

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

electroCore, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

3845
(Primary Standard Industrial
Classification Code Number)

20-3454976
(I.R.S. Employer
Identification Number)

200 Forge Way, Suite 205
Rockaway, NJ 07866
(973) 290-0097

(Address, including zip code, and telephone number, including area code of registrant's principal executive offices)

Daniel S. Goldberger
Chief Executive Officer
electroCore, Inc.
200 Forge Way, Suite 205
Rockaway, NJ 07866
(973) 290-0097

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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New York, New York 10020
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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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

Large accelerated filer
Non-accelerated filer

Accelerated filer
 Smaller reporting company
 Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling securityholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and the selling securityholders are not soliciting an offer to buy these securities, in any state where the offer or sale of these securities is not permitted.

PROSPECTUS



electroCore, Inc.

1,924,960 shares of Common Stock

This prospectus relates to the resale by the selling securityholders identified in this prospectus of up to an aggregate of 1,924,960 shares (the "Common Shares") of our common stock, \$0.001 par value per share ("Common Stock"), consisting of (i) up to 438,191 shares of Common Stock; (ii) pre-funded warrants (the "Private Pre-funded Warrants") to purchase up to an aggregate of 770,119 shares of our Common Stock; and (iii) up to 716,650 shares of Common Stock issuable upon the exercise of warrants to purchase Common Stock (the "Warrants") that were issued by us to certain institutional and accredited investors, and certain of our directors, in concurrent private placement transactions completed on June 5, 2024.

We are registering the resale of the Common Shares as required by the securities purchase agreements for the concurrent private placements. We are not selling any securities under this prospectus and will not receive any proceeds from sales of the Common Shares by the selling securityholders or their permitted transferees. To the extent the Warrants are exercised for cash, if at all, we will receive the exercise price of such Warrants. Each Warrant is immediately exercisable from the date of issuance at an exercise price of \$6.43 per share (subject to adjustment as set forth in the Warrant) and will expire on June 5, 2029. Each Private Pre-funded Warrant was sold at a purchase price of \$6.43 minus \$0.001 per Private Pre-Funded Warrant and is immediately exercisable from the date of issuance at an exercise price of \$0.001 per share.

The selling securityholders may sell the Common Shares in a number of different ways and at varying prices that will be determined by the prevailing market price for the shares or in negotiated transactions. See "Plan of Distribution" for more information about how the selling securityholders may sell the Common Shares pursuant to this prospectus.

The selling securityholders will pay all brokerage fees and commissions and similar expenses. We will pay certain expenses (except brokerage fees and commissions and similar expenses) incurred in registering the Common Shares, including legal and accounting fees. See "Plan of Distribution" for additional information.

Our Common Stock is listed on The Nasdaq Capital Market under the symbol " ECOR." On July 9, 2024, the last reported sale price of our Common Stock was \$6.36 per share.

Investing in our Common Stock involves a high degree of risk. Before making an investment decision, please read the information under "Risk Factors" beginning on page 9 of this prospectus and under similar headings in any amendment or supplement to this prospectus or in any filing with the Securities and Exchange Commission that is incorporated by reference herein.

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.

The date of this prospectus is , 2024.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-1 that we filed with the Securities and Exchange Commission (the "SEC"). Under this registration statement, the selling securityholders may sell from time to time in one or more offerings the Common Shares described in this prospectus. We incorporate by reference important information into this prospectus. You may obtain the information incorporated by reference without charge by following the instructions under "Where You Can Find More Information." You should carefully read this prospectus as well as additional information described under "Incorporation of Certain Information by Reference," before deciding to invest in our Common Stock.

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

Unless otherwise stated, all references in this prospectus to "we," "us," "our," "electroCore," the "Company" and similar designations refer to electroCore, Inc. This prospectus contains references 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, may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that the applicable licensor will not assert, to the fullest extent under applicable law, its rights 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.

A prospectus supplement may add to, update or change the information contained in this prospectus. You should read both this prospectus and any applicable prospectus supplement together with additional information described below under the heading "Where You Can Find More Information."

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains or incorporates by reference forward-looking statements that involve substantial risks and uncertainties for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. All statements contained or incorporated by reference in this prospectus other than statements of historical fact, including statements regarding our strategy, future operations, future financial position, liquidity, future revenue, projected expenses, results of operations, expectations concerning the timing and our ability to commence and subsequently report data from planned non-clinical studies and clinical trials, prospects, plans and objectives of management are forward-looking statements. The words "believe," "can," "could," "may," "might," "seek," "will," "estimate," "expect," "would," "continue," "anticipate," "intend," "plan," "expect," "predict," "potential," "project," "opportunity," "goals," "target," or "should," and similar expressions are intended to identify forward-looking statements. Such statements are based on management's current expectations and involve risks and uncertainties. Actual results and performance could differ materially from those projected in the forward-looking statements as a result of many factors.

Our forward-looking statements are based largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. These forward-looking statements are subject to a number of risks, uncertainties, and assumptions, including those described in "Risk Factors" in this prospectus, and under a similar heading in any other annual, periodic or current report incorporated by reference into this prospectus or that we may file with the SEC in the future. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge quickly and from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the future events and trends discussed in this prospectus, may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. All forward-looking statements are qualified in their entirety by these cautionary statements.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of such statements, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and you are cautioned not to unduly rely upon these statements.

