

PROSPECTUS SUPPLEMENT
(To prospectus dated August 8, 2024)

3,918,182 Shares of Common Stock Pre-Funded Warrants to Purchase 181,818 Shares of Common Stock

We are offering 3,918,182 shares of our common stock and, in lieu of common stock to certain investors that so choose, pre-funded warrants to purchase 181,818 shares of common stock in this offering. Our common stock is listed on the Nasdaq Global Market under the symbol "IRON." On January 22, 2025, the closing sale price of our common stock on the Nasdaq Global Market, was \$58.50 per share.

The purchase price of each pre-funded warrant will equal the price per share at which shares of our common stock are being sold to the public in this offering, minus \$0.0001, which is the exercise price of each pre-funded warrant. The pre-funded warrants do not expire, and each pre-funded warrant will be exercisable at any time after the date of issuance, subject to an ownership limitation and in some cases clearance under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, or the HSR Act. This prospectus supplement also relates to the offering of the shares of common stock issuable upon exercise of such pre-funded warrants.

There is no established public trading market for the pre-funded warrants, and we do not expect a market to develop. We do not intend to list the pre-funded warrants on the Nasdaq Global Market or any other national securities exchange or nationally recognized trading system.

Investing in our securities involves a high degree of risk. Please read "[Risk Factors](#)" beginning on page S-6 of this prospectus supplement, page 1 in the accompanying prospectus, and under similar headings in the documents that are incorporated by reference into this prospectus supplement concerning factors you should carefully consider before investing in our securities.

	Per Share	Pre-Funded Warrant	Total
Public offering price	\$ 55.00	\$ 54.9999	\$ 225,499,982
Underwriting discounts and commissions ⁽¹⁾	\$ 3.30	\$ 3.3000	\$ 13,530,000
Proceeds, before expenses, to us	\$ 51.70	\$ 51.6999	\$ 211,969,982

(1) See the section titled "Underwriting" beginning on page S-25 for a description of the compensation payable to the underwriters.

We have granted the underwriters an option for a period of 30 days to purchase up to an additional 615,000 shares of our common stock at the public offering price, less the underwriting discounts and commissions.

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 prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of common stock and pre-funded warrants against payment therefor on or about January 24, 2025.

Joint Book-Running Managers

Jefferies

Leerink Partners

Stifel

Cantor

Co-Managers

BMO Capital Markets

LifeSci Capital

Wedbush PacGrow

H.C. Wainwright & Co.

January 22, 2025

[Table of Contents](#)

TABLE OF CONTENTS
PROSPECTUS SUPPLEMENT

	<u>Page</u>
About this Prospectus Supplement	S-ii
Cautionary Statement Regarding Forward-Looking Statements	S-iv
Prospectus Supplement Summary	S-1
Risk Factors	S-6
Dividend Policy	S-11
Use of Proceeds	S-12
Dilution	S-13
Description of Pre-Funded Warrants	S-15
Material U.S. Federal Income Tax Consequences for Investors in Common Stock	S-18
Underwriting	S-25
Legal Matters	S-35
Experts	S-36
Where You Can Find More Information	S-37
Incorporation of Certain Information by Reference	S-38

PROSPECTUS

	<u>Page</u>
ABOUT THIS PROSPECTUS	1
WHERE YOU CAN FIND MORE INFORMATION	1
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	2
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	4
ABOUT THE COMPANY	7
RISK FACTORS	10
USE OF PROCEEDS	11
DIVIDEND POLICY	12
GENERAL DESCRIPTION OF SECURITIES	13
DESCRIPTION OF CAPITAL STOCK	14
DESCRIPTION OF DEBT SECURITIES	21
DESCRIPTION OF WARRANTS	28
DESCRIPTION OF UNITS	29
PLAN OF DISTRIBUTION	32
LEGAL MATTERS	35
EXPERTS	35

[Table of Contents](#)**ABOUT THIS PROSPECTUS SUPPLEMENT**

This prospectus supplement is part of an automatic shelf registration statement on Form S-3 (File No. 333-281359) that we filed with the Securities and Exchange Commission, or SEC, on August 8, 2024 as a “well-known seasoned issuer” as defined in Rule 405 of the Securities Act.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering of common stock and pre-funded warrants. The second part is the accompanying prospectus, which provides more general information, some of which may not apply to this offering. The information included or incorporated by reference in this prospectus supplement also adds to, updates and changes information contained or incorporated by reference in the accompanying prospectus. If information included or incorporated by reference in this prospectus supplement is inconsistent with the accompanying prospectus or the information incorporated by reference therein, then this prospectus supplement or the information incorporated by reference in this prospectus supplement will apply and will supersede the information in the accompanying prospectus and the documents incorporated by reference therein. However, if any statement in one of these documents is inconsistent with a statement in another document with a later date that is incorporated by reference herein, the statement in the document having the later date modifies and supersedes the earlier statement.

Before buying any of the shares of common stock or pre-funded warrants offered hereby, we urge you to read carefully this prospectus supplement and the accompanying prospectus, together with the information incorporated herein by reference as described below under the heading “Incorporation of Certain Information by Reference,” as well as the additional information described in this prospectus supplement under “Where You Can Find More Information.”

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.

Neither we nor the underwriters have authorized anyone to provide you with information other than the information that we have provided or incorporated by reference in this prospectus supplement and the accompanying prospectus and your reliance on any unauthorized information or representation is at your own risk. 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 and pre-funded warrants. 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 and pre-funded warrants only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the common stock and pre-funded warrants 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 prospectus in that jurisdiction. Persons outside the United States who come into possession of this prospectus supplement and the accompanying 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 prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a

[Table of Contents](#)

solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

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.

All references in this prospectus supplement and the accompanying prospectus to our consolidated financial statements include the related notes thereto.

Disc Medicine, Inc., the Disc logo and our other registered or common law trademarks, trade names or service marks appearing in this prospectus supplement are owned by us. All other trademarks or trade names referred to in this prospectus supplement are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus supplement are referred to without the symbols® and™, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

S-iii

[Table of Contents](#)**CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS**

This prospectus supplement, the accompanying 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 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 our planned APOLLO clinical trial of bitopertin, our ongoing Phase 1b and Phase 2 clinical trials of DISC-0974 and our planned Phase 2 clinical trial of DISC-3405, and 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 use the U.S. Food and Drug Administration’s, or FDA’s, Accelerated Approval Program for bitopertin, including the treatment of the APOLLO clinical study as a post-marketing confirmatory trial, and the timeline for a potential New Drug Application, or NDA, submission and accelerated approval, if granted, and whether the NDA submission will meet the standards of accelerated approval;
- 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;

S-iv

[Table of Contents](#)

- 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 conflicts between Russia and Ukraine and between Israel and Hamas, 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;
- other risks and uncertainties, including those listed under the caption “Risk Factors;” and
- our use of the proceeds from this offering and any other financing transaction we may undertake.

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.

The outcome of the events described in these forward-looking statements is subject to known and unknown risks, uncertainties, and other factors. As a result of a number of known and unknown risks and uncertainties, our actual results or performance may be materially different from those expressed or implied by these forward-looking statements. 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 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 prospectus and the documents that we reference herein and 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 risks and uncertainties and are subject to change based on various factors, including those discussed in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2024 filed with the SEC on November 12, 2024, which is incorporated by reference into this prospectus supplement and the accompanying prospectus, and the section of this prospectus supplement and the accompanying prospectus entitled “Risk Factors” that could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, joint ventures, or investments that we may make or into which we may enter.

S-v

[Table of Contents](#)**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 or pre-funded warrants. You should read this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein carefully, especially those associated with the risks of investing in our common stock or pre-funded warrants discussed under "Risk Factors" beginning on page S-6 of this prospectus supplement and in the section entitled "Risk Factors" of our quarterly report on Form 10-Q for the quarter ended September 30, 2024, filed with the SEC on November 12, 2024, and any subsequent reports we file with the SEC 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 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 initially developing bitopertin for the treatment of EPs, including EPP and XLP, which are part of a group of severe diseases, known as porphyrias, caused by defects in the heme biosynthesis pathway that cause an accumulation of toxic metabolites referred to as porphyrins. In June and December 2023, we presented interim data from BEACON, a Phase 2 open-label, parallel-dose clinical trial of bitopertin in EPP and XLP patients conducted at sites in Australia. In April 2024, we presented topline data from AURORA, a Phase 2, randomized, double-blind, placebo-controlled clinical trial of bitopertin in EPP patients conducted at sites in the United States. Additional analyses of the BEACON and AURORA trials were presented in June 2024 and in December 2024. All participants in AURORA and BEACON are eligible to participate in HELIOS, an ongoing open-label, long-term extension study of bitopertin in EPP and XLP. We are also planning APOLLO, a randomized, double-blind, placebo-controlled clinical trial of bitopertin in EPP and XLP patients. As a result of our end-of-Phase 2 meeting with the U.S. Food & Drug Administration, or the FDA, the FDA agreed with the potential for reduction of protoporphyrin IX, or PPIX, to serve as a surrogate endpoint to support a potential accelerated approval of bitopertin in EPP and XLP. Under the FDA's Accelerated Approval Program, we would have the potential to submit a New Drug Application, or NDA, for bitopertin in EPP and XLP based on our existing data, and we would be required to conduct a post-marketing confirmatory clinical trial. As a result of our Type C meeting with the FDA in December 2024, we aligned with the FDA on the design of our APOLLO post-marketing confirmatory trial. We plan to initiate the APOLLO trial by mid-2025 and anticipate submitting an NDA for

[Table of Contents](#)

bitopertin in EPP and XLP in the second half of 2025 under the Accelerated Approval Program. We have also 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, which trial began in July 2023. We are planning additional trials of bitopertin in other indications.

DISC-0974 is the lead product candidate in our iron homeostasis portfolio and was in-licensed from AbbVie Deutschland GmbH & Co. KG, or AbbVie. DISC-0974 is designed to suppress hepcidin production and increase serum iron levels. We submitted an Investigational New Drug application, or 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 anemia of MF, and initiated a separate Phase 1b/2 clinical trial in February 2023 in patients with non-dialysis dependent CKD and anemia. We presented interim data from both of these trials in December 2023 as well as additional interim data for anemia of MF in June 2024 and non-dialysis dependent CKD and anemia in October 2024, which additional interim data included safety and changes in hepcidin, iron, and hemoglobin levels for additional patients, as well as longer follow-up. In December 2024, we presented additional analyses of the Phase 1b study in anemia of MF, and initiated a Phase 2 open-label clinical trial in patients with anemia of MF. We are also planning additional trials of DISC-0974 in other anemias of inflammation. 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. 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 a Phase 1 clinical trial in healthy adult volunteers was initiated in October 2023. Interim data was presented from the single-ascending dose (SAD) portion of the Phase 1 clinical trial of DISC-3405 in healthy volunteers in June 2024. We presented data from the multiple-ascending dose (MAD) portion of the Phase 1 healthy volunteer study of DISC-3405 in December 2024. We expect to develop DISC-3405 for the treatment of PV and other hematologic disorders, and plan to initiate a Phase 2 clinical trial of DISC-3405 in PV in the first half of 2025.

