensed consolidated financial statements included in our Quarterly Reports on Form 10-Q filed with the SEC on May 6, 2022, August 11, 2022, and November 10, 2022, as adjusted to reflect the reverse stock split for all periods presented. Our historical results are not indicative of the results that may be expected in the future and results of interim periods are not indicative of the results for the entire year. In addition, the below presented historical results do not present the pro forma impact of the reverse merger, as presented in the unaudited pro forma financial statements and accompanying notes for the nine months ended September 30, 2022, and the fiscal year ended December 31, 2021, contained in the Company's Current Report on Form 8-K filed on December 29, 2022, and incorporated herein by reference.

AS REPORTED (in thousands, except per share amounts):

	Years Ended December 31,	
	2021	2020
Net loss and comprehensive loss	\$ (71,869)	\$ (40,837)
Net loss per share, basic and diluted	\$ (1.78)	\$ (2.70)
Weighted average common shares outstanding, basic and diluted	40,362,303	15,115,129
Common shares outstanding at year end	43,208,159	15,565,380

	Three Mon Marcl	
	2022	2021
	(Unauc	lited)
Net loss and comprehensive loss	\$ (15,231)	\$ (19,048)
Net loss per share, basic and diluted	\$ (0.35)	\$ (0.59)
Weighted average common shares outstanding, basic and diluted	43,212,803	32,027,161
Common shares outstanding at period end	43,227,159	43,002,144

	Three Months Ended June 30,			
		2022		2021
		(Una	udited)	
Net loss and comprehensive loss	\$	(7,090)	\$	(16,447)
Net loss per share, basic and diluted	\$	(0.16)	\$	(0.38)
Weighted average common shares outstanding, basic and diluted	43,	230,523	43	3,041,856
Common shares outstanding at period end	43,	244,453	43	3,055,112

	Six Months Ended June 30,	
	2022	2021
	(Unaudi	ted)
Net loss and comprehensive loss	\$ (22,321)	\$ (35,495)
Net loss per share, basic and diluted	\$ (0.52)	\$ (0.94)
Weighted average common shares outstanding, basic and diluted	43,221,712	37,564,936
Common shares outstanding at period end	43,244,453	43,055,112

	Three Months Ended September 30,			
		2022		2021
		(Unau	udited)	
Net loss and comprehensive loss	\$	(3,277)	\$	(18,551)
Net loss per share, basic and diluted	\$	(0.08)	\$	(0.43)
Weighted average common shares outstanding, basic and diluted	43,	264,616	43	,091,822
Common shares outstanding at period end	43.	299,453	43	3,112,742

	Nine Months Ended September 30,	
	2022	2021
	(Unau	dited)
Net loss and comprehensive loss	\$ (25,598)	\$ (54,046)
Net loss per share, basic and diluted	\$ (0.59)	\$ (1.37)
Weighted average common shares outstanding, basic and diluted	43,236,171	39,427,476
Common shares outstanding at period end	43,299,453	43,112,742

AS ADJUSTED FOR 1-FOR-10 REVERSE STOCK SPLIT (unaudited, in thousands, except per share amounts):

	Years Ended December 31,	
	2021	2020
	(Unaud	lited)
Net loss and comprehensive loss	\$ (71,869)	\$ (40,837)
Net loss per share, basic and diluted	\$ (17.81)	\$ (27.02)
Weighted average common shares outstanding, basic and diluted	4,036,230	1,511,512
Common shares outstanding at year end	4,320,815	1,556,538

	Three Months Ended March 31,	
	2022	2021
	(Unau	dited)
Net loss and comprehensive loss	\$ (15,231)	\$ (19,048)
Net loss per share, basic and diluted	\$ (3.52)	\$ (5.95)
Weighted average common shares outstanding, basic and diluted	4,321,280	3,202,716
Common shares outstanding at period end	4,322,715	4,300,214

	Three Months Ended June 30,	
	2022	2021
	(Unau	idited)
Net loss and comprehensive loss	\$ (7,090)	\$ (16,447)
Net loss per share, basic and diluted	\$ (1.64)	\$ (3.82)
Weighted average common shares outstanding, basic and diluted	4,323,052	4,304,185
Common shares outstanding at period end	4,324,445	4,305,511

	Six Months Ended June 30,	
	2022	2021
	(Una	udited)
Net loss and comprehensive loss	\$ (22,321)	\$ (35,495)
Net loss per share, basic and diluted	\$ (5.16)	\$ (9.45)
Weighted average common shares outstanding, basic and diluted	4,322,171	3,756,493
Common shares outstanding at period end	4,324,445	4,305,511