You should also read carefully the factors described in the "Risk Factors" section of this prospectus, and under a similar heading in any annual, periodic or current report incorporated by reference into this prospectus, to better understand the risks and uncertainties inherent in our business and underlying any forward-looking statements. You are advised to consult any further disclosures we make on related subjects in our future public filings. See "Where You Can Find More Information" and "Incorporation of Certain Information by Reference."

PROSPECTUS SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus. This summary is not complete and does not contain all of the information that you should consider before making an investment decision. For a more complete understanding of our company, you should read and consider carefully the more detailed information included or incorporated by reference in this prospectus and any applicable prospectus supplement, including our consolidated financial statements and the notes thereto, and the factors under the heading "Risk Factors" beginning on page 9 of this prospectus, before making an investment decision about investing in our Common Stock.

Company Overview

We are a commercial stage bioelectronic medicine and general wellness company dedicated to improving health and quality of life through our proprietary non-invasive vagus nerve stimulation ("nVNS") technology platform.

nVNS modulates neurotransmitters through its effects on both the peripheral and central nervous systems. Our nVNS treatment is delivered through a proprietary high-frequency burst waveform that safely and comfortably passes through the skin and stimulates therapeutically relevant fibers in the vagus nerve. Various scientific publications suggest that nVNS works through a variety of mechanistic pathways including the modulation of neurotransmitters.

Historically, vagus nerve stimulation or VNS, required an invasive surgical procedure to implant a costly medical device. This generally limited VNS from being used by anyone other than the most severe patients. Our non-invasive medical devices and general wellness products are self-administered and intended for regular or intermittent use over many years.

Our capabilities include product development, regulatory affairs and compliance, sales and marketing, product testing, assembly, fulfillment, and customer support. We derive revenues from the sale of products in the United States and select overseas markets. We have two principal product categories:

- Handheld, personal use medical devices for the management and treatment of certain medical conditions such as primary headache; and
- Handheld, personal use consumer products utilizing nVNS technology to promote general wellness and human performance.

We believe our nVNS products may be used in the future to effectively treat additional medical conditions.

Our goal is to be a leader in non-invasive neuromodulation by using our proprietary nVNS platform technology to deliver better health. To achieve this, we offer multiple propositions:

- Prescription gammaCore medical devices for the treatment of certain medical conditions such as primary headache;
- Truvaga products for the support of general health and wellbeing; and
- TAC-STIM for human performance.

Our flagship gammaCore Sapphire is a prescription medical device that is FDA cleared for a variety of primary headache conditions. gammaCore is available by prescription only and Sapphire is a portable, reusable, rechargeable and reloadable personal use option for patients to use at home or on the go. Prescriptions are written by a health care provider and dispensed from a specialty pharmacy, through the patient's healthcare system, or shipped directly to certain patients in the United States directly from our facility in Rockaway, NJ. After the initial prescription is filled, access to additional therapy can be refilled for certain of our gammaCore products through the input of a prescription-only authorization.

Truvaga is a personal use consumer electronics wellness product that does not require a prescription and is available direct-to-consumer from electroCore at www.truvaga.com. Truvaga is not intended for medical use. TAC-STIM is a form of nVNS for human performance and has been developed in collaboration with the United States Department of Defense Biotech Optimized for Operational Solutions and Tactics, or "BOOST" program.

We offer two versions of our Truvaga products for the support of general health and wellbeing. Truvaga 350 is a personal use consumer electronics general wellness product and Truvaga Plus, which was launched in April 2024, is our next generation, app-enabled general wellness product. Neither product require a prescription, and both are available direct-to-consumer from electroCore at www.truvaga.com.

TAC-STIM is a form of nVNS for human performance and has been developed in collaboration with the United States Department of Defense Biotech Optimized for Operational Solutions and Tactics, or BOOST program. TAC-STIM products are available as a Commercial Off the Shelf (COTS) solution to professional organizations and are the subject of ongoing research and evaluation within the United States Air Force Special Operations Command, the United States Army Special Operations Command and at the United States Air Force Research Laboratory.

Truvaga and TAC-STIM products are intended for general wellness in compliance with the FDA guidance document entitled "General Wellness: Policy for Low-Risk Devices; Guidance for Industry and FDA Staff, issued on September 27, 2019." Truvaga and TAC-STIM products are not intended to diagnose, treat, cure, or prevent any disease or medical condition.

We are exploring strategies to make our TAC-STIM product available to other branches of the active-duty military and certain human performance professionals in the United States and abroad. Our TAC-STIM product is not a medical device and is not intended to diagnose, cure, mitigate, prevent, or treat a disease or condition.