RECENT DEVELOPMENTS

On January 21, 2025, we announced positive feedback from our Type C meeting with the FDA to discuss the APOLLO post-marketing confirmatory trial for bitopertin in EPP. As a result of the meeting, we aligned with the FDA on the design of the APOLLO post-marketing confirmatory trial. Key features of the trial include:

- Co-primary endpoints of average monthly total time in sunlight without pain between 10:00 and 18:00 during the last month of the 6-month treatment period and percent change from baseline in whole blood metal-free PPIX after 6 months of treatment;
- Other measures of efficacy such as occurrence of phototoxic reactions, cumulative total pain-free time in sunlight, patient global impression of change (PGIC), and time to prodrome;
- Selection of 60 mg dose of bitopertin and 6-month treatment duration;
- Inclusion of patients aged 12+ with EPP including XLP; and
- Double-blind, placebo-controlled study with ~150 patients randomized 1:1.

[Table of Contents](#)

We plan to initiate the APOLLO trial by mid-2025 and will include sites in the United States, Canada, Europe and Australia. We anticipate submitting an NDA for bitopertin in EPP and XLP in the second half of 2025 under the Accelerated Approval Program. Based on the anticipated timing of our NDA submission, we expect enrollment for the APOLLO trial to be well underway by the Prescription Drug User Fee Act date for accelerated approval, if granted.

CORPORATE HISTORY AND 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, 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. Information contained on our website is not incorporated by reference into this prospectus supplement or the accompanying 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 prospectus.

[Table of Contents](#)

THE OFFERING	
Common stock offered by us	3,918,182 shares.
Pre-funded warrants offered by us	We are also offering, in lieu of common stock to certain investors that so choose, pre-funded warrants to purchase 181,818 shares of our common stock. Each pre-funded warrant is exercisable for one share of our common stock. The purchase price of each pre-funded warrant will equal the price per share at which shares of common stock are being sold to the public in this offering, less \$0.0001, which is the exercise price of each pre-funded warrant. The pre-funded warrants do not expire, and each pre-funded warrant will be exercisable at any time after the date of issuance, subject to an ownership limitation and in some cases clearance under the HSR Act. See "Description of Pre-Funded Warrants." This prospectus supplement also relates to the offering of the shares of our common stock issuable upon exercise of the pre-funded warrants
Underwriters' option to purchase additional shares	We have granted the underwriters an option to purchase up to an additional 615,000 shares of our common stock from us, at the public offering price, less the underwriting discounts and commissions, for a period of 30 days after the date of this prospectus supplement.
Common stock to be outstanding immediately after this offering	33,666,336 shares (or 34,281,336 shares, if the underwriters exercise their option in full to purchase additional shares), in each case, assuming no exercise of any pre-funded warrants offered and sold by us.
Use of proceeds	We currently intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities, to fund research and clinical development of our current or additional product candidates, support the potential commercialization of bitopertin for EPP and XLP, 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-12 of this prospectus supplement.
Risk factors	Your investment involves a high degree of risk. You should read the "Risk Factors" section of this prospectus supplement beginning on page S-6 and in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2024, as well as the other documents incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of factors to consider carefully before deciding to invest in our securities.

[Table of Contents](#)

Nasdaq Global Market symbol

“IRON”. We do not intend to list the pre-funded warrants on the Nasdaq Global Market or any other national securities exchange or nationally recognized trading system.

The number of shares of our common stock that will be outstanding immediately after this offering as shown above is based on 29,748,154 shares outstanding as of September 30, 2024. The number of shares outstanding as of September 30, 2024 as used throughout this prospectus supplement, unless otherwise indicated, excludes:

- 2,972,432 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2024, at a weighted average exercise price of \$25.29 per share;
- 143,490 shares of common stock issuable upon the exercise of stock options granted subsequent to September 30, 2024, at a weighted average exercise price of \$54.95 per share;
- 429,522 shares of common stock issuable upon the vesting of restricted stock awards outstanding as of September 30, 2024;
- 95,649 shares of common stock issuable upon the vesting of restricted stock awards granted subsequent to September 30, 2024;
- 1,634,822 shares of common stock available for issuance under our Amended and Restated 2021 Stock Option and Incentive Plan as of September 30, 2024;
- 254,926 shares of common stock available for future issuance under our Amended and Restated 2021 Employee Stock Purchase Plan as of September 30, 2024; and
- 204,081 shares of common stock issuable upon the exercise of pre-funded warrants outstanding as of September 30, 2024.

Except as otherwise indicated, all information in this prospectus supplement:

- assumes no exercise of the outstanding stock options or pre-funded warrants described above;
- assumes no exercise by the underwriters of their option to purchase additional shares of our common stock;
- assumes no exercise of the pre-funded warrants that we are offering in this offering in lieu of common stock to certain investors; and
- does not reflect the potential issuance of up to \$200.0 million of common stock that remains available for sale as of the date of this prospectus supplement under our Controlled Equity OfferingSM Sales Agreement, or Sales Agreement, with Cantor Fitzgerald & Co. dated November 15, 2024.

[Table of Contents](#)**RISK FACTORS**

Your investment in our common stock or pre-funded warrants involves a high degree of risk. Before deciding whether to invest in our common stock or pre-funded warrants, you should carefully consider the risks discussed under the section captioned "Risk Factors" contained in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2024 which is incorporated by reference in this prospectus supplement and the accompanying prospectus in its entirety, together with other information in this prospectus supplement, the accompanying prospectus and in our other filings with the SEC that we have incorporated by reference herein and therein. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.

Risks Related to this Offering

If you purchase shares of our common stock or pre-funded warrants sold in this offering, you will experience immediate and substantial dilution. In addition, we may issue additional equity or convertible securities in the future, which may result in additional dilution to you.

Since the price per share of our common stock being offered is higher than the net tangible book value per share of our common stock, you will suffer dilution with respect to the net tangible book value of the shares of common stock or pre-funded warrants you purchase in this offering. Based on the public offering price of \$55.00 per share of our common stock and \$54.9999 per pre-funded warrant and our net tangible book value as of September 30, 2024, if you purchase shares of common stock or pre-funded warrants in this offering, you will suffer immediate dilution of \$34.82 per share with respect to the net tangible book value of the common stock. For a more detailed discussion of the foregoing, see the section entitled "Dilution" below. To the extent outstanding stock options or pre-funded warrants are exercised, or restricted stock units vest and settle, there will be further dilution to investors. In addition, to the extent we need to raise additional capital in the future, under our Sales Agreement with Cantor Fitzgerald & Co. or otherwise, and we issue additional shares of common stock or securities convertible or exchangeable for our common stock, our then existing stockholders may experience dilution and the new securities may have rights senior to those of our common stock offered in this offering.

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 our current or additional product candidates, support the potential commercialization of bitopertin for EPP and XLP, 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

[Table of Contents](#)

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. Further, the exercise of pre-funded warrants sold in this offering will result in further dilution to the holders of our common stock.

Sales of a substantial number of shares of our common stock in the public market after this offering could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. If our stockholders sell, or the market perceives that our stockholders intend to sell, substantial amounts of our common stock in the public market, the market price of our common stock could decline significantly. We had 29,748,154 shares of common stock outstanding as of September 30, 2024. We filed an automatic registration statement on Form S-3 (Registration No. 333-281359) that became automatically effective on August 8, 2024, and which registers the offer and sale from time to time of a variety of securities, including common stock, preferred stock, debt securities, warrants or units pursuant to one or more offerings at prices and terms to be determined at the time of sale. To the extent shares are sold into the market pursuant to this registration statement on Form S-3, under Rule 144 of the Securities Act or otherwise, particularly in substantial quantities, the market price of our common stock could decline.

We cannot predict what effect, if any, sales of our shares in the public market or the availability of shares for sale will have on the market price of our common stock. However, future sales of substantial amounts of our common stock in the public market, including shares issued upon exercise of outstanding options or pre-funded warrants, or the perception that such sales may occur, could adversely affect the market price of our common stock.

We may raise money through additional public or private offerings of our equity securities or equity-linked securities. For example, in November 2024, we entered into the Sales Agreement pursuant to which we may offer and sell, from time to time to or through Cantor Fitzgerald & Co., acting as our sales agent, shares of common stock having an aggregate offering price of up to \$200.0 million. As of the date of this prospectus supplement, we may issue and sell shares of our common stock having an aggregate offering price of up to \$200.0 million under our “at-the-market” offering program. Any sales of our equity or equity-linked securities could have a material adverse effect on the market price of our common stock.

In connection with this offering, we and our directors and executive officers have entered into lock-up agreements covering some or all of their equity ownership for a period of 45 days following this offering. The lock-up agreements are subject to various exceptions, and we and our directors and executive officers may be released from the lock-up agreements prior to the expiration of the lock-up period at the sole discretion of Jefferies LLC and Leerink Partners LLC. See the section entitled “Underwriting.” Upon expiration or earlier release of the lock-up agreements, we and our directors and executive officers may sell previously locked-up shares into the market, which could adversely affect the market price of shares of our common stock.

We also expect that significant additional capital may be needed in the future to continue our planned operations. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock.

In addition, we have a significant number of stock options and restricted stock units outstanding and our board of directors intends to grant additional stock options, and may also choose to issue additional restricted stock units, common stock, or securities convertible into or exchangeable for common stock, in the future in

[Table of Contents](#)

connection with a financing, an acquisition, employee arrangements or otherwise. In the event that the outstanding options are exercised or that we make additional issuances of common stock or other convertible or exchangeable securities, you could experience additional dilution. Furthermore, we cannot assure you that we will be able to issue shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering, and investors purchasing our securities in the future may have rights superior to investors purchasing shares in this offering.

The trading price of the shares of our common stock could be highly volatile, and purchasers of our common stock could incur substantial losses.

The volatility of our common stock may affect the price at which you could sell the shares of our common stock, and the sale of substantial amounts of our common stock could adversely affect the price of our common stock. Our stock price is likely to continue to be volatile and subject to significant price and volume fluctuations in response to market and other factors, including those described in the sections captioned "Risk Factors" in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein.