	Three Months Ended September 30,	
	2022	2021
		(Unaudited)
Net loss and comprehensive loss	\$ (3,27	7) \$ (18,551)
Net loss per share, basic and diluted	\$ (0.7	6) \$ (4.30)
Weighted average common shares outstanding, basic and diluted	4,326,46	1 4,309,182
Common shares outstanding at period end	4,329,94	5 4,311,274

	Nine Months Ended September 30,	
	2022	2021
	(Unau	dited)
Net loss and comprehensive loss	\$ (25,598)	\$ (54,046)
Net loss per share, basic and diluted	\$ (5.92)	\$ (13.71)
Weighted average common shares outstanding, basic and diluted	4,323,617	3,942,747
Common shares outstanding at period end	4,329,945	4,311,274

USE OF PROCEEDS

Unless otherwise described in the applicable prospectus supplement, we intend to use the net proceeds from the sale of any securities described in this prospectus for general corporate purposes, which may include research and development and preclinical and clinical development costs to support the advancement of our product candidates; working capital; capital expenditures; general and administrative expenses; and other general corporate purposes.

We may set forth additional information concerning our expected use of net proceeds from sales of securities in the applicable prospectus supplement relating to the specific offering. Pending use of net proceeds as described above, we may temporarily invest the net proceeds in a variety of capital preservation instruments, including high quality, investment grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government, or may hold such proceeds as cash, until they are used for their stated purpose. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock and do not anticipate paying any cash dividends in the foreseeable future. Payment of cash dividends, if any, in the future will solely be at the discretion of our board of directors and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

GENERAL DESCRIPTION OF SECURITIES

We may offer shares of common or preferred stock, various series of senior or subordinated debt securities, warrants, or units consisting of combinations of the foregoing, in each case from time to time under this prospectus, together with the applicable prospectus supplement, at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. At the time we offer a particular type or series of securities, we will provide an applicable prospectus supplement describing the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- voting or other rights;
- rates and times of payment of interest, dividends or other payments;
- liquidation preference;
- original issue discount;
- maturity;
- ranking;
- restrictive covenants;
- redemption, conversion, exercise, exchange, settlement or sinking fund terms, including prices or rates, and any provisions for changes to
 or adjustments in such prices or rates and in the securities or other property receivable upon conversion, exercise, exchange or settlement;
- any securities exchange or market listing arrangements; and
- important U.S. federal income tax considerations.

This prospectus may not be used to offer or sell securities unless accompanied by an applicable prospectus supplement. The applicable prospectus supplement may add, update or change information contained in this prospectus or in documents incorporated by reference in this prospectus. You should read the applicable prospectus supplement related to any securities being offered.

We may sell the securities to or through underwriters, dealers or agents, directly to purchasers or through a combination of any of these methods of sale or as otherwise set forth under "*Plan of Distribution*". We and our underwriters, dealers or agents reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters or agents, we will include in the applicable prospectus supplement (i) the names of the underwriters or agents and applicable fees, discounts and commissions to be paid to them; (ii) details regarding over-allotment options, if any; and (iii) net proceeds to us.

The following descriptions are not complete and may not contain all the information you should consider before investing in any securities we may offer hereunder; they are summarized from, and qualified by reference to, our amended and restated certificate of incorporation, amended and restated bylaws and the other documents referred to in the descriptions, all of which are or will be publicly filed with the SEC, as applicable. See "*Where You Can Find More Information*."

DESCRIPTION OF CAPITAL STOCK

The following summary description of our common stock and preferred stock, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of our capital stock. The following description of our capital stock is intended as a summary only, does not purport to be complete and is subject to, and qualified in its entirety by, our amended and restated certificate of incorporation and amended and restated bylaws, which are exhibits to the registration statement of which this prospectus forms a part, and by applicable law. The terms of our common stock and preferred stock may also be affected by Delaware law.

Authorized Capital Stock

Our authorized capital stock consists of 100,000,000 shares of common stock, par value \$0.0001 per share, and 10,000,000 shares of preferred stock, par value \$0.0001 per share, all of which preferred stock is undesignated. As of September 30, 2023, we had estimated 24,139,078 shares of our common stock outstanding and no shares of preferred stock outstanding. Unless our board of directors determines otherwise, we will issue all shares of our capital stock in uncertificated form.

Common Stock

The holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock. When we issue shares of common stock under this prospectus, when issued and paid for, the shares will be validly issued, fully paid and non-assessable.

Exchange Listing

Our common stock is listed on The Nasdaq Global Market under the symbol "IRON." On November 16, 2023, the closing price for our common stock, as reported on The Nasdaq Global Market, was \$48.36 per share. As of September 30, 2023, we had estimated approximately 36 stockholders of record.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Broadridge Corporate Issuer Solutions, LLC. The transfer agent and registrar's address is 51 Mercedes Way, Edgewood, NY 11717.