Recent Offerings

On June 5, 2024, we completed the transaction (the "Registered Direct Offering") contemplated by a securities purchase agreement dated June 3, 2024 (the "Registered Direct Purchase Agreement") with an institutional and accredited investor (the "Purchaser") providing for the sale by us of pre-funded warrants (the "RD Pre-funded Warrants") to purchase up to 225,000 shares of Common Stock. In a concurrent private placement, we issued and sold to the Purchaser warrants to purchase up to 112,500 shares of Common Stock (the "PIPE Warrants"). Each RD Pre-funded Warrant was sold together with one-half of one PIPE Warrant at a combined effective offering price of \$6.4925 per share and related PIPE warrant. The PIPE Warrants are exercisable at a price of \$6.43 per share, subject to adjustment as set forth in the PIPE Warrants, and will expire on June 5, 2029.

In a separate concurrent private placement, on June 5, 2024, we completed the transaction contemplated by a separate securities purchase agreement dated May 31, 2024 with certain institutional and accredited investors and directors of the Company (the "Private Agreements"), providing for the sale by us of (i) 438,191 shares of Common Stock (the "Private Shares"), (ii) pre-funded warrants (the "Private Pre-funded Warrants") to purchase up to 770,119 shares of Common Stock and (iii) warrants to purchase up to 604,150 shares of Common Stock (the "Private Warrants"). Each Private Share was sold together with one-half of one Private Warrant at a combined effective offering price of \$6.4925 per share and related warrant. Each Private Pre-funded Warrant was sold together with one-half of one Private Warrant at a combined effective offering price of \$6.4925 per Private Pre-funded Warrant and Private Warrant minus \$0.001 per Private Pre-funded Warrant. The Private Warrants issued and sold to these certain institutional and accredited investors and directors of the Company have the same terms as the PIPE Warrants sold to the Purchaser.

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The PIPE Warrants and Private Warrants are only exercisable for whole shares of Common Stock.

The registration statement of which this prospectus is a part relates to the resale of the Private Shares and the shares of Common Stock issuable upon exercise of the PIPE Warrants, Private Pre-funded Warrants and the Private Warrants.

Corporate Information

Our principal executive offices are located at 200 Forge Way, Suite 205, Rockaway, New Jersey 07866. Our telephone number is (973) 290-0097 and our website address is www.electrocore.com. We have included our website address in this prospectus supplement as an inactive textual reference only. The information available on or accessible through our website does not constitute a part of this prospectus and should not be relied upon. Our Common Stock is listed on the Nasdaq Capital Market under the symbol "ECOR."

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THE OFFERING

Common Stock Offered by the Selling Securityholders 1,924,960 shares of Common Stock.

Terms of the Offering Each selling securityholder will determine when and how it will sell the Common Stock offered in this prospectus, as described in "Plan of Distribution."

Common Stock Outstanding 6,446,866 shares of Common Stock (as of June 15, 2024) (1)

Use of Proceeds We will not receive any proceeds from the sale of shares of our Common Stock by the selling securityholders. To the extent the Warrants are exercised for cash, if at all, we will receive the exercise price of the Warrants. See "Use of Proceeds" on page 9 of this prospectus for a more detailed discussion.

Offering Price The selling securityholders may sell all or a portion of their shares through public or private transactions at prevailing market prices or at privately negotiated prices.

Nasdaq Capital Market Symbol ECOR

Risk Factors See "Risk Factors" beginning on page 9, for a discussion of factors you should carefully consider before deciding to invest in our Common Stock.

(1) The number of shares of our Common Stock that will be outstanding after this offering is based on 6,446,866 shares of our Common Stock outstanding as of June 15, 2024 (before giving effect to potential exercise of the Private Pre-funded Warrants and Private Warrants to purchase 1,486,769 shares of Common Stock issued to the selling securityholders on June 5, 2024 in connection with the Registered Direct Offering and concurrent private placements are excluded as of that date: (i) 498,000 shares of our Common Stock reserved for issuance upon the exercise of outstanding options at a weighted average exercise price of \$36.98 per share; (ii) 924,000 shares of our Common Stock reserved for issuance upon the exercise of outstanding warrants at a weighted average exercise price of \$4.54 per share; (iii) 422,000 shares of our Common Stock reserved for issuance upon settlement of restricted and deferred stock units; (iv) 613,314 shares of our Common Stock reserved for issuance upon the exercise of earlier issued pre-funded warrants; and (v) up to 225,000 shares of Common Stock issuable upon exercise of the RD Pre-Funded Warrants.

The selling securityholders named in this prospectus may offer and sell up to 1,924,960 shares of Common Stock including 1,486,769 shares of Common Stock which are issuable upon exercise of the Private Pre-funded Warrants and Warrants.

Each selling securityholder is prohibited, subject to certain exceptions and by the determination of the holder, from exercising the RD Pre-Funded Warrants, Private Pre-funded Warrants, and Warrants to the extent that immediately prior to or after giving effect to such exercise, the selling securityholder, together with its affiliates and other attribution parties, would own in excess of 4.99% (or 9.99% at the election of the holder prior to the date of issuance), as indicated on such selling securityholder's Warrant, of the total number of shares of the Common Stock then issued and outstanding, which percentage may be changed at the selling securityholder's election to a lower percentage at any time or to a higher percentage not to exceed 9.99% upon 61 days' notice to us.