As a result, you may not be able to sell your shares of common stock at or above the price at which you purchase them. In addition, the stock market in general, and the Nasdaq Global Market and the stock of biotechnology and emerging pharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance.

The stock market in general and the market for pharmaceutical and biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. The market price for our common stock may be influenced by many factors, including:

- the issuance of new equity securities pursuant to a future offering, including issuances of preferred stock;
- changes in interest rates;
- our ability to develop our product candidates;
- competitive developments, including announcements by competitors of new products or services or significant contracts, acquisitions, strategic partnerships, joint ventures, or capital commitments;
- variations in quarterly operating results or those of companies that are perceived to be similar to us;
- the depth and liquidity of the market for our common stock;
- investor perceptions of our company and the pharmaceutical and biotechnology industries generally;
- the degree of success of competitive products or technologies;
- results of clinical trials and preclinical studies, of our product candidates or those of our competitors;
- regulatory or legal developments in the U.S. and other countries;
- receipt of, or failure to obtain, regulatory approvals, including approvals of NDAs from the FDA and our ability to use accelerated regulatory pathways;
- developments or disputes concerning patent applications, issued patents, or other proprietary rights;
- the recruitment or departure of key personnel;
- the success of our corporate strategy and goals;
- the level of expenses related to our product candidates;

[Table of Contents](#)

- the results of our efforts to discover, develop, acquire, or in-license additional technologies or product candidates;
- actual or anticipated changes in estimates as to financial results, development timelines, or recommendations by securities analysts;
- rumors or announcements regarding transactions involving our company or our product candidates;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry, and market conditions and other national conditions; and
- the other factors described in this “Risk Factors” section.

There is no public market for the pre-funded warrants being offered in this offering.

There is no public trading market for the pre-funded warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to list the pre-funded warrants on the Nasdaq Global Market or any other national securities exchange or nationally recognized trading system. Without an active trading market, the liquidity of the pre-funded warrants will be limited.

We will not receive a significant amount or any additional funds upon the exercise of the pre-funded warrants.

Each pre-funded warrant is exercisable for \$0.0001 per share of common stock underlying such pre-funded warrant, which may be paid by way of a cashless exercise, in which the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the pre-funded warrant. Accordingly, we will not receive a significant amount of additional funds (if any) upon the exercise of the pre-funded warrants.

Except for the right to participate in certain dividends and distributions, holders of the pre-funded warrants will have no rights as stockholders until such holders exercise their pre-funded warrants and acquire shares of our common stock.

Until holders of the pre-funded warrants exercise their pre-funded warrants and acquire shares of our common stock, such holders will have no rights with respect to the shares of common stock underlying such pre-funded warrants, except that the holder of a pre-funded warrant shall be entitled to participate in certain distributions, including cash dividends, if any, to all holders of our common stock for no consideration, subject to certain ownership limitations and in some cases clearance under the HSR Act. Upon exercise of the pre-funded warrants, the holders will be entitled to exercise the rights of a holder of common stock only as to matters for which the record date occurs after the exercise date. See “Description of Pre-Funded Warrants—No Rights as a Stockholder.”

Significant holders or beneficial holders of our common stock may not be permitted to exercise pre-funded warrants that they hold.

A holder of a pre-funded warrant will not be entitled to exercise any portion of any pre-funded warrant which, upon giving effect to such exercise, would cause the aggregate number of shares of our common stock beneficially owned by the holder (together with its affiliates and other attribution parties, as defined under “Description of Pre-Funded Warrants—Exercise Limitations”) to exceed 24.99%, or if the purchaser elected prior to the issuance of pre-funded warrants to have the initial exercise limitation set at any of 4.99%, 9.99% or 19.99% of our outstanding common stock, such lower threshold, of the number of shares of our common stock that would be outstanding immediately after giving effect to the exercise. However, subject to certain limitations,

[Table of Contents](#)

any holder may increase or decrease such percentage to any other percentage not in excess of 24.99% upon at least 61 days' prior notice from the holder to us. In addition, where a holder notifies us that a filing under the HSR Act is required, we may not effect the exercise of any portion of any pre-funded warrant, and a holder will not be entitled to exercise any portion of any pre-funded warrant, which, upon giving effect to such exercise, would cause the aggregate number of shares of our common stock beneficially owned by the holder (together with its attribution parties) to equal or exceed the HSR Threshold (as defined below), until the applicable waiting period under the HSR Act has expired. As a result, you may not be able to exercise your pre-funded warrants for shares of our common stock at a time when it would be financially beneficial for you to do so. In such circumstance you could seek to sell your pre-funded warrants to realize value, but you may be unable to do so in the absence of an established trading market for the pre-funded warrants.

S-10

[Table of Contents](#)**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 is restricted by the terms of our loan and security agreement with Hercules Capital, Inc., and may be restricted by the terms of any of our future indebtedness.

S-11

[Table of Contents](#)**USE OF PROCEEDS**

We estimate that the net proceeds to us from the sale of the shares of common stock and pre-funded warrants to purchase shares of common stock that we are offering will be approximately \$211.6 million, or approximately \$243.3 million if the option to purchase additional shares is exercised in full by the underwriters, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We will receive nominal proceeds, if any, from the exercise of the pre-funded warrants.

As of September 30, 2024, we had cash, cash equivalents and marketable securities of \$487.4 million. We currently intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities, to fund research and clinical development of our current or additional product candidates, support the potential commercialization of bitopertin for EPP and XLP, 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.

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. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, feedback from regulatory authorities, the status of and results from clinical trials, as well as any collaborations that we may enter into with third parties for our product candidates, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering. We may find it necessary or advisable to use the net proceeds from this offering for other purposes, and we will have broad discretion in the application of net proceeds. Pending use of the proceeds as described above, we intend to invest the 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.

After the completion of this offering, assuming net proceeds to us, after deducting estimated offering expenses payable by us, of approximately \$211.6 million, we expect that our cash, cash equivalents and marketable securities, will be sufficient to fund our current operating and capital expenditure plans into 2028. Without the proceeds of this offering, we anticipate that our existing cash, cash equivalents and marketable securities will be sufficient to fund our operating and capital expenditure plans well into 2027. These expectations do not take into account any potential net cash inflows from bitopertin or any other marketed product, if approved during such period. Our future capital requirements will depend on many factors, including those discussed in "Liquidity and Capital Resources" of our Quarterly Report on Form 10-Q for the quarter ended September 30, 2024.

We have based our estimates on assumptions that may prove to be wrong. In addition, we could use our available capital resources sooner than we currently expect, in which case we would need to obtain additional funding, which may not be available to us on acceptable terms, or at all. See the "Risk Factors" section of this prospectus supplement and the documents incorporated by reference for a discussion of the risks affecting our business that could have an adverse effect on our available capital resources.

[Table of Contents](#)**DILUTION**

If you purchase shares of our common stock or pre-funded warrants in this offering, your ownership interest will be diluted to the extent of the difference between the price per share of our common stock or pre-funded warrant you pay in this offering and the net tangible book value per share of our common stock immediately after this offering.

Our net tangible book value as of September 30, 2024 was approximately \$468.00 million, or \$15.73 per share of common stock, based upon 29,748,154 shares outstanding as of that date. Net tangible book value per share is equal to our total tangible assets, less our total liabilities, divided by the total number of shares outstanding.

After giving effect to our issuance and sale of shares of our common stock and pre-funded warrants at the public offering price of \$55.00 per share and \$54.9999 per pre-funded warrant (which equals the \$55.00 per share price at which shares of our common stock are being sold to the public in this offering, less the \$0.0001 per share exercise price of each such pre-funded warrant) (excluding shares of common stock issuable upon exercise of the pre-funded warrants, any proceeds which may be received upon exercise of the pre-funded warrants or any resulting accounting associated with the exercise of the pre-funded warrants), after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our adjusted net tangible book value as of September 30, 2024 would have been \$679.5 million, or \$20.18 per share. This represents an immediate increase in net tangible book value of \$4.45 per share to our existing stockholders, and an immediate dilution of \$34.82 per share to investors purchasing shares of common stock or pre-funded warrants in the offering. Dilution per share to investors purchasing securities in this offering is determined by subtracting as adjusted net tangible book value per share after this offering from the public offering price per share of common stock (or pre-funded warrant) paid by investors.

The following table illustrates this calculation on a per share basis, assuming the underwriters do not exercise their option to purchase additional shares of common stock:

Public offering price per share		\$55.00
Historical net tangible book value per share as of September 30, 2024	\$15.73	
Increase in net tangible book value per share attributable to investors purchasing shares of common stock or pre-funded warrants in this offering	<u>4.45</u>	
As adjusted net tangible book value per share as of September 30, 2024 after giving effect to this offering		<u>20.18</u>
Dilution in as adjusted net tangible book value per share to investors in this offering		<u>\$34.82</u>

If holders of pre-funded warrants exercise the pre-funded warrants offered hereby, the as adjusted net tangible book value per share of our common stock after giving effect to this offering would be \$20.08 per share, and the dilution in net tangible book value per share to investors purchasing common stock in this offering would be \$34.92 per share.

If the underwriters exercise their option to purchase shares of common stock in full, the as adjusted net tangible book value after this offering would be \$20.64 per share, representing an increase in net tangible book value of \$4.91 per share to existing stockholders and immediate dilution in net tangible book value of \$34.36 per share to investors purchasing our common stock in this offering at the public offering price.

[Table of Contents](#)

The foregoing tables and calculations are based on 29,748,154 shares of common stock outstanding as of September 30, 2024, and excludes:

- 2,972,432 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2024, at a weighted average exercise price of \$25.29 per share;
- 143,490 shares of common stock issuable upon the exercise of stock options granted subsequent to September 30, 2024, at a weighted average exercise price of \$54.95 per share;
- 429,522 shares of common stock issuable upon the vesting of restricted stock awards outstanding as of September 30, 2024;
- 95,649 shares of common stock issuable upon the vesting of restricted stock awards granted subsequent to September 30, 2024;
- 1,634,822 shares of common stock available for issuance under our Amended and Restated 2021 Stock Option and Incentive Plan as of September 30, 2024;
- 254,926 shares of common stock available for future issuance under our Amended and Restated 2021 Employee Stock Purchase Plan as of September 30, 2024; and
- 204,081 shares of common stock issuable upon the exercise of pre-funded warrants outstanding as of September 30, 2024.