Preferred Stock

Undesignated Preferred Stock

Our board of directors has the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that

such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. We have no shares of preferred stock outstanding, and we have no present plan to issue any shares of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock in one or more series and determine the number of shares in the series and its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. Examples of rights and preferences that our board of directors may fix are:

- dividend rights;
- dividend rates;
- conversion rights;
- voting rights;
- terms of redemption; and
- liquidation preferences.

The existence of authorized but unissued shares of undesignated preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer, stockholder or stockholder group. The rights of holders of our common stock described above, will be subject to, and may be adversely affected by, the rights of any preferred stock that we may designate and issue in the future. The issuance of shares of undesignated preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Additional Series of Preferred Stock

We will incorporate by reference as an exhibit to the registration statement, which includes this prospectus, the form of any certificate of designation that describes the terms of any additional series of preferred stock we may offer pursuant to this prospectus. This description and the applicable prospectus supplement will include:

- the title and stated value;
- the number of shares authorized;
- the liquidation preference per share;
- the purchase price;
- the dividend rate, period and payment date, and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;

- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price, or how it will be calculated, and the exchange period;
- voting rights, if any, of the preferred stock;
- preemptive rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- whether interests in the preferred stock will be represented by depositary shares;
- a discussion of any material United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

When we issue shares of preferred stock under this prospectus, the shares will fully be paid and nonassessable and will not be subject to any preemptive or similar rights.

Registration Rights

The holders of approximately 7.5 million shares of our common stock, or their transferees, are entitled to the registration rights set forth below with respect to registration of the resale of such shares under the Securities Act pursuant to the investors' rights agreement, by and among us and certain of our stockholders. Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions and limitations, to limit the number of shares the holders may include.

2022 Registration Rights Agreement

We are party to a registration rights agreement, or the 2022 Registration Rights Agreement, with certain holders of our capital stock, or the 2022 Investors, pursuant to which we (i) agreed to register for resale shares of our common stock issued to the 2022 Investors pursuant to the Merger Agreement, or the Registrable Securities, and (ii) granted certain other registration rights to the 2022 Investors.

In particular, the 2022 Registration Rights Agreement provides for the following registration rights:

- *Shelf registration rights.* No later than 45 calendar days following the completion of the merger as contemplated by the Merger Agreement, we were required to file with the SEC, a shelf registration statement registering the resale of the Registrable Securities, and use our commercially reasonable efforts to have such registration statement declared effective by the SEC as promptly as possible.
- *Expenses and indemnification.* The fees, costs and expenses of registrations pursuant to the registration rights granted to the 2022 Investors under the 2022 Registration Rights Agreement will be borne by us. The 2022 Registration Rights Agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of Registrable Securities in the event of material misstatements or omissions in the registration statement attributable to us, and holders of Registrable Securities are obligated to indemnify us for material misstatements or omissions attributable to them.

2021 Registration Rights Agreement

We are a party to a registration rights agreement, or the 2021 Registration Rights Agreement, pursuant to which, among other things, certain holders of capital stock, including certain investors of FS Development Corporation, a Delaware corporation, or the FSDC Investors, certain entities affiliated with Atlas Ventures, entities affiliated with Lightstone Ventures, OrbiMed Private Investments VI, LP, and Wu Capital Investment LLC, or collectively, the Major Investors and together with the FSDC Investors, the Investors, were granted certain registration rights with respect to Registrable Securities, as defined in the 2021 Registration Rights Agreement, held by them, subject to certain conditions and limitations.

In particular, the 2021 Registration Rights Agreement provides for the following registration rights:

- Demand registration rights. We are required, upon the written request of either (i) FSDC Investors holding a majority of the Registrable Securities held by all FSDC Investors or (ii) Major Investors holding a majority of the Registrable Securities held by all Major Investors, to file a registration statement under the Securities Act on Form S-1 or any similar long-form registration statement or, if then available, on Form S-3, and use reasonable best efforts to effect the registration of all or part of their registrable securities requested to be included in such registration by the Investors.
- Shelf registration rights. A shelf registration statement pursuant to Rule 415 of Securities Act, was filed on February 17, 2021 and became effective on April 28, 2021. At any time we have an effective shelf registration statement, if we receive a request from Investors holding registrable securities with an estimated market value of at least \$5,000,000, to effect an underwritten shelf takedown, we shall use our reasonable best efforts to as expeditiously as possible effect the underwritten shelf takedown.
- Limits on demand registration rights and shelf registration rights. We shall not be obligated to effect: (a) more than one (1) demand registration or underwritten shelf takedown during any six-month period; (b) any demand registration at any time there is an effective resale shelf registration statement on file with the SEC; (c) more than two underwritten demand registrations in respect of all registrable securities held by the FSDC Investors, including those made under a shelf registration statement, or (d) more than two underwritten demand registrations in respect of all registrable securities held by the Major Investors, including those made under a shelf registration statement.
- *Piggyback registration rights.* At any time after the first anniversary of the closing date, if we propose to file a registration statement to register any of our equity securities under the Securities Act or to conduct a public offering, either for our own account or for the account of any other person, subject to certain exceptions, the Investors are entitled to include their registrable securities in such registration statement, subject to customary cut-back rights.
- *Expenses and indemnification.* All fees, costs and expenses of underwritten registrations will be borne by us and underwriting discounts and selling commissions will be borne by the holders of the shares being registered. The 2021 Registration Rights Agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and holders of registrable securities are obligated to indemnify us for material misstatements or omissions attributable to them.
- *Registrable securities.* Securities of ours shall cease to be registrable securities upon the earlier of (i) tenth anniversary of February 5, 2021 and (ii) the date as of which (1) a registration statement with respect to the sale of such securities shall have become effective under the Securities Act and such securities shall have been disposed of in accordance with such registration statement, or (2) such securities shall have been transferred pursuant to Rule 144 of the Securities Act, or with respect to any Investor, securities of such Investor shall cease to be registrable securities, on the earlier of (x) the date such Investor ceases to hold at least 1% of the registrable securities or (y) if such Investor is an individual and such Investor is a director or an executive officer of Disc or FS Development Corporation as of immediately prior to the consummation of the business combination, the date when

such Investor is permitted to sell the Registrable Securities under Rule 144 (or any similar provision) under the Securities Act without limitation on the amount of securities sold or the manner of sale.

Authorized but Unissued Capital Stock

The Delaware General Corporation Law does not require stockholder approval for any issuance of authorized shares. However, the listing requirements of Nasdaq, which would apply so long as our common stock remains listed on Nasdaq, require stockholder approval of certain issuances equal to or exceeding 20% of the then outstanding voting power or then outstanding number of shares of common stock. These additional shares may be used for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions.

One of the effects of the existence of unissued and unreserved common stock or preferred stock may be to enable our board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of our company by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive our stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

Anti-Takeover Effects of our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws and Delaware Law

Certain provisions of Delaware law and our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could make the following transactions more difficult: acquisition of us by means of a tender offer; acquisition of us by means of a proxy contest or otherwise; or removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions that might result in a premium over the market price for our shares.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware anti-takeover statute

We are not governed by Section 203 of the Delaware General Corporation Law.

Undesignated preferred stock

The ability to authorize undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to effect a change in control of our company. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our company.

Special stockholder meetings

Our amended and restated certificate of incorporation provides that a special meeting of stockholders may be called at any time by our board of directors, but such special meetings may not be called by the stockholders or any other person or persons.

Requirements for advance notification of stockholder nominations and proposals

Our amended and restated bylaws contain advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of our board of directors.

No stockholder action by written consent

Our amended and restated certificate of incorporation does not allow stockholders to act by written consent without a meeting.

Classified board; election and removal of directors; filling vacancies

Our board of directors is divided into three classes, divided as nearly as equal in number as possible. The directors in each class serve for a three-year term, one class being elected each year by our stockholders, with staggered three-year terms. Only one class of directors is elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the shares of common stock outstanding will be able to elect all of our directors. Our amended and restated certificate of incorporation provides for the removal of any of our directors only for cause and requires a stockholder vote by the holders of at least 66-2/3% of the voting power of the then outstanding voting stock. Any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of the board, may only be filled by a resolution of the board of directors.

This system of electing and removing directors and filling vacancies may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us because it generally makes it more difficult for stockholders to replace a majority of the directors.

Choice of forum

Our amended and restated certificate of incorporation and amended and restated bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: any derivative action or proceeding brought on our behalf; any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers, employees or stockholders to us or to our stockholders; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws (as either may be amended from time to time); any action to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. As a result, any action brought by any of our stockholders with regard to any of these matters will need to be filed in the Court of Chancery of the State of Delaware and cannot be filed in any other jurisdiction; provided that, the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act or the Securities Act. In addition, unless we consent in writing to the selection of an alternative forum, the United States District Court for the District of Massachusetts will be the sole and exclusive forum for resolving any action asserting a claim arising under the Securities Act. Such provision is intended to benefit and may be enforced by us, our officers and directors, employees and agents, including the underwriters and any other professional or entity who has prepared or certified any part of this prospectus. Nothing in our amended and restated certificate of incorporation and amended and restated bylaws preclude stockholders that assert cla

Although our amended and restated certificate of incorporation and amended and restated bylaws contain the choice of forum provision described above, it is possible that a court could find that such a provision is inapplicable for a particular claim or action or that such provision is unenforceable.