Shares of Common Stock that may be offered under this prospectus will be fully paid and non-assessable. We will not receive any of the proceeds of sales by the selling securityholders of any of the Common Stock covered by this prospectus. Throughout this prospectus, when we refer to the shares of our Common Stock being registered on behalf of the selling securityholders for offer and resale, we are referring to shares of Common Stock held by the selling securityholders as well as the shares of Common Stock that may in the future be issued to the selling securityholders in connection with the exercise of the Warrants. When we refer to the selling securityholders in this prospectus, we are referring to the selling securityholders identified in this prospectus and, as applicable, their permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part.

RISK FACTORS

Investing in our Common Stock involves a high degree of risk. You should carefully consider the risks described in Part I, Item 1A, Risk Factors in our most recent Annual Report on Form 10-K, together with the other information set forth in this prospectus, and in the other documents that we include or incorporate by reference into this prospectus, as updated by our Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other filings we make with the SEC, the risk factors described under the caption "Risk Factors" in any applicable prospectus supplement and any risk factors set forth in our other filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), making a decision about investing in our Common Stock. Our business, financial condition, results of operations or prospects could be materially adversely affected by any of these risks. The trading price of our Common Stock could decline due to any of these risks, and you may lose all or part of your investment. For more information, see the section entitled "Where You Can Find More Information" and "Incorporation of Certain Information by Reference." Please also read carefully the section entitled "Special Note Regarding Forward-Looking Statements."

USE OF PROCEEDS

We are filing the registration statement of which this prospectus forms a part to permit the holders of the Common Shares described in the section titled "Selling Securityholders" to resell such securities. The selling securityholders will receive all of the net proceeds from sales of Common Shares sold pursuant to this prospectus and we will not receive any proceeds from the resale of any Common Shares offered by this prospectus by the selling securityholders. To the extent the Private Pre-funded Warrants and Warrants are exercised for cash, if at all, we will receive the exercise price of the Private Pre-funded Warrants and Warrants. Any proceeds from the exercise of the Private Pre-funded Warrants and Warrants will be used for working capital and general corporate purposes. We cannot predict when or if the Private Pre-funded Warrants and Warrants will be exercised, and it is possible that the Private Pre-funded Warrants and Warrants may expire and never be exercised. We will bear the out-of-pocket costs, expenses and fees incurred in connection with the registration of Common Shares to be sold by the selling securityholders, including registration, listing and qualifications fees, printers and accounting fees, and fees and disbursements of our counsel, or collectively, the Registration Expenses. Other than Registration Expenses, the selling securityholders will bear underwriting discounts, commissions, placement agent fees or other similar expenses payable with respect to sales of such securities.

MARKET INFORMATION

Our Common Stock is listed on The Nasdaq Capital Market under the symbol "ECOR." On July 9, 2024, the last reported sale price for our Common Stock on The Nasdaq Capital Market was \$6.36 per share. As of June 15, 2024, we had approximately 349 stockholders of record.

DIVIDEND POLICY

We do not anticipate declaring or paying, in the foreseeable future, any cash dividends on our capital stock. We intend to retain all available funds and future earnings, if any, to fund the development and expansion of our business, and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination regarding the declaration and payment of dividends, if any, will be at the discretion of our Board and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our Board may deem relevant.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation arrangements, including employment, termination of employment and change in control arrangements, with our directors and executive officers, and the other transactions discussed under Items 11 and 13 in the sections titled "Executive Compensation" and "Certain Relationships and Related Party Transactions" in our Annual Report on Form 10-K filed with the SEC on March 13, 2024, which these items are incorporated by reference herein, the following is a description of each transaction since January 1, 2023 and each currently proposed transaction in which:

- the amounts involved exceeded or will exceed the lesser of (a) \$120,000 or (b) 1% of the average of our total assets for the fiscal years ended December 31, 2023 or 2022; and

- any of our directors, executive officers or holders of more than 5% of our capital stock, or any member of the immediate family of, or person sharing the household with, the foregoing persons, had or will have a direct or indirect material interest.

In a private placement consummated on June 5, 2024 that included several of our directors, we sold (i) 438,191 shares of Common Stock, (ii) Private Pre-funded Warrants to purchase up to 770,119 shares of Common Stock and (iii) Warrants to purchase up to 604,150 shares of Common Stock. Each share of Common Stock (or Private Pre-funded Warrant) in the private placement was sold together with one-half of one Warrant at a combined effective offering price of \$6.4925 per share and related Warrant. The Common Stock was sold at a purchase price of \$6.43 per share. The Warrants became immediately exercisable as of June 5, 2024 at a price of \$6.43 per share and will expire on June 5, 2024. We also agreed to indemnify the purchasers against certain liabilities, including liabilities under the Securities Act of 1933 and liabilities arising from breaches of representations and warranties contained in the purchase agreements.

The purchasers listed below participated in the private placement, and may be considered related parties of our company. The table below summarizes the issuances of Common Stock, Private Pre-Funded Warrants and Warrants to such parties.