To the extent that outstanding options or pre-funded warrants are exercised, new options or other securities are issued under our equity incentive plans or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

[Table of Contents](#)**DESCRIPTION OF PRE-FUNDED WARRANTS**

The following is a brief summary of certain terms and conditions of the pre-funded warrants being offered by this prospectus supplement. The following description is subject in all respects to the provisions contained in the pre-funded warrants.

Form

The pre-funded warrants will be issued as individual warrant agreements to the investors. The form of pre-funded warrant will be filed as an exhibit to our Current Report on Form 8-K that we expect to file with the SEC in connection with this offering.

Term

The pre-funded warrants do not expire.

Exercisability

Subject to certain limitations described below in “—Exercise Limitations,” the pre-funded warrants are exercisable at any time after their original issuance. The pre-funded warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and by payment in full of the exercise price in immediately available funds for the number of shares of common stock purchased upon such exercise. As an alternative to payment in immediately available funds, the holder may elect to exercise the pre-funded warrant through a cashless exercise, in which the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the pre-funded warrant. No fractional shares of common stock will be issued in connection with the exercise of a pre-funded warrant. In lieu of any fractional shares that would otherwise be issuable, we will pay in cash to an exercising holder the fair market value, determined according to the terms of the pre-funded warrant, for any such fractional shares.

Exercise Limitations

Under the pre-funded warrants, we may not effect the exercise of any portion of any pre-funded warrant, and a holder will not be entitled to exercise any portion of any pre-funded warrant, which, upon giving effect to such exercise, would cause the aggregate number of shares of our common stock beneficially owned by the holder (together with its attribution parties (as defined below)) to exceed 24.99% of the number of shares of our common stock that would be outstanding immediately after giving effect to the exercise. Purchasers in this offering may also elect prior to the issuance of pre-funded warrants to have the initial exercise limitation set at any of 4.99%, 9.99% or 19.99% of our outstanding common stock. However, any holder may increase or decrease such percentage to any other percentage not in excess of 24.99%, which increase or decrease shall not become effective until 61 days after notice from the holder to us. Notwithstanding the prior sentence, purchasers in this offering that select an exercise limitation of 19.99% or less will only be allowed to increase the exercise limitation above 19.99% if such increase would not result in a change of control under Nasdaq rules. For purposes of the foregoing, “attribution parties” means, collectively, the following persons and entities with respect to any holder: (i) its direct or indirect affiliates, (ii) any person acting or who could be deemed to be acting as a Section 13(d) “group” together with the holder or any attribution parties and (iii) any other persons whose beneficial ownership of our common stock would or could be aggregated with the holder and/or any other attribution parties for purposes of Section 13(d) or Section 16 of the Exchange Act.

In addition, if the exercise of a pre-funded warrant would result in a holder of pre-funded warrants (together with its attribution parties) acquiring beneficial ownership of our common stock (together with all other equity owned by such holder at such time) equal to or in excess of the notification threshold applicable to the holder under the HSR Act as of the date of delivery of the applicable exercise notice, which we refer to as the HSR

[Table of Contents](#)

Threshold, and no exemption to filing a notice and report form under the HSR Act is applicable, then only such portion of the pre-funded warrants held by such holder, which when exercised does not exceed the HSR Threshold, shall be exercisable and the applicable exercise notice shall be deemed to relate only to such portion of the pre-funded warrants, and the remaining portion of the pre-funded warrants in excess of the HSR Threshold shall not be exercisable until the expiration or early termination of the applicable waiting period under the HSR Act or receipt of applicable approval. For certain holders of pre-funded warrants, upon expiration or early termination of the applicable waiting period under the HSR Act or receipt of applicable approval, such holder shall no longer be subject to any of the limitations on exercise described in this section.

Exercise Price

The exercise price per whole share of our common stock purchasable upon the exercise of the pre-funded warrants is \$0.0001 per share of common stock. The exercise price of the pre-funded warrants and the number of shares of our common stock issuable upon exercise of the pre-funded warrants is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock.

Charges, Taxes and Expenses

Issuance and delivery of shares of common stock upon exercise of a pre-funded warrant will be made without charge to the holder thereof for any issue or transfer tax, transfer agent fee or other incidental tax or expense (excluding any applicable stamp duties) in respect of the issuance thereof, all of which taxes and expenses shall be paid by us. However, we are not required to pay any tax that may be payable in respect of any transfer involved in the registration of any warrant shares or pre-funded warrants in a name other than that of the holder or an affiliate thereof. The holder shall be responsible for all other tax liability that may arise as a result of holding or transferring its pre-funded warrants or receiving shares upon exercise thereof.

Transferability

Subject to applicable laws, the pre-funded warrants may be assigned by the holder without our consent. The ownership of the pre-funded warrants and any transfers of the pre-funded warrants will be registered in a warrant register maintained by the warrant agent. We will initially act as warrant agent.

Exchange Listing

We do not plan on applying to list the pre-funded warrants on the Nasdaq Global Market, any other national securities exchange or any other nationally recognized trading system.

Fundamental Transactions

In the event of a "fundamental transaction" (as described in the pre-funded warrants and generally including but not limited to certain reclassifications of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the tender and acceptance for payment of shares representing more than 50% of the voting power of our capital stock pursuant to any tender or exchange offer (whether by us or another person), and the acquisition by another person of more than 50% of the voting power of our capital stock pursuant to a stock purchase agreement or other business combination, including a reorganization, recapitalization or spin-off (except for any such transaction in which our stockholders immediately prior to such transaction maintain, in substantially the same proportions, voting power of us immediately after the transaction)), upon consummation of such a fundamental transaction, the holders of the pre-funded warrants will be entitled to receive upon exercise of the pre-funded warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the pre-funded warrants in full immediately prior to such fundamental transaction without regard to any limitations on exercise contained in the pre-funded warrants.

[Table of Contents](#)**No Rights as a Stockholder**

Except by virtue of such holder's ownership of shares of our common stock, the holder of a pre-funded warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the pre-funded warrant. In the event of certain distributions, including cash dividends, if any, to all holders of our common stock for no consideration, the holder of a pre-funded warrant shall be entitled to participate in such distributions to the same extent as if such holder held the number of shares of our common stock acquirable upon complete exercise of its pre-funded warrant (without regard to any limitations on exercise). If such distribution would result in such holder and the other attribution parties exceeding the exercise limitations described above, a portion of such distribution shall be held in abeyance for the benefit of such holder until such time as the ownership limitations would not be exceeded.

S-17

[Table of Contents](#)**MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR INVESTORS IN OUR COMMON STOCK AND PRE-FUNDED WARRANTS**

The following summary describes the material U.S. federal income tax considerations of the acquisition, ownership and disposition of our common stock and pre-funded warrants acquired in this offering. This discussion does not address all aspects of U.S. federal income taxes, does not discuss the potential application of the alternative minimum tax or Medicare Contribution tax and does not deal with state or local taxes, U.S. federal gift and estate tax laws or any non-U.S. tax consequences that may be relevant to investors in light of their particular circumstances.

Special rules different from those described below may apply to certain investors that are subject to special treatment under the Internal Revenue Code of 1986, as amended, or the Code, such as:

- insurance companies, banks and other financial institutions;
- tax-exempt organizations (including private foundations) and tax-qualified retirement plans;
- foreign governments and international organizations;
- broker-dealers and traders in securities;
- U.S. expatriates and former citizens or long-term residents of the United States;
- Non-U.S. Holders (as defined below) that own or are deemed to own (directly, indirectly or by attribution) more than 5% of our common stock or more than 5% of our pre-funded warrants;
- persons required for U.S. federal income tax purposes to conform the timing of income accruals to their financial statements under Section 451(b) of the Code;
- “controlled foreign corporations,” “passive foreign investment companies” and corporations that accumulate earnings to avoid U.S. federal income tax;
- persons that hold our common stock or pre-funded warrants as part of a “straddle,” “hedge,” “conversion transaction,” “synthetic security” or integrated investment or other risk reduction strategy;
- U.S. Holders (as defined below) whose functional currency for U.S. tax purposes is not the U.S. dollar;
- persons who do not hold our common stock or pre-funded warrants as “capital assets” within the meaning of Section 1221 of the Code (generally, for investment purposes);
- regulated investment companies;
- pension plans;
- “qualified foreign pension funds” as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds;
- persons deemed to sell our common stock or pre-funded warrants under the constructive sale provisions of the Code; and
- persons who hold or receive our common stock or pre-funded warrants pursuant to the exercise of any employee stock option or otherwise as compensation.

Such investors are urged to consult their own tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them.

In addition, this discussion does not address the tax treatment of partnerships or other pass-through entities or persons who hold our common stock or pre-funded warrants through partnerships or other entities which are pass-through entities for U.S. federal income tax purposes. If a partnership or other pass-through entity holds our

[Table of Contents](#)

common stock or pre-funded warrants, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership or other pass-through entity. A partner in a partnership or other pass-through entity that will hold our common stock or pre-funded warrants should consult his, her or its own tax advisor regarding the tax consequences of the ownership and disposition of our common stock or pre-funded warrants through a partnership or other pass-through entity, as applicable.

Furthermore, the discussion below is based upon the provisions of the Code, and Treasury regulations, rulings and judicial decisions thereunder, as of the date hereof, and such authorities may be repealed, revoked or modified, possibly retroactively, and are subject to differing interpretations which could result in U.S. federal income tax consequences different from those discussed below. We have not requested a ruling from the Internal Revenue Service, or the IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions or will not take a contrary position regarding the tax consequences described herein, or that any such contrary position would not be sustained by a court.

For the purposes of this discussion, a "U.S. Holder" means a beneficial owner of our common stock or pre-funded warrants, other than a partnership or other pass-through entity, that is, for U.S. federal income tax purposes, (a) an individual who is a citizen or resident of the United States, (b) a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes), created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (c) an estate the income of which is subject to U.S. federal income taxation regardless of its source, or (d) a trust if it (1) is subject to the primary supervision of a court within the United States and one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code) have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

A "Non-U.S. Holder" means a beneficial owner of our common stock or pre-funded warrants, other than a partnership or other pass-through entity, that, for U.S. federal income tax purposes, is (i) a foreign corporation, (ii) nonresident alien individual, or (iii) a foreign estate or trust that in each case is not subject to U.S. federal income tax on a net-income basis on income or gain from common stock or pre-funded warrants.

An individual non-U.S. citizen may, in some cases, be deemed to be a resident alien (as opposed to a nonresident alien) by virtue of being present in the United States for at least 31 days in the calendar year and for an aggregate of at least 183 days during a three-year period ending in the current calendar year. Generally, for this purpose, all the days present in the current year, one-third of the days present in the immediately preceding year, and one-sixth of the days present in the second preceding year, are counted.