This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims or make such lawsuits more costly for stockholders, although our stockholders will not be deemed to have waived our compliance with federal securities laws and the rules and regulations thereunder.

Amendment of charter provisions or bylaws

Our amended and restated bylaws may be amended or repealed by our board of directors or by the affirmative vote of the holders of not less than two-thirds of the voting power of all of the shares of the capital stock of our Company entitled to vote on such amendment or repeal, voting as one class; provided, however, that if our board of directors recommends that stockholders approve such amendment or repeal, such amendment or repeal shall only require the affirmative vote of the majority of the outstanding shares of capital stock entitled to vote on such amendment or repeal, voting together as a single class. The affirmative vote of the holders of the majority of the outstanding shares of each class entitled to vote thereon as a class voting together as a single class, will be required to amend certain provisions of our amended and restated certificate of incorporation.

The provisions of the Delaware General Corporation Law, our amended and restated certificate of incorporation and our amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

DESCRIPTION OF DEBT SECURITIES

This section describes the general terms and provisions of our debt securities that we may issue from time to time. We may issue debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any future debt securities we may offer under this prospectus, the applicable prospectus supplement or free writing prospectus will describe the specific terms of any debt securities offered through that prospectus supplement or free writing prospectus. The terms of any debt securities we offer under a prospectus supplement or free writing prospectus may differ from the terms we describe below. Unless the context requires otherwise, whenever we refer to the "indentures," we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue any senior debt securities under the senior indenture that we will enter into with the trustee named in the senior indenture. We will issue any subordinated debt securities under the subordinated indenture that we will enter into with the trustee named in the subordinated indenture. We have filed forms of these documents as exhibits to the registration statement, of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The indentures will be qualified under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. We use the term "trustee" to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplement or free writing prospectus and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete applicable indenture that contains the terms of the debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

General

We will describe in the applicable prospectus supplement or free writing prospectus the terms of the series of debt securities being offered, including:

- the title;
- the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;
- any limit on the amount that may be issued;
- whether or not we will issue the series of debt securities in global form, and, if so, the terms and who the depository will be;
- the maturity date;
- whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;

- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place where payments will be payable;
- restrictions on transfer, sale or other assignment, if any;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the date, if any, after which, the conditions upon which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option, to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- whether the indenture will restrict our ability to:
 - incur additional indebtedness;
 - issue additional securities;
 - create liens;
 - pay dividends or make distributions in respect of our capital stock or the capital stock of our subsidiaries;
 - redeem capital stock;
 - · place restrictions on our subsidiaries' ability to pay dividends, make distributions or transfer assets;
 - make investments or other restricted payments;
 - sell or otherwise dispose of assets;
 - enter into sale-leaseback transactions;
 - engage in transactions with stockholders or affiliates;
 - issue or sell stock of our subsidiaries;
 - effect a consolidation or merger;
- whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;
- a discussion of certain material or special United States federal income tax considerations applicable to the debt securities;
- information describing any book-entry features;
- provisions for a sinking fund purchase or other analogous fund, if any;
- the applicability of the provisions in the indenture on discharge;
- whether the debt securities are to be offered at a price such that they will be deemed to be offered at an "original issue discount" as defined in paragraph (a) of Section 1273 of the Internal Revenue Code of 1986, as amended;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;

- the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations or advisable in connection with the marketing of the debt securities.

Conversion or Exchange Rights

We will set forth in the applicable prospectus supplement or free writing prospectus the terms on which a series of debt securities may be convertible into or exchangeable for our common stock, our preferred stock or other securities (including securities of a third-party). We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock, our preferred stock or other securities (including securities of a third-party) that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, the indentures will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the debt securities, as appropriate. If the debt securities are convertible into or exchangeable for other securities of ours or securities of other entities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities that the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

Events of Default Under the Indenture

Unless we provide otherwise in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, the following are events of default under the indentures with respect to any series of debt securities that we may issue:

- if we fail to pay interest when due and payable and our failure continues for 90 days and the time for payment has not been extended;
- if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable at maturity, upon redemption or repurchase or otherwise, and the time for payment has not been extended;
- if we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive notice from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur.

We will describe in each applicable prospectus supplement or free writing prospectus any additional events of default relating to the relevant series of debt securities.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the

unpaid principal, premium, if any, and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity or security satisfactory to it against any loss, liability or expense. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies if:

- the holder has given written notice to the trustee of a continuing event of default with respect to that series;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the trustee or security satisfactory to it against any loss, liability or expense or to be incurred in compliance with instituting the proceeding as trustee; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities, or other defaults that may be specified in the applicable prospectus supplement or free writing prospectus.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indentures.