Purchaser	Investment Amount	Common Stock Purchased	Pre-Funded Warrants Purchased	Warrants Purchased
Happy Holstein Management, LLC ⁽¹⁾	\$ 5,000,000	—	770,119	385,059
Daniel S. Goldberger	\$ 250,000	38,505	—	19,252
Thomas J. Errico	\$ 250,000	38,505	—	19,252
Joseph P. Errico	\$ 250,000	38,505	—	19,252
Trevor Moody	\$ 100,000	15,402	—	7,701
Julie A. Goldstein	\$ 50,000	7,701	—	3,850
Thomas M. Patton	\$ 50,000	7,701	—	3,850
Patricia Wilber	\$ 45,000	6,931	—	3,465

(1) Kathryn Theofilos, the spouse of Charles S. Theofilos, a member of our Board since December 8, 2023, is the manager of Happy Holstein Management, LLC.

SELLING SECURITYHOLDERS

We are registering the resale of 1,924,960 shares of Common Stock, including 1,486,769 shares of Common Stock which are issuable upon the exercise of the Private Pre-funded Warrants and Warrants, held by the selling securityholders identified below to permit such selling securityholders, or their permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part, to resell or otherwise dispose of these shares in the manner contemplated under the section entitled "Plan of Distribution" in this prospectus (as may be supplemented and amended). For additional information regarding the transactions pursuant to which we offered and sold such Securities to the selling securityholders, see "Recent Offerings" in "Prospectus Summary" above.

The selling securityholders may sell some, all or none of their Common Shares. We do not know how long each of the selling securityholder will hold their Common Shares before selling them, and we currently have no agreements, arrangements or understandings with the selling securityholders regarding the sale or other disposition of any of the Common Shares. The Common Shares covered hereby may be offered from time to time by the selling securityholders. As a result, we cannot estimate the number of shares of Common Stock each of the selling securityholders will beneficially own after termination of sales under this prospectus. In addition, the selling securityholders may have sold, transferred or otherwise disposed of all or a portion of their shares of Common Stock since the date on which it provided information for this table.

The following table sets forth the name of each selling securityholder, the number and percentage of our outstanding shares of Common Stock beneficially owned by the selling securityholder as of June 15, 2024, the number of Common Shares that may be offered under this prospectus, and the number and percentage of our outstanding shares of Common Stock beneficially owned by the selling securityholder, in each case assuming exercise of the Warrants held by such selling securityholder on that date without regard to any limitations on exercise of such Warrants, assuming all of the Common Shares covered hereby are sold. Except as otherwise noted, beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to our Common Stock. Generally, a person "beneficially owns" shares of our Common Stock if the person has or shares with others the right to vote those shares or to dispose of them, or if the person has the right to acquire voting or disposition rights within 60 days. Under the terms of the RD Pre-funded Warrants, Private Pre-funded Warrants and Warrants held by the selling securityholders, each selling securityholder may not exercise the RD Pre-funded Warrant, Private Pre-funded Warrant or Warrant held by such selling securityholder to the extent such exercise would cause the selling securityholder, together with its affiliates, to beneficially own a number of shares of Common Stock which would exceed 4.99% (or 9.99% at the election of the holder prior to the date of issuance), as indicated in such selling securityholder's warrant, of our then outstanding Common Stock following such exercise, excluding, for purposes of such determination, Common Shares issuable upon exercise of the RD Pre-funded Warrants, Private Pre-funded Warrants or Warrants held by the Investor, which have not been exercised. The number of Common Shares in the first and fourth columns and the percentage in the second and fifth columns reflect these limitations.

The information in the table below and the footnotes thereto regarding shares of Common Stock to be beneficially owned after the offering pursuant to this prospectus assumes the exercise of the Warrants by the selling securityholders and sale of all Common Shares, including those issuable pursuant to the Warrants, being offered by the selling securityholders under this prospectus. Information contained in the table below and the footnotes thereto is based upon information provided to us by the selling securityholders. The selling securityholders may have sold or transferred, in transactions exempt from the registration requirements of the Securities Act, some or all of their shares of Common Stock since the date on which the information in the table below is presented. Information about the selling securityholders may change over time. The percentage of shares owned after the offering is based on 6,446,866 shares of Common Stock outstanding as of June 15, 2024, which excludes (i) 498,000 shares of our Common Stock reserved for issuance upon the exercise of outstanding options at a weighted average exercise price of \$36.98 per share; (ii) 924,000 shares of our Common Stock reserved for issuance upon the exercise of outstanding warrants at a weighted average exercise price of \$4.54 per share; (iii) 422,000 shares of our Common Stock reserved for issuance upon settlement of restricted and deferred stock units; (iv) 613,314 shares of our Common Stock reserved for issuance upon the exercise of pre-funded warrants and (v) up to 225,000 shares of Common Stock issuable upon exercise of the RD Pre-Funded Warrants, but assumes exercise of the Warrants by the selling securityholders and sale of all Common Shares, including those issuable pursuant to the Warrants.