Resident aliens are generally subject to U.S. federal income tax as if they were U.S. citizens. Individuals who are uncertain of their status as resident or nonresident aliens for U.S. federal income tax purposes are urged to consult their own tax advisors regarding the U.S. federal income tax consequences of the ownership or disposition of our common stock or pre-funded warrants.

PERSONS CONSIDERING THE PURCHASE OF OUR COMMON STOCK OR PRE-FUNDED WARRANTS PURSUANT TO THIS OFFERING SHOULD CONSULT THEIR OWN TAX ADVISORS CONCERNING THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF ACQUIRING, OWNING AND DISPOSING OF OUR COMMON STOCK OR PRE-FUNDED WARRANTS IN LIGHT OF THEIR PARTICULAR SITUATIONS AS WELL AS ANY CONSEQUENCES ARISING UNDER THE LAWS OF ANY OTHER TAXING JURISDICTION, INCLUDING ANY STATE, LOCAL OR NON-U.S. TAX CONSEQUENCES OR ANY U.S. FEDERAL NON-INCOME TAX CONSEQUENCES, AND THE POSSIBLE APPLICATION OF TAX TREATIES.

Characterization of the Pre-Funded Warrants for Tax Purposes

Although the characterization of the pre-funded warrants for U.S. federal income tax purposes is not entirely clear, because the exercise price of the pre-funded warrants is a nominal amount, we intend to treat the

[Table of Contents](#)

pre-funded warrants as our common stock for U.S. federal income tax purposes and a holder of pre-funded warrants should generally expect to be taxed in the same manner as a holder of common stock as described below. Accordingly, for U.S. federal income tax purposes, no gain or loss should be recognized upon the exercise of a pre-funded warrant (except to the extent of cash received in lieu of a fractional share), and upon exercise, the holding period of the share of common stock received should include the holding period of the pre-funded warrant. Similarly, the tax basis of a share of common stock received upon exercise of a pre-funded warrant should include the tax basis of the pre-funded warrant increased by the exercise price of \$0.0001 per share. The balance of this discussion generally assumes that the characterization described above is respected for U.S. federal income tax purposes.

Our position with respect to the characterization of pre-funded warrants is not binding on the IRS and the IRS may treat the pre-funded warrants as warrants to acquire our common stock and, if so, the amount and character of a holder's gain with respect to an investment in our pre-funded warrants could change. Each holder should consult its tax advisor regarding the characterization of pre-funded warrants for U.S. federal income tax purposes, and the consequences of an investment in the pre-funded warrants based on such holder's own particular facts and circumstances.

Tax Consequences to U.S. Holders

Distributions on Common Stock and Pre-funded Warrants

As stated under "*Dividend Policy*," we do not expect to make distributions on our common stock (or pre-funded warrants) in the foreseeable future. In the event that we do make distributions of cash or other property, distributions paid on common stock (or pre-funded warrants) will be treated as a dividend to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles), and will be includible in your income as ordinary income when received. However, with respect to dividends received by individuals, such dividends are generally taxed at the lower applicable qualified dividends rate, provided certain holding period requirements are satisfied. Distributions in excess of our current and accumulated earnings and profits will be treated as a return of capital to the extent of a U.S. Holder's tax basis in the common stock (or pre-funded warrants) and thereafter as capital gain from the sale or exchange of such common stock (or pre-funded warrants). The tax treatment of such gain is further described in "*Sale or Other Disposition of Common Stock or Pre-funded Warrants*" below. Dividends received by a corporation may be eligible for a dividends received deduction, subject to applicable limitations. Any such distributions will also be subject to the discussions below under the section titled "*Information Reporting and Backup Withholding*."

A U.S. Holder of a pre-funded warrant is entitled to receive certain distributions paid with respect to common stock prior to the exercise of the pre-funded warrant and, in such case, would be taxed in the same manner as a U.S. Holder of common stock that receives such a distribution. However, under certain circumstances, it is possible for the distributions to be held in abeyance for the U.S. Holder until a pre-funded warrant is exercised or the ownership limitations (described under "*Description of Pre-Funded Warrants*") would not be exceeded, at which time such U.S. Holder shall be entitled to receive distributions. It is possible that such entitlement to distributions could cause the declaration of a distribution on our common stock to be currently taxable to U.S. Holders of pre-funded warrants, including under the principles governing Section 305 of the Code, even though the holders will not receive such distributions until a future date. Additionally, it is possible that other adjustments to the terms of the pre-funded warrants can be considered a constructive distribution under Section 305 of the Code. A holder of a pre-funded warrant should consult its tax advisor regarding the tax treatment of any distribution with respect to such pre-funded warrant that is held in abeyance in connection with any applicable limitation on the holder's beneficial ownership of our common stock and the tax treatment of any other adjustments to the pre-funded warrants.

Sale or Other Disposition of Common Stock or Pre-funded Warrants

For U.S. federal income tax purposes, gain or loss realized on the sale or other disposition of common stock or pre-funded warrants by a U.S. Holder will be capital gain or loss, and will be long-term capital gain or loss if

[Table of Contents](#)

the U.S. Holder has held the common stock or pre-funded warrants for more than one year. The amount of the gain or loss will equal the difference between the U.S. holder's adjusted tax basis in the common stock or pre-funded warrants disposed of and the amount realized on the disposition. Long-term capital gains recognized by non-corporate U.S. Holders will be subject to reduced tax rates. The deductibility of capital losses is subject to limitations.

Information Reporting and Backup Withholding

Information reporting requirements generally will apply to any payments of distributions on our common stock and pre-funded warrants, constructive distributions on our pre-funded warrants, and gross proceeds on the sale or other disposition of our common stock and pre-funded warrants, unless the U.S. Holder is an exempt recipient (such as a corporation), regardless of whether any tax was actually withheld. Backup withholding (currently at a 24% rate) will apply to those payments if the U.S. Holder fails to provide its correct taxpayer identification number, or certification of exempt status, or if the U.S. Holder is notified by the IRS that it has failed to report in full payments of interest and dividend income. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a U.S. Holder's U.S. federal income tax liability provided the required information is furnished timely to the IRS.

Tax Consequences to Non-U.S. Holders***Distributions on Common Stock and Pre-funded Warrants***

As stated under "*Dividend Policy*," we do not expect to make any distributions on our common stock (or pre-funded warrants) in the foreseeable future. If we do make distributions on our common stock (or pre-funded warrants), however, such distributions made to a Non-U.S. Holder will constitute dividends for U.S. tax purposes to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Distributions in excess of our current and accumulated earnings and profits will constitute a return of capital that is applied against and reduces, but not below zero, a Non-U.S. Holder's adjusted tax basis in our common stock (or pre-funded warrants). Any remaining excess will be treated as gain realized as described below under the section titled "*Sale or Other Disposition of Common Stock and Pre-funded Warrants*."

Any distribution on our common stock (or pre-funded warrants) that is treated as a dividend paid to a Non-U.S. Holder that is not effectively connected with the holder's conduct of a trade or business in the United States will generally be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and the Non-U.S. Holder's country of residence. To obtain a reduced rate of withholding under a treaty, a Non-U.S. Holder generally will be required to provide the applicable withholding agent with a properly executed IRS Form W-8BEN, IRS Form W-8BEN-E or other appropriate form, certifying the Non-U.S. Holder's entitlement to benefits under that treaty. Such form must be provided prior to the payment of dividends and must be updated periodically. If a Non-U.S. Holder holds stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to such agent. The holder's agent may then be required to provide certification to the applicable withholding agent, either directly or through other intermediaries. A Non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty should consult with its own tax advisor to determine if such holder is able to obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

We (or any applicable withholding agent) generally are not required to withhold tax on dividends paid (or constructive dividends deemed paid) to a Non-U.S. Holder that are effectively connected with the holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment or fixed base that the holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to us (or, if shares of our common stock are held through a financial institution or other agent, to the applicable withholding agent).

[Table of Contents](#)

In general, such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular rates applicable to U.S. persons, unless a specific treaty exemption applies. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to an additional “branch profits tax,” which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S. Holder’s effectively connected earnings and profits, subject to certain adjustments.

A Non-U.S. Holder of a pre-funded warrant is entitled to receive certain distributions paid with respect to common stock prior to the exercise of the pre-funded warrant and, in such case, would be taxed in the same manner as a Non-U.S. Holder of common stock that receives such a distribution. However, under certain circumstances, it is possible for the distribution to be held in abeyance for a Non-U.S. Holder until a pre-funded warrant is exercised or the ownership limitations (described under “*Description of Pre-Funded Warrants*”) would not be exceeded, at which time the Non-U.S. Holder shall be entitled to receive distributions. It is possible that such entitlement to distributions could cause the declaration of a distribution on our common stock to be currently taxable to Non-U.S. Holders of pre-funded warrants, including under the principles governing Section 305 of the Code, even though such holders will not receive the distributions until a future date. Additionally, it is possible that other adjustments to the terms of the pre-funded warrants can be considered a constructive distribution under Section 305 of the Code. A holder of a pre-funded warrant should consult its tax advisor regarding the tax treatment of any distribution with respect to such pre-funded warrant that is held in abeyance in connection with any applicable limitation on the holder’s beneficial ownership of our common stock and the tax treatment of any other adjustments to the pre-funded warrants.

See also the section below titled “*Foreign Accounts*” for additional withholding rules that may apply to dividends paid to certain foreign financial institutions or non-financial foreign entities.

Sale or Other Disposition of Common Stock and Pre-funded Warrants

Subject to the discussion below under the sections titled “*Information Reporting and Backup Withholding*” and “*Foreign Accounts*,” a Non-U.S. Holder generally will not be subject to U.S. federal income or withholding tax with respect to gain realized on a sale or other disposition of our common stock or pre-funded warrants unless (a) the gain is effectively connected with a trade or business of the holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base that the holder maintains in the United States), (b) the Non-U.S. Holder is a nonresident alien individual and is present in the United States for a period or periods aggregating 183 or more days in the taxable year of the disposition and certain other conditions are met, or (c) we are or have been a “United States real property holding corporation” within the meaning of Code Section 897(c)(2), unless any class of our stock is regularly traded on an established securities market and the Non-U.S. Holder disposes of such class of stock and holds no more than 5% of such class of stock, directly or indirectly, actually or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the Non-U.S. Holder held such class of stock.