Modification of Indenture; Waiver

Subject to the terms of the indenture for any series of debt securities that we may issue, we and the trustee may change an indenture without the consent of any holders with respect to the following specific matters:

- to fix any ambiguity, defect or inconsistency in the indenture;
- to comply with the provisions described above under "Description of Debt Securities-Consolidation, Merger or Sale;"
- to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act;

- to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;
- to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided under "Description of Debt Securities-General," to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;
- to evidence and provide for the acceptance of appointment hereunder by a successor trustee;
- to provide for uncertificated debt securities and to make all appropriate changes for such purpose;
- to add to our covenants such new covenants, restrictions, conditions or provisions for the benefit of the holders, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred to us in the indenture; or
- to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, subject to the terms of the indenture for any series of debt securities that we may issue or as otherwise provided in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, we and the trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the stated maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption or repurchase of any debt securities; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Discharge

Each indenture provides that, subject to the terms of the indenture and any limitation otherwise provided in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- recover excess money held by the trustee;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement or free writing prospectus, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company or another depository named by us and identified in a prospectus supplement or free writing prospectus with respect to that series. At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement or free writing prospectus, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement or free writing prospectus, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement or free writing prospectus the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series. If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs.

Subject to this provision, the trustee is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement or free writing prospectus, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement or free writing prospectus, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement or free writing prospectus, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement or free writing prospectus any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

Ranking of Debt Securities

The subordinated debt securities will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement or free writing prospectus. The subordinated indenture does not limit the amount of subordinated debt securities that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

The senior debt securities will rank equally in right of payment to all our other senior unsecured debt. The senior indenture does not limit the amount of senior debt securities that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement, which includes this prospectus.

General

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities.

We will evidence each series of warrants by warrant certificates that we will issue under a separate warrant agreement. We will enter into the warrant agreement with a warrant agent. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the periods during which, and places at which, the warrants are exercisable;
- the manner of exercise;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreement and warrants may be modified;
- federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

DESCRIPTION OF UNITS

We may issue units comprised of shares of common stock, shares of preferred stock, debt securities and warrants in any combination. We may issue units in such amounts and in as many distinct series as we wish. This section outlines certain provisions of the units that we may issue. If we issue units, they will be issued under one or more unit agreements to be entered into between us and a bank or other financial institution, as unit agent. The information described in this section may not be complete in all respects and is qualified entirely by reference to the unit agreement with respect to the units of any particular series. The specific terms of any series of units offered will be described in the applicable prospectus supplement. If so described in a particular supplement, the specific terms of any series of units may differ from the general description of terms presented below. We urge you to read any prospectus supplement related to any series of units we may offer, as well as the complete unit agreement and unit certificate that contain the terms of the units. If we issue units, forms of unit agreements and unit certificates relating to such units will be incorporated by reference as exhibits to the registration statement, which includes this prospectus.

Each unit that we may issue will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. The applicable prospectus supplement may describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement;
- the price or prices at which such units will be issued;
- the applicable United States federal income tax considerations relating to the units;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- any other terms of the units and of the securities comprising the units.

The provisions described in this section, as well as those described under "Description of Capital Stock," "Description of Debt Securities" and "Description of Warrants" will apply to the securities included in each unit, to the extent relevant and as may be updated in any prospectus supplements.

Issuance in Series

We may issue units in such amounts and in as many distinct series as we wish. This section summarizes terms of the units that apply generally to all series. Most of the financial and other specific terms of a particular series of units will be described in the applicable prospectus supplement.

Unit Agreements

We will issue the units under one or more unit agreements to be entered into between us and a bank or other financial institution, as unit agent. We may add, replace or terminate unit agents from time to time. We will identify the unit agreement under which each series of units will be issued and the unit agent under that agreement in the applicable prospectus supplement.

The following provisions will generally apply to all unit agreements unless otherwise stated in the applicable prospectus supplement:

Modification without Consent

We and the applicable unit agent may amend any unit or unit agreement without the consent of any holder:

- to cure any ambiguity; any provisions of the governing unit agreement that differ from those described below;
- to correct or supplement any defective or inconsistent provision; or
- to make any other change that we believe is necessary or desirable and will not adversely affect the interests of the affected holders in any material respect.

We do not need any approval to make changes that affect only units to be issued after the changes take effect. We may also make changes that do not adversely affect a particular unit in any material respect, even if they adversely affect other units in a material respect. In those cases, we do not need to obtain the approval of the holder of the unaffected unit; we need only obtain any required approvals from the holders of the affected units.