Name and Address	Number of Shares of Common Stock Beneficially Owned Before the Offering (1)	Percentage of Common Stock Beneficially Owned Before the Offering	Maximum Number of Shares of Common Stock Offered	Number of Shares of Common Stock Beneficially Owned (2)	Percentage of Common Stock Beneficially Owned
Special Situations Fund III QP, L.P. (3)	422,740 (4)	6.56%	86,292 (5)	422,740 (4)	5.33%
Special Situations Cayman Fund, L.P. (3)	128,367 (6)	1.99%	26,208 (7)	128,367 (6)	1.62%
Happy Holstein Management LLC (the Theo Group)(8)	215,841 (8)	3.35%	1,155,178 (9)	215,841	2.72%
Lincoln Park Capital Fund, LLC (10)					
	46,206 (11)	*	46,206 (12)	0	*
District 2 Capital Fund, LP (13)	57,757 (14)	*	57,757 (15)	0	*
Susan Schenker	42,411 (16)	*	23,103 (17)	19,308	*
MAZ Partners L.P. (18)					
Joseph P. Errico	351,715 (19)	5.46%	69,310 (20)	282,405	3.56%
Daniel S. Goldberger	321,277 (21)	4.98%	57,757 (22)	263,520	3.32%
Thomas J. Errico	185,979 (23)	2.88%	57,757 (24)	128,222	1.62%
Trevor Moody	281,958 (25)	4.37%	57,757 (26)	224,201	2.83%
Julie A. Goldstein	102,279 (27)	1.59%	23,103 (28)	79,176	1.00%
Thomas M. Patton	127,273 (29)	1.97%	11,551 (30)	115,722	1.46%
Patricia Wilber	76,562 (31)	1.19%	11,551 (32)	65,011	*
Dentons US LLP	40,196 (33)	*	10,396 (34)	29,800	*
	231,034 (35)	3.58%	231,034 (36)	0	*

* Represents less than 1%.

(1) Excludes the exercise of any RD Pre-funded Warrants, Private Pre-funded Warrants or Warrants, and assumes no further acquisitions of Common Stock by the selling securityholder.

(2) Assumes the exercise of the Warrants and sale of all Common Shares, including shares exercisable pursuant to the Warrants, available for sale under this prospectus and no further acquisitions of Common Stock by the selling securityholder. The ability to exercise the Warrants, RD Pre-Funded Warrants and Private Pre-funded Warrants, as applicable, held by the Selling Securityholders is subject to a beneficial ownership limitation that, at the time of initial issuance of the Warrants, RD Pre-Funded Warrants and Private Pre-funded Warrants, as applicable, was capped at 4.99% (or 9.99% at the election of the holder prior to the date of issuance) beneficial ownership of the Company's issued and outstanding Common Stock (post-exercise). These beneficial ownership limitations may be adjusted up or down, subject to providing 61 days advance notice to the Company. Beneficial ownership as reflected in the selling securityholder table reflects the total number of Common Shares potentially issuable underlying the Warrants, RD Pre-Funded Warrants and Private Pre-funded Warrants, as applicable, and does not give effect to these beneficial ownership limitations. Accordingly, actual beneficial ownership, as calculated in accordance with Section 13(d) and Rule 13d-3 thereunder may be lower than as reflected in the table.

(3) AWM Investment Company Inc., a Delaware corporation ("AWM"), is the investment advisor to Special Situations Fund III QP, L.P. a Delaware limited partnership ("SSFQP"), and to Special Situations Cayman Fund, L.P., a Cayman Islands limited partnership ("Cayman," and collectively with SSFQP, the "Funds"). AWM holds sole voting and sole investment power over the shares held by the Funds. David M. Greenhouse and Adam Stettner are the principal owners of AWM and are deemed to share beneficial ownership of the shares of the common stock held by the Funds. Messrs. Greenhouse and Stettner disclaim beneficial ownership of such shares except to the extent of their respective pecuniary interests therein.

(4) Consists of 422,740 shares of Common Stock and excludes an additional 946,586 shares of common stock underlying warrants consisting of (i) 390,492 common stock warrants with a 9.99% beneficial ownership limitation and (ii) 556,094 prefunded warrants with a 9.99% beneficial ownership limitation.

(5) Consists of 86,292 shares of Common Stock issuable upon the exercise of PIPE Warrants.

(6) Consists of 128,367 shares of Common Stock and excludes an additional 287,514 shares of common stock underlying warrants consisting of (i) 118,608 common stock warrants with a 9.99% beneficial ownership limitation and (ii) 168,906 prefunded warrants with a 9.99% beneficial ownership limitation.

(7) Consists of 26,208 shares of Common Stock issuable upon the exercise of PIPE Warrants.

(8) Based on a Schedule 13D/A filed with the SEC on June 7, 2024. Represents 215,841 shares of Common Stock beneficially owned by Happy Holstein Management, LLC. Includes (i) 153,168 shares of Common Stock held by Happy Holstein, LLLP, a Florida limited liability limited partnership, of which Happy Holstein Management, LLC is the general partner, and (ii) 62,673 shares of Common Stock for which previously issued warrants held by Happy Holstein Management, LLC currently are exercisable. Excludes 220,612 shares of Common Stock for which previously issued warrants held by Happy Holstein Management, LLC are not currently exercisable due to a 9.99% beneficial ownership limitation. The address for Happy Holstein Management, LLC is 300 Village Square Crossing, Suite 102, Palm Beach Gardens, FL 33410.

(9) Consists of (i) 770,119 shares of Common Stock issuable upon the exercise of Private Pre-funded Warrants and (ii) 385,059 shares of Common Stock issuable upon the exercise of Private Warrants.