If you are a Non-U.S. Holder described in (a) above, you will be required to pay tax on the net gain derived from the sale at the regular U.S. federal income tax rates applicable to U.S. persons, unless a specific treaty exemption applies. Corporate Non-U.S. Holders described in (a) above may also be subject to the additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. An individual Non-U.S. Holder described in (b) above will be required to pay a flat 30% tax on the gain derived from the sale, which gain may be offset by certain U.S. source capital losses (even though such holder is not considered a resident of the United States), provided such holder has timely filed U.S. federal income tax returns with respect to such losses. With respect to (c) above, in general, we would be a U.S. real property holding corporation if interests in U.S. real estate comprised (by fair market value) at least half of our worldwide real property interests plus our other assets used or held for use in a trade or business. We believe that we are not, and do not anticipate becoming, a U.S. real property holding corporation. However, there can be no assurance that we will not become a U.S. real property holding corporation in the future. Special rules may apply to holders of

[Table of Contents](#)

pre-funded warrants. Non-U.S. Holders of pre-funded warrants should consult their own tax advisors regarding the application of these rules to pre-funded warrants.

Information Reporting and Backup Withholding

Generally, we or certain financial middlemen must report information to the IRS with respect to any distributions we pay on our common stock or pre-funded warrants and any constructive distributions deemed paid on pre-funded warrants including the amount of any such distributions, the name and address of the recipient, and the amount, if any, of tax withheld. A similar report is sent to the holder to whom any such distributions are paid. Pursuant to tax treaties or certain other agreements, the IRS may make its reports available to tax authorities in the recipient's country of residence.

Dividends paid by us (or our paying agents) to a Non-U.S. Holder may also be subject to U.S. backup withholding. U.S. backup withholding generally will not apply to a Non-U.S. Holder who provides a properly executed IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, or otherwise establishes an exemption, provided that the applicable withholding agent does not have actual knowledge or reason to know the holder is a U.S. person.

Under current U.S. federal income tax law, U.S. information reporting and backup withholding requirements generally will apply to the proceeds of a disposition of our common stock or pre-funded warrants effected by or through a U.S. office of any broker, U.S. or non-U.S., unless the Non-U.S. Holder provides a properly executed IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, or otherwise meets documentary evidence requirements for establishing non-U.S. person status or otherwise establishes an exemption. Generally, U.S. information reporting and backup withholding requirements will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the United States through a non-U.S. office of a non-U.S. broker. Information reporting and backup withholding requirements may, however, apply to a payment of disposition proceeds if the broker has actual knowledge, or reason to know, that the holder is, in fact, a U.S. person. For information reporting purposes, certain brokers with substantial U.S. ownership or operations will generally be treated in a manner similar to U.S. brokers.

Backup withholding is not an additional tax. If backup withholding is applied to a Non-U.S. Holder, such Non-U.S. holder should consult with its own tax advisor to determine whether such Non-U.S. Holder has overpaid U.S. federal income tax, and whether such Non-U.S. holder is able to obtain a tax refund or credit of the overpaid amount.

Foreign Accounts

In addition to, and separately from the withholding rules described above, U.S. federal withholding taxes may apply under the Foreign Account Tax Compliance Act, or FATCA, on certain types of payments, including dividends to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends paid in respect of our common stock or pre-funded warrants, constructive distributions deemed paid with respect to pre-funded warrants and the gross proceeds of the disposition of our common stock or pre-funded warrants paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution agrees to undertake certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. The 30% federal withholding tax described in this paragraph cannot be reduced under an income tax treaty with the United States. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report

[Table of Contents](#)

certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

The Treasury Secretary has issued proposed regulations providing that the withholding provisions under FATCA do not apply with respect to payment of gross proceeds from a sale or other disposition, which may be relied upon by taxpayers until final regulations are issued. Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock or pre-funded warrants.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK AND PRE-FUNDED WARRANTS, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAW, AS WELL AS TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, NON-U.S. OR U.S. FEDERAL NON-INCOME TAX LAWS SUCH AS ESTATE AND GIFT TAX.

[Table of Contents](#)**UNDERWRITING**

We are offering the shares of common stock and pre-funded warrants described in this prospectus supplement through a number of underwriters. Jefferies LLC, Leerink Partners LLC, Stifel, Nicolaus & Company, Incorporated and Cantor Fitzgerald & Co. are acting as joint book-running managers of the offering and as representatives of the underwriters. We intend to enter into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus supplement, the number of shares of common stock and pre-funded warrants listed next to its name in the following table:

<u>Name</u>	<u>Number of Shares</u>	<u>Number of Pre-Funded Warrants</u>
Jefferies LLC	1,273,409	59,091
Leerink Partners LLC	1,077,500	50,000
Stifel, Nicolaus & Company, Incorporated	548,546	25,455
Cantor Fitzgerald & Co.	391,818	18,182
BMO Capital Markets Corp.	195,909	9,091
LifeSci Capital LLC	176,318	8,181
Wedbush Securities Inc.	176,318	8,181
H.C. Wainwright & Co., LLC	78,364	3,637
Total:	<u>3,918,182</u>	<u>181,818</u>

The underwriters are committed to purchase all the shares of common stock and pre-funded warrants offered by us if they purchase any shares or pre-funded warrants. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the shares of common stock and pre-funded warrants directly to the public at the public offering price set forth on the cover page of this prospectus supplement and to certain dealers at that price less a concession not in excess of \$1.98 per share. After the initial offering of the shares to the public, if all of the shares are not sold at the public offering price, the underwriters may change the offering price and the other selling terms. Sales of any shares made outside of the United States may be made by affiliates of the underwriters. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase, from time to time, in whole or in part, up to an aggregate of 615,000 shares of common stock from us at the public offering price set forth on the cover page of this prospectus supplement, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares of common stock proportionate to that underwriter's initial purchase commitment as indicated in the table above.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock, or the offering price per pre-funded warrant less the amount paid by the underwriters to us per pre-funded warrant, as the case may be. The underwriting fee is \$3.30 per share and per pre-funded warrant. The following table shows the per share, per pre-funded warrant and total

[Table of Contents](#)

underwriting discounts and commissions to be paid to the underwriters, assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Per Share	Per Pre-Funded Warrant	Without option to purchase additional shares exercise	Total With full option to purchase additional shares exercise
Public offering price	\$55.00	\$54.9999	\$ 225,499,981.82	\$ 259,324,981.82
Underwriting discounts and commissions to be paid by us	\$3.30	\$3.3000	\$ 13,530,000.00	\$ 15,559,500.00
Proceeds, before expenses to us	\$51.70	\$51.6999	\$ 211,969,981.82	\$ 243,765,481.82

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately \$0.4 million.

A prospectus supplement in electronic format may be made available on the websites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We and all of our directors and officers have agreed that, without the prior written consent of Jefferies LLC and Leerink Partners LLC, we and they will not, and will not publicly disclose an intention to, during the period ending 45 days after the date of this prospectus supplement (the "restricted period"):

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock subject to the lock-up agreement;
- file any registration statement with the SEC relating to the offering of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock; or
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock subject to the lock-up agreement;

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, we and each such person agrees that, without the prior written consent of Jefferies LLC and Leerink Partners LLC, we or such other person will not, during the restricted period, make any demand for, or exercise any right with respect to, the registration of any shares of common stock subject to the lock-up agreement or any security convertible into or exercisable or exchangeable for common stock.

In relation to us, the restrictions described above do not apply to:

- the shares to be sold under the underwriting agreement;
- the issuance by us of shares of common stock upon the exercise of an option or a warrant or the conversion of a security outstanding on the date of this prospectus supplement in the manner described in this prospectus supplement or the information incorporated by reference herein;
- transactions by any person other than us relating to shares of common stock or other securities acquired in open market transactions after the completion of the offering of the shares; provided that no filing under Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is required or voluntarily made in connection with subsequent sales of the common stock or other securities acquired in such open market transactions;

[Table of Contents](#)

- d) the filing by us of registration statements on Form S-8 with respect to the employee benefit plans described in this prospectus supplement or the documents incorporated by reference herein;
- e) the issuance by us of shares of common stock or options to purchase shares of common stock to our employees, officers, directors, advisors or consultants pursuant to employee benefit plans described in this prospectus supplement or in the information incorporated by reference herein, provided that, prior to the issuance of any such shares or the grant of any such options to any director or executive officer elected or appointed following the date of this prospectus supplement and prior to the end of the Restricted Period, we shall cause each such recipient of such grant or issuance to execute and deliver a "lock-up" agreement;
- f) the sale or issuance of or entry into an agreement to sell or issue shares of common stock in connection with our acquisition of one or more businesses, products, assets or technologies (whether by means of merger, stock purchase, asset purchase or otherwise) or in connection with joint ventures, collaboration or licensing agreements, marketing or distribution arrangements, commercial relationships or other strategic transactions; provided, that, the aggregate number of shares of our common stock that we may sell or issue or agree to sell or issue may not exceed 5% of the total number of shares of our common stock issued and outstanding immediately following the completion of the transactions contemplated by the underwriting agreement and provided further that we cause each recipient of such shares to execute and a lock up agreement;
- g) facilitating the establishment of a trading plan on behalf of a shareholder, officer or director pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of common stock, provided that (i) such plan does not provide for the transfer of common stock during the restricted period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by us regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of common stock may be made under such plan during the restricted period; or
- h) the issuance of shares of Common Stock pursuant to a placement made under any "at-the-market" offering program described in the Time of Sale Prospectus and the Prospectus, provided that no shares may be offered or sold pursuant to such program during the period ending 30 days after the date of the Prospectus.