Modification with Consent

We may not amend any particular unit or a unit agreement with respect to any particular unit unless we obtain the consent of the holder of that unit, if the amendment would:

- impair any right of the holder to exercise or enforce any right under a security included in the unit if the terms of that security require the consent of the holder to any changes that would impair the exercise or enforcement of that right; or
- reduce the percentage of outstanding units or any series or class the consent of whose holders is required to amend that series or class, or the applicable unit agreement with respect to that series or class, as described below.

Any other change to a particular unit agreement and the units issued under that agreement would require the following approval:

- If the change affects only the units of a particular series issued under that agreement, the change must be approved by the holders of a majority of the outstanding units of that series; or
- If the change affects the units of more than one series issued under that agreement, it must be approved by the holders of a majority of all outstanding units of all series affected by the change, with the units of all the affected series voting together as one class for this purpose.

These provisions regarding changes with majority approval also apply to changes affecting any securities issued under a unit agreement, as the governing document.

In each case, the required approval must be given by written consent.

Unit Agreements Will Not Be Qualified under Trust Indenture Act

No unit agreement will be qualified as an indenture, and no unit agent will be required to qualify as a trustee, under the Trust Indenture Act. Therefore, holders of units issued under unit agreements will not have the protections of the Trust Indenture Act with respect to their units.

Mergers and Similar Transactions Permitted; No Restrictive Covenants or Events of Default

The unit agreements will not restrict our ability to merge or consolidate with, or sell our assets to, another corporation or other entity or to engage in any other transactions. If at any time we merge or consolidate with, or

sell our assets substantially as an entirety to, another corporation or other entity, the successor entity will succeed to and assume our obligations under the unit agreements. We will then be relieved of any further obligation under these agreements.

The unit agreements will not include any restrictions on our ability to put liens on our assets, nor will they restrict our ability to sell our assets. The unit agreements also will not provide for any events of default or remedies upon the occurrence of any events of default.

Governing Law

The unit agreements and the units will be governed by New York law.

Form, Exchange and Transfer

We will issue each unit in global, i.e., book-entry, form only. Units in book-entry form will be represented by a global security registered in the name of a depositary, which will be the holder of all the units represented by the global security. Those who own beneficial interests in a unit will do so through participants in the depositary's system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depositary and its participants. We will describe book-entry securities, and other terms regarding the issuance and registration of the units in the applicable prospectus supplement.

Each unit and all securities comprising the unit will be issued in the same form.

If we issue any units in registered, non-global form, the following will apply to them.

The units will be issued in the denominations stated in the applicable prospectus supplement. Holders may exchange their units for units of smaller denominations or combined into fewer units of larger denominations, as long as the total amount is not changed.

- Holders may exchange or transfer their units at the office of the unit agent. Holders may also replace lost, stolen, destroyed or mutilated units at that office. We may appoint another entity to perform these functions or perform them ourselves.
- Holders will not be required to pay a service charge to transfer or exchange their units, but they may be required to pay for any tax or other governmental charge associated with the transfer or exchange. The transfer or exchange, and any replacement, will be made only if our transfer agent is satisfied with the holder's proof of legal ownership. The transfer agent may also require an indemnity before replacing any units.
- If we have the right to redeem, accelerate or settle any units before their maturity, and we exercise our right as to less than all those units or other securities, we may block the exchange or transfer of those units during the period beginning 15 days before the day we mail the notice of exercise and ending on the day of that mailing, in order to freeze the list of holders to prepare the mailing. We may also refuse to register transfers of or exchange any unit selected for early settlement, except that we will continue to permit transfers and exchanges of the unsettled portion of any unit being partially settled. We may also block the transfer or exchange of any unit in this manner if the unit includes securities that are or may be selected for early settlement.

Only the depositary will be entitled to transfer or exchange a unit in global form, since it will be the sole holder of the unit.

Payments and Notices

In making payments and giving notices with respect to our units, we will follow the procedures as described in the applicable prospectus supplement.

PLAN OF DISTRIBUTION

We may sell the offered securities in and outside the United States (1) through underwriters or dealers, (2) directly to one or more purchasers, including to a limited number of institutional purchasers, to a single purchaser or to our affiliates and stockholders, (3) through agents or (4) through a combination of any of these methods.

If underwriters or dealers are used in the sale, the securities will be acquired by the underwriters or dealers for their own account and may be resold from time to time in one or more transactions, including:

- in one or more transactions at a fixed price or prices, which may be changed from time to time;
- in "at-the-market offerings," within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;
- through a market maker or into an existing trading market on an exchange or otherwise;
- at prices related to those prevailing market prices; or
- at negotiated prices.

The applicable prospectus supplement will set forth the following information to the extent applicable:

- the terms of the offering;
- the names of any underwriters, dealers or agents;
- the name or names of any managing underwriter or underwriters;
- the purchase price of the securities;
- the net proceeds from the sale of the securities;
- any delayed delivery arrangements;
- any underwriting discounts, commissions and other items constituting underwriters' compensation;
- any initial public offering price;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any commissions paid to agents.