(10) Joshua Scheinfeld and Jonathan Cope, the principals of Lincoln Park Capital Fund, LLC are deemed beneficial owners of all shares of Common Stock owned by Lincoln Park Capital Fund, LLC. Messrs. Scheinfeld and Cope have shared voting and disposition power.

(11) Consists of 30,804 shares of Common Stock and 15,402 shares of Common Stock issuable upon the exercise of Private Warrants.

(12) Consists of 30,804 Private Shares and 15,402 shares of Common Stock issuable upon the exercise of Private Warrants.

(13) Michael Bigger and Eric Schlanger, the managing members of District 2 Capital Fund, LP. are deemed beneficial owners of all shares of Common Stock owned by District 2 Capital Fund, LP. Messrs. Bigger and Schlanger have shared voting and disposition power.

(14) Consists of 38,505 shares of Common Stock and 19,252 shares of Common Stock issuable upon the exercise of Private Warrants.

(15) Consists of 38,505 Private Shares and 19,252 shares of Common Stock issuable upon the exercise of Private Warrants.

(16) Consists of 34,710 shares of Common Stock and 7,701 shares of Common Stock issuable upon the exercise of Private Warrants.

(17) Consists of 15,402 Private Shares and 7,701 shares of Common Stock issuable upon the exercise of Private Warrants.

(18) Walter Schenker is the principal and control person of MAZ Partners LP.

(19) Consists of 271,957 shares of Common Stock, 56,655 previously issued warrants to purchase shares of Common Stock, and 23,103 shares of Common Stock issuable upon the exercise of Private Warrants.

(20) Consists of 46,207 Private Shares and 23,103 shares of Common Stock issuable upon the exercise of Private Warrants.

(21) Consists of 197,674 shares of Common Stock held directly by Mr. Errico and his individual retirement account; 19,869 shares of Common Stock held directly by Mr. Errico's spouse, minor children and a trust for the benefit of Mr. Errico's spouse and minor children; 42,463 options to purchase shares of Common Stock and 13,691 deferred stock units held directly by Mr. Errico; 28,328 previously issued warrants to purchase shares of Common Stock; and 19,252 shares of Common Stock issuable upon the exercise of Private Warrants.

(22) Consists of 38,505 Private Shares and 19,252 shares of Common Stock issuable upon the exercise of Private Warrants.

(23) Consists of 86,060 shares of Common Stock, 16,667 restricted stock units, 25,495 previously issued warrants to purchase shares of Common Stock, 38,505 Private Shares, and 19,252 shares of Common Stock issuable upon the exercise of Private Warrants.

(24) Consists of 38,505 Private Shares and 19,252 shares of Common Stock issuable upon the exercise of Private Warrants.

(25) Consists of 151,319 shares of Common Stock, 14,016 options to purchase shares of Common Stock, 21,739 restricted stock units, 14,324 deferred stock units, 22,803 previously issued warrants to purchase shares of Common Stock, 38,505 Private Shares and 19,252 shares of Common Stock issuable upon the exercise of Private Warrants.

(26) Consists of 38,505 Private Shares and 19,252 shares of Common Stock issuable upon the exercise of Private Warrants.

(27) Consists of 67,657 shares of Common Stock, 188 options to purchase shares of Common Stock, 11,331 previously issued warrants to purchase shares of Common Stock, 15,402 Private Shares and 7,701 shares of Common Stock issuable upon the exercise of Private Warrants.

(28) Consists of 15,402 Private Shares and 7,701 shares of Common Stock issuable upon the exercise of Private Warrants.

(29) Consists of 64,675 shares of Common Stock, 8,061 deferred stock units, 25,989 options to purchase shares of Common Stock, 16,997 previously issued warrants to purchase shares of Common Stock, 7,701 Private Shares and 3,850 shares of Common Stock issuable upon the exercise of Private Warrants.

(30) Consists of 7,701 Private Shares and 3,850 shares of Common Stock issuable upon the exercise of Private Warrants.

(31) Consists of 24,016 shares of Common Stock, 35,471 deferred stock units, 5,524 previously issued warrants to purchase shares of Common Stock, 7,701 Private Shares and 3,850 shares of Common Stock issuable upon the exercise of Private Warrants.

(32) Consists of 7,701 Private Shares and 3,850 shares of Common Stock issuable upon the exercise of Private Warrants.

(33) Consists of 6,672 shares of Common Stock, 23,128 restricted stock units, 6,931 Private Shares, and 3,465 shares of Common Stock issuable upon the exercise of Private Warrants.

(34) Consists of 6,931 Private Shares and 3,465 shares of Common Stock issuable upon the exercise of Private Warrants.

(35) Consists of 154,023 shares of Common Stock and 77,011 shares of Common Stock issuable upon the exercise of Private Warrants.

(36) Consists of 154,023 Private Shares and 77,011 shares of Common Stock issuable upon the exercise of Private Warrants.