In relation to our directors and executive officers, the restrictions described above do not apply to:

- a) transactions relating to shares of common stock or other securities acquired in this offering or in open market transactions after the completion of this offering, provided that no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made in connection with subsequent sales of common stock or other securities acquired in this offering or in such open market transactions;
- b) transfers of shares of common stock or any security convertible into or exercisable or exchangeable for common stock as a bona fide gift or to a charitable organization or educational institution in a transfer not involving a disposition for value;
- c) transfers or dispositions of shares of common stock or any security convertible into or exercisable or exchangeable for common stock to any immediate family member or any trust for the direct or indirect benefit of any immediate family member in a transaction not involving a disposition for value;
- d) distributions of shares of common stock or any security convertible into common stock to general or limited partners, members, beneficiaries or other equityholders, direct or indirect affiliates (as defined in Rule 405 promulgated under the Securities Act) or to an investment fund or other entity that controls or manages, or is under common control with certain holders and their affiliates;
- e) transfers or dispositions of shares of common stock or any security convertible into or exercisable or exchangeable for common stock (i) by will, other testamentary document or intestate succession to the

[Table of Contents](#)

- legal representative, heir, beneficiary or a member of their immediate family upon their death or (ii) by operation of law pursuant to orders of a court or regulatory agency, in connection with a negotiated divorce settlement or pursuant to a qualified domestic relations order;
- f) transfers or dispositions of shares of common stock or any security convertible into or exercisable or exchangeable for common stock to us pursuant to any contractual arrangement in effect on the date of this agreement and disclosed to the underwriter in writing that provides for the repurchase of common stock or other securities by us or in connection with the termination of employment with or service to us; provided that (i) the repurchase price for any such shares or securities shall not exceed the original purchase price (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization) paid and (ii) any filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of common stock shall indicate by footnote disclosure or otherwise the nature of the transfer or disposition);
- g) transfers or dispositions of shares of common stock or other securities to us in connection with the conversion of any convertible security into, or the exercise of any option or warrant for, shares of common stock (including by way of “net” or “cashless” exercise solely to cover withholding tax obligations in connection with such exercise or transfer to us for the payment of taxes as a result of such exercise); provided that (i) such convertible security, option or warrant is described in the prospectus and is outstanding on the date thereof, (ii) any such shares of common stock received by the undersigned shall be subject to the terms of this agreement and (iii) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of common stock, shall be required or shall be voluntarily made during the restricted period, other than a filing on a Form 4 that reports such disposition under the transaction code “F,” in which case, the filing shall clearly indicate in the footnotes thereto or comments section thereof that the filing relates to the exercise of a stock option or warrant, as the case may be, that no shares of common stock were sold by the reporting person and that the shares of common stock received upon exercise of the stock option or warrant are subject to a lock-up agreement with the underwriter of the offering;
- h) transfers or dispositions of shares of common stock or other securities to us in connection with the vesting or settlement of restricted stock units, so long as such sale is effected pursuant to our sell to cover policy solely in an amount sufficient to cover withhold taxes, provided that (i) to the extent a filing under Section 16(a) of the Exchange Act shall be required, the filing shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described herein and (ii) no other public announcement shall be required or shall be made voluntary in connection with such transfer;
- i) the establishment of a trading plan on behalf of a stockholder, officer or director pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of common stock, provided that (i) such plan does not provide for the transfer of common stock during the restricted period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by or on behalf of the undersigned or us regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of common stock may be made under such plan during the restricted period;
- j) transfers of shares of common stock (or any securities convertible into or exercisable or exchangeable for common stock) pursuant to a bona fide third-party tender offer for shares of our capital stock made to all holders of our securities, merger, consolidation or other similar transaction approved by our board of directors and occurring after the closing of this offering, the result of which is that any person (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, other than us, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of more than 50% of the total voting power of our voting stock; provided that in the event that such change of control transaction is not completed, the shares of common stock (or any security convertible into or exercisable or exchangeable for common stock) owned by the stockholder, officer or director shall remain subject to the restrictions contained in the lock-up agreement and title to the such shares shall remain with the applicable stockholder, officer or director; or

[Table of Contents](#)

- k) the sale or transfer of shares of common stock pursuant to a written trading plan pursuant to Rule 10b5-1 under the Exchange Act that has been entered into prior to the date of the lock-up agreement; provided that no amendments or other modifications are made to such plans during the restricted period and that, to the extent a public announcement or filing under the Exchange Act, if any, is required or voluntarily made regarding such sales or transfers, such announcement or filing shall include a statement to the effect that the sale or transfer was made pursuant to a trading plan pursuant to Rule 10b5-1 of the Exchange Act;

provided that in the case of any transfer or distribution pursuant to clause (b), (c), (d) or (e), (i) each transferee, donee or distributee shall sign and deliver a lock-up agreement substantially in the form of the lock-up agreement signed by the transferor, donor or distributor and (ii) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of common stock, shall be required or shall be voluntarily made during the restricted period (other than, with respect to clause (e) only, any Form 4 or Form 5 required to be filed under the Exchange Act if the undersigned is subject to Section 16 reporting under the Exchange Act due to their relationship with us, in which case any such filing will indicate by footnote disclosure or otherwise the nature of the transfer or disposition).

Jefferies LLC and Leerink Partners LLC, in their sole discretion, may release the securities subject to any of the lock-up agreements with the underwriters described above, in whole or in part at any time.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

Our common stock is quoted on the Nasdaq Global Market under the symbol "IRON." We do not intend to list the pre-funded warrants on the Nasdaq Global Market, any other nationally recognized securities exchange or any other nationally recognized trading system.

In connection with this offering, the underwriters may engage in stabilizing transactions, which involve making bids for, purchasing and selling shares of common stock in the open market for the purpose of preventing or retarding a decline in the market price of the common stock while this offering is in progress. These stabilizing transactions may include making short sales of common stock, which involve the sale by the underwriters of a greater number of shares of common stock than they are required to purchase in this offering, and purchasing shares of common stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' option to purchase additional shares referred to above, or may be "naked" shorts, which are short positions in excess of that amount. The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock, and, as a result, the price of the

[Table of Contents](#)

common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on the Nasdaq Global Select Market, in the over-the-counter market or otherwise.

In addition, in connection with this offering certain of the underwriters may engage in passive market making transactions in our common stock on The Nasdaq Stock Market prior to the pricing and completion of this offering. Passive market making consists of displaying bids on The Nasdaq Stock Market no higher than the bid prices of independent market makers and making purchases at prices no higher than these independent bids and effected in response to order flow. Net purchases by a passive market maker on each day are generally limited to a specified percentage of the passive market maker's average daily trading volume in the common stock during a specified period and must be discontinued when such limit is reached. Passive market making may cause the price of our common stock to be higher than the price that otherwise would exist in the open market in the absence of these transactions. If passive market making is commenced, it may be discontinued at any time.

Selling Restrictions

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus supplement in any jurisdiction where action for that purpose is required. The securities offered by this prospectus supplement may not be offered or sold, directly or indirectly, nor may this prospectus supplement or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus supplement comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus supplement. This prospectus supplement does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus supplement in any jurisdiction in which such an offer or a solicitation is unlawful.

Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

European Economic Area

In relation to each Member State of the European Economic Area (each a "Relevant State"), no shares or pre-funded warrants have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares or pre-funded warrants which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of shares or pre-funded warrants may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

- a) to any legal entity which is a qualified investor as defined under Article 2 of the Prospectus Regulation;
- b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares or pre-funded warrants shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of

[Table of Contents](#)

the Prospectus Regulation and each person who initially acquires any shares or pre-funded warrants or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the underwriters and us that it is a "qualified investor" within the meaning of Article 2(e) of the Prospectus Regulation.

In the case of any shares or pre-funded warrants being offered to a financial intermediary as that term is used in the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares or pre-funded warrants acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares or pre-funded warrants to the public other than their offer or resale in a Relevant State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters has been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an "offer to the public" in relation to the shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares or pre-funded warrants to be offered so as to enable an investor to decide to purchase or subscribe for any shares or pre-funded warrants, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

United Kingdom

No shares or pre-funded warrants have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares or pre-funded warrants which has been approved by the Financial Conduct Authority, except that the shares or pre-funded warrants may be offered to the public in the United Kingdom at any time:

- a) to any legal entity which is a qualified investor as defined under Article 2 of the U.K. Prospectus Regulation;
- b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the U.K. Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- c) in any other circumstances falling within Section 86 of the Financial Services and Markets Act 2000, as amended (FSMA);

provided that no such offer of the shares or pre-funded warrants shall require us or any underwriter to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the U.K. Prospectus Regulation. For the purposes of this provision, the expression an "offer to the public" in relation to the shares or pre-funded warrants in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares or pre-funded warrants to be offered so as to enable an investor to decide to purchase or subscribe for any shares or pre-funded warrants and the expression "U.K. Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the U.K. Prospectus Regulation) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the Order), and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons") or otherwise in circumstances which have not resulted and will not result in an offer to the public of the shares or pre-funded warrants in the United Kingdom within the meaning of the FSMA. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons. Any person in the UK who is not a relevant person must not act on or rely upon this document or any of its contents.

[Table of Contents](#)**Notice to Prospective Investors in Canada**

The shares or pre-funded warrants may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares or pre-funded warrants must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus supplement (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to Prospective Investors in Switzerland

The shares or pre-funded warrants may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (SIX), or on any other stock exchange or regulated trading facility in Switzerland. This document does not constitute a prospectus within the meaning of, and has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares, the pre-funded warrants or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares or pre-funded warrants have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares or pre-funded warrants will not be supervised by, the Swiss Financial Market Supervisory Authority (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares or pre-funded warrants.

Notice to Prospective Investors in Hong Kong

The shares or pre-funded warrants have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (the SFO), of Hong Kong and any rules made thereunder; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the CO), or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the shares or pre-funded warrants has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares or pre-funded warrants which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made thereunder.

[Table of Contents](#)**Notice to Prospective Investors in Singapore**

The representatives have acknowledged that this prospectus supplement and the accompanying prospectus have not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the representatives have represented and agreed that it has not offered or sold any shares or pre-funded warrants or caused the shares or pre-funded warrants to be made the subject of an invitation for subscription or purchase and will not offer or sell any shares or pre-funded warrants or cause the shares or pre-funded warrants to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this prospectus supplement and the accompanying prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares or pre-funded warrants, whether directly or indirectly, to any person in Singapore other than:

- a) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (the SFA)) pursuant to Section 274 of the SFA;
- b) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA; or
- c) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares or pre-funded warrants are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares or pre-funded warrants pursuant to an offer made under Section 275 of the SFA except:

- i. to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- ii. where no consideration is or will be given for the transfer;
- iii. where the transfer is by operation of law;
- iv. as specified in Section 276(7) of the SFA; or
- v. as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018

Notice to Prospective Investors in Japan

The shares or pre-funded warrants have not been and will not be registered pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act. Accordingly, none of the shares, pre-funded warrants, nor any interest therein may be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any "resident" of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to or for the benefit of a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other applicable laws, regulations and ministerial guidelines of Japan in effect at the relevant time.

[Table of Contents](#)**Notice to Prospective Investors in the United Arab Emirates**

The shares or pre-funded warrants have not been, and are not being, publicly offered, sold, promoted or advertised in the United Arab Emirates (including the Dubai International Financial Centre) other than in compliance with the laws of the United Arab Emirates (and the Dubai International Financial Centre) governing the issue, offering and sale of securities. Further, this prospectus supplement does not constitute a public offer of securities in the United Arab Emirates (including the Dubai International Financial Centre) and is not intended to be a public offer. This prospectus supplement has not been approved by or filed with the Central Bank of the United Arab Emirates, the Securities and Commodities Authority or the Dubai Financial Services Authority.