Sale through Underwriters or Dealers

If any securities are offered through underwriters, the underwriters will acquire the securities for their own account and may resell them from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer and sell securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise provided in the applicable prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters may be obligated to purchase all of the offered securities if they purchase any of them. In connection with the sale of securities, underwriters may be deemed to have received compensation from us in the form of underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallowed or paid to dealers.

In order to facilitate the offering of securities, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. Specifically, the underwriters may overallot in connection with the offering, creating a short position in the securities for their account. In addition, to cover overallotments

or to stabilize the price of the shares, the underwriters may bid for, and purchase, shares in the open market. Finally, an underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed shares in transactions to cover syndicate short positions, in stabilization transactions, or otherwise. Any of these activities may stabilize or maintain the market price of the offered securities above independent market levels. The underwriters are not required to engage in these activities, and may discontinue any of these activities at any time.

Some or all of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities offered pursuant to this prospectus.

If any securities are offered through dealers, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale.

Direct Sales and Sales through Agents

We may sell the securities directly to purchasers. If the securities are sold directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities, we will describe the terms of any such sales in the applicable prospectus supplement. We may also sell the securities through agents designated from time to time. Sales may be made by means of ordinary brokers' transactions on The Nasdaq Global Market at market prices, in block transactions and such other transactions as agreed by us and any agent. In the applicable prospectus supplement, we will name any agent involved in the offer or sale of the offered securities, and we will describe any commissions payable to the agent. Unless otherwise provided in the applicable prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

At-the-Market Offerings

To the extent that we make sales through one or more underwriters or agents in at-the-market offerings, we will do so pursuant to the terms of a sales agency financing agreement or other at-the-market offering arrangement between us, on the one hand, and the underwriters or agents, on the other. If we engage in at-the-market sales pursuant to any such agreement, we will issue and sell our securities through one or more underwriters or agents, which may act on an agency basis or a principal basis. During the term of any such agreement, we may sell securities on a daily basis in exchange transactions or otherwise as we agree with the underwriters or agents. Any such agreement will provide that any securities sold will be sold at prices related to the then prevailing market prices for our securities. Therefore, exact figures regarding proceeds that will be raised or commissions to be paid cannot be determined at this time. Pursuant to the terms of the agreement, we may agree to sell, and the relevant underwriters or agents may agree to solicit offers to purchase blocks of our common stock or other securities. The terms of any such agreement will be set forth in more detail in the applicable prospectus supplement.

Remarketing Arrangements

Offered securities may also be offered and sold, if we so indicate in the applicable prospectus supplement, in connection with a remarketing upon their purchase, in accordance with a redemption or repayment pursuant to their terms, or otherwise, by one or more remarketing firms, acting as principals for their own accounts or as our agents. Any remarketing firm will be identified and the terms of its agreements, if any, with us and its compensation will be described in the applicable prospectus supplement. Remarketing firms may be deemed to be underwriters of the offered securities under the Securities Act.

Delayed Delivery Contracts

If we so indicate in the applicable prospectus supplement, we may authorize agents, underwriters or dealers to solicit offers by certain institutions to purchase securities from us pursuant to contracts providing for payment and delivery on a specified future date. The applicable prospectus supplement will describe the conditions to those contracts and the commission payable for solicitation of those contracts.

General Information

We may have agreements with the agents, dealers, underwriters and remarketing firms to indemnify them against certain civil liabilities, including liabilities under the Securities Act, or to contribute with respect to payments that the agents, dealers or underwriters may be required to make. Agents, dealers, underwriters and remarketing firms may be customers of, engage in transactions with or perform services for us in the ordinary course of their businesses.

Each underwriter, dealer and agent participating in the distribution of any of the securities that are issuable in bearer form will agree that it will not offer, sell or deliver, directly or indirectly, securities in bearer form in the United States or to United States persons, other than qualifying financial institutions, during the restricted period, as defined in United States Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7).

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LEGAL MATTERS

Certain legal matters in connection with this offering will be passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Additional legal matters may be passed on for us, or any underwriters, dealers or agents by counsel we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of Disc Medicine, Inc. appearing in Disc Medicine, Inc.'s Annual Report (Form 10-K) for the years ended December 31, 2022 and 2021, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the reports of Ernst & Young LLP pertaining to such financial statements (to the extent covered by consents filed with the Securities and Exchange Commission) given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Gemini Therapeutics, Inc. appearing in Gemini Therapeutics, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2021, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.



Up to \$192,832,832

Common Stock

PROSPECTUS SUPPLEMENT

Jefferies

December 5, 2023