Notice to Prospective Investors in Israel

In the State of Israel this prospectus supplement shall not be regarded as an offer to the public to purchase shares of common stock or pre-funded warrants under the Israeli Securities Law, 5728—1968, which requires a prospectus to be published and authorized by the Israel Securities Authority, if it complies with certain provisions of Section 15 of the Israeli Securities Law, 5728—1968, including, inter alia, if: (i) the offer is made, distributed or directed to not more than 35 investors, subject to certain conditions, or the Addressed Investors, or (ii) the offer is made, distributed or directed to certain qualified investors defined in the First Addendum of the Israeli Securities Law, 5728—1968, subject to certain conditions, or the Qualified Investors. The Qualified Investors shall not be taken into account in the count of the Addressed Investors and may be offered to purchase securities in addition to the 35 Addressed Investors. The company has not and will not take any action that would require it to publish a prospectus in accordance with and subject to the Israeli Securities Law, 5728—1968. We have not and will not distribute this prospectus supplement or make, distribute or direct an offer to subscribe for our common stock or pre-funded warrants to any person within the State of Israel, other than to Qualified Investors and up to 35 Addressed Investors.

Qualified Investors may have to submit written evidence that they meet the definitions set out in of the First Addendum to the Israeli Securities Law, 5728—1968. In particular, we may request, as a condition to be offered common stock or pre-funded warrants, that Qualified Investors will each represent, warrant and certify to us and/or to anyone acting on our behalf: (i) that it is an investor falling within one of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968; (ii) which of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968 regarding Qualified Investors is applicable to it; (iii) that it will abide by all provisions set forth in the Israeli Securities Law, 5728—1968 and the regulations promulgated thereunder in connection with the offer to be issued common stock or pre-funded warrants; (iv) that the shares of common stock or pre-funded warrants that it will be issued are, subject to exemptions available under the Israeli Securities Law, 5728—1968: (a) for its own account; (b) for investment purposes only; and (c) not issued with a view to resale within the State of Israel, other than in accordance with the provisions of the Israeli Securities Law, 5728—1968; and (v) that it is willing to provide further evidence of its Qualified Investor status. Addressed Investors may have to submit written evidence in respect of their identity and may have to sign and submit a declaration containing, inter alia, the Addressed Investor's name, address and passport number or Israeli identification number.

[Table of Contents](#)

LEGAL MATTERS

The validity of the shares of common stock and pre-funded warrants offered hereby will be passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Wilmer Cutler Pickering Hale and Dorr LLP, New York, New York, is acting as counsel to the underwriters in connection with this offering.

S-35

[Table of Contents](#)**EXPERTS**

The consolidated financial statements of Disc Medicine, Inc. appearing in Disc Medicine, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2023, 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 financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the report 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.

S-36

[Table of Contents](#)**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. Information contained on our website is not incorporated by reference into this prospectus supplement or the accompanying 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 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 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.

S-37

[Table of Contents](#)**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 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 until the offering of the securities offered hereby is terminated or completed:

- Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2023, filed with the SEC on March 21, 2024;
- Quarterly Reports on Form 10-Q for the quarters ended March 31, 2024, June 30, 2024 and September 30, 2024, filed with the SEC on [May 9, 2024](#), [August 8, 2024](#), and [November 12, 2024](#), respectively;
- Current Reports on Form 8-K filed with the SEC on [February 7, 2024](#), [April 2, 2024](#), [June 14, 2024](#), [June 14, 2024](#), [June 14, 2024](#), [October 25, 2024](#), [November 4, 2024](#), [November 8, 2024](#), [November 15, 2024](#), [December 9, 2024](#), [January 10, 2025](#) and [January 21, 2025](#) (in each case, 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 August 10, 2020, and as set forth by the description of our common stock set forth in [Exhibit 4.4](#) to our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 10, 2022, and as further supplemented by the description of our common stock set forth in our Registration Statement on [Form S-4/A](#), filed with the SEC on December 1, 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 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 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 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.

[Table of Contents](#)

PROSPECTUS



**Common Stock
Preferred Stock
Debt Securities
Warrants
Units**

From time to time, we may offer and sell, in one or more series or classes, 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 August 7, 2024, the closing price of our common stock, as reported on The Nasdaq Global Market, was \$41.27 per share.

Investing in our securities involves risks. You should review carefully the risks and uncertainties described under the heading "[Risk Factors](#)" on page 10 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 August 8, 2024.

[Table of Contents](#)

Table of Contents

	Page
ABOUT THIS PROSPECTUS	1
WHERE YOU CAN FIND MORE INFORMATION	1
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	2
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	4
ABOUT THE COMPANY	7
RISK FACTORS	10
USE OF PROCEEDS	11
DIVIDEND POLICY	12
GENERAL DESCRIPTION OF SECURITIES	13
DESCRIPTION OF CAPITAL STOCK	14
DESCRIPTION OF DEBT SECURITIES	21
DESCRIPTION OF WARRANTS	28
DESCRIPTION OF UNITS	29
PLAN OF DISTRIBUTION	32
LEGAL MATTERS	35
EXPERTS	35

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.

[Table of Contents](#)**ABOUT THIS PROSPECTUS**

This prospectus is part of an automatic shelf registration statement on Form S-3 that we have filed with the Securities and Exchange Commission, or the SEC, as a “well-known seasoned issuer” as defined in Rule 405 of the Securities Act of 1933, as amended, or the Securities Act.

Under this process, we may sell the securities described in this prospectus in one or more offerings. 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.discomedicine.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.

[Table of Contents](#)**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 Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on [March 21, 2024](#);
- Quarterly Reports on Form 10-Q for the quarters ended March 31, 2024 and June 30, 2024, filed with the SEC on [May 9, 2024](#) and [August 8, 2024](#), respectively;
- Current Reports on Form 8-K filed with the SEC on [February 7, 2024](#), [April 2, 2024](#), [June 14, 2024](#), [June 14, 2024](#) (in each case, excluding information furnished pursuant to Item 7.01) and [June 14, 2024](#); and
- The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on [August 10, 2020](#), and as set forth by the description of the Registrant's common stock set forth in [Exhibit 4.4](#) to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on [March 10, 2022](#), 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 [December 1, 2022](#), 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.

[Table of Contents](#)

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

[Table of Contents](#)**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,” “continue,” “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 our ongoing Phase 1b/2 clinical trials of DISC-0974 and our ongoing Phase 1 clinical trial of DISC-3405, and 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;

[Table of Contents](#)

- 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 conflicts between Russia and Ukraine and between Israel and Hamas, 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

[Table of Contents](#)

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.

[Table of Contents](#)**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 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 initially developing 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. 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 interim data from BEACON in June and December 2023, and we presented topline data from AURORA in April 2024. Additional analyses of the BEACON and AURORA trials were presented in June 2024. We expect to have regulatory interactions to define optimal registrational endpoints moving forward in EPP in the second half of 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 the trial began in July 2023. We are planning additional trials of bitopertin in other indications.

DISC-0974 is the lead product candidate in our iron homeostasis portfolio and was in-licensed from AbbVie Deutschland GmbH & Co. KG, or AbbVie. 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 anemia of MF, and initiated a separate Phase 1b/2 clinical trial in February 2023 in patients with non-dialysis dependent CKD and anemia. We presented interim data from both of these trials in December 2023 and presented additional interim data for anemia of MF in June 2024, including safety and changes in hepcidin, iron, and hemoglobin levels for additional patients, as well as longer follow-up. We anticipate presenting additional interim data for non-dialysis dependent CKD and anemia in second half of 2024. 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. 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.

[Table of Contents](#)

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 a Phase 1 clinical trial in healthy adult volunteers was initiated in October 2023. Interim data was presented from the single-ascending dose (SAD) portion of the Phase 1 clinical trial of DISC-3405 in healthy volunteers in June 2024. We anticipate presenting data from the multiple-ascending dose (MAD) portion of the Phase 1 healthy volunteer study of DISC-3405 in the fourth quarter of 2024. 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.

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 Reports 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.*”

[Table of Contents](#)**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.

[Table of Contents](#)

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 most recent Annual Report on Form 10-K, which is on file with the SEC and is incorporated herein by reference, as updated by our subsequent annual, quarterly and other reports we file with the SEC, as well as any amendments thereto, which are 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.

[Table of Contents](#)

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.

[Table of Contents](#)**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.

[Table of Contents](#)**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*."

[Table of Contents](#)**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 June 30, 2024, we had 29,707,997 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 August 7, 2024, the closing price for our common stock, as reported on The Nasdaq Global Market, was \$41.27 per share. As of June 30, 2024, we had estimated approximately 19 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

[Table of Contents](#)

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;

[Table of Contents](#)

- 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 an estimated 5.0 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.* 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.

[Table of Contents](#)**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

[Table of Contents](#)

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.

[Table of Contents](#)***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 claims under the Exchange Act from bringing such claims in state or federal court, subject to applicable law.

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.

[Table of Contents](#)

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 capital stock of our Company entitled to vote thereon as a class, and the affirmative vote of the holders of a 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.

[Table of Contents](#)**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;

[Table of Contents](#)

- 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

[Table of Contents](#)

- 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.

[Table of Contents](#)

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;

[Table of Contents](#)

- 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

[Table of Contents](#)

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

[Table of Contents](#)

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.

[Table of Contents](#)**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.

[Table of Contents](#)**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.

[Table of Contents](#)

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

[Table of Contents](#)

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 depository, 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 depository's system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depository 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 depository 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.

[Table of Contents](#)**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 reallocated 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 will 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 underwriting discounts or commissions and dealers may receive compensation from the underwriters in the form of discounts or concessions. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallocated 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 over-allot in connection

[Table of Contents](#)

with the offering, creating a short position in the securities for their account. In addition, to cover overallocments 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.

[Table of Contents](#)**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).

[Table of Contents](#)**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 year ended December 31, 2023, 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 report 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.

[Table of Contents](#)



3,918,182 Shares of Common Stock
Pre-Funded Warrants to Purchase 181,818 Shares of Common Stock

PROSPECTUS SUPPLEMENT

Joint Book-Running Managers

Jefferies

Leerink Partners

Stifel

Cantor

Co-Managers

BMO Capital Markets

LifeSci Capital

Wedbush PacGrow

H.C. Wainwright & Co.

January 22, 2025