Relationship with Selling Securityholders

As discussed in "Prospectus Summary- Recent Offerings" above, we entered into agreements with the selling securityholders pursuant to which they acquired the Private Shares, Private Pre-funded Warrants, and/or Warrants, and agreed with the selling securityholders to file a registration statement to enable the resale of the Private Shares and shares of Common Stock issuable upon the exercise of the Private Pre-funded Warrants and Warrants.

As of the closing of the Registered Direct Offering and concurrent private placements, Daniel Goldberger, Thomas Errico, M.D., Patricia Wilber, Julie Goldstein, Thomas Patton and Charles S. Theofilos, M.D. were all members of our board of directors. Mr. Goldberger was also our chief executive officer at the time of closing. Joseph P. Errico was a member of the Board until his resignation in May 2023 and Trevor Moody was a member of the Board until August 2023. Thomas Errico, M.D., is the uncle of Joseph P. Errico. Joseph P. Errico is currently a consultant to us.

Except as discussed above, none of the selling securityholders nor any persons having control over such selling securityholders have held any position or office with us or our affiliates within the last three years nor has had a material relationship with us or any of our predecessors or affiliates within the past three years, other than as a result of the ownership of our Common Shares or other securities.

DESCRIPTION OF SECURITIES THAT THE SELLING SECURITYHOLDERS ARE OFFERING

The following summary of the terms of our Common Stock is based upon our Certificate of Incorporation and our Amended and Restated bylaws. The summary is not complete, and is qualified by reference to our Certificate of Incorporation and our Amended and Restated bylaws, each of which was filed or incorporated by reference as exhibits to our [Annual Report on Form 10-K for the fiscal year ended December 31, 2023](#), and each of which is incorporated by reference herein. For a description of our Common Stock, see our (i) Registration Statement on [Form 8-A, filed with the SEC on June 18, 2018](#) under Section 12(b) of the Exchange Act, including any amendments or reports filed for the purpose of updating such description and (ii) Exhibit 4.1 — Description of Capital Stock, to our [Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on March 13, 2024](#).

The Selling Securityholders are offering for resale up to 1,924,960 shares of our Common Stock including 1,486,769 shares of our Common Stock issuable upon exercise of the Private Pre-funded Warrants and Warrants.

Common Stock

As of the date of this prospectus, our authorized Common Stock consists of 500,000,000 shares of Common Stock, and 1,000,000 shares of preferred stock, par value \$0.001 per share.

Voting Rights

Each holder of our Common Stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Under our certificate of incorporation and our bylaws, our stockholders do not have cumulative voting rights. Because of this, the holders of a majority of the shares of Common Stock entitled to vote in any election of directors are able to elect all of the directors standing for election, if they should so choose.

Dividend Rights

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of Common Stock are not entitled to receive ratably those dividends, if any, as may be declared from time to time by the Board out of legally available funds.

Liquidation Rights

In the event of our liquidation, dissolution or winding up, holders of Common Stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

Other Rights and Preferences

Holders of our Common Stock have no preemptive, conversion or subscription rights and there are no redemption or sinking fund provisions applicable to the Common Stock. The rights, preferences and privileges of the holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Anti-Takeover Provisions

The provisions of Delaware law, and our certificate of incorporation and our bylaws could have the effect of delaying, deferring or discouraging another person from acquiring control of our company. These provisions, which are summarized below, may have the effect of discouraging takeover bids. They are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our Board. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us because negotiation of these proposals could result in an improvement of their terms.

Section 203 of the DGCL

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We are subject to Section 203 of the DGCL, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a "business combination" to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to specified exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an "interested stockholder" as an entity or person who, together with the person's affiliates and associates, beneficially

owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Our Certificate of Incorporation and Bylaws

Our certificate of incorporation and bylaws include a number of provisions that could deter hostile takeovers or delay or prevent changes in control of our company, including the following:

- **Classified Board.** Our certificate of incorporation provides for our Board to be divided into three classes 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, stockholders holding a majority of the shares of Common Stock outstanding is able to elect all of our directors. Our certificate of incorporation and our bylaws also provide that directors may be removed by the stockholders only for cause upon the vote of 66 2/3% or more of our outstanding Common Stock. Furthermore, the authorized number of directors may be changed only by resolution of the board of directors, and vacancies and newly created directorships on the board of directors may, except as otherwise required by law or determined by the board, only be filled by a majority vote of the directors then serving on the board, even though less than a quorum.
- **Special Meetings of Stockholders and Stockholder Action by Written Consent.** Our certificate of incorporation and bylaws provide that all stockholder actions must be effected at a duly called meeting of stockholders and eliminate the right of stockholders to act by written consent without a meeting. Our bylaws also provide that only our chairman of the board, Chief Executive Officer (or if there is no Chief Executive Officer, the President) or the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors may call a special meeting of stockholders.
- **Advance Notice Requirements for Stockholder Proposals.** Our bylaws provide that stockholders seeking to present proposals before a meeting of stockholders, including the nomination of director candidates, must provide timely advance notice in writing, and specifies requirements as to the form and content of a stockholder's notice.
- **Amendment to Certificate of Incorporation and Bylaws.** Our certificate of incorporation and bylaws provide that the stockholders cannot amend the provisions described above except by a vote of 66 2/3% or more of our outstanding Common Stock.

The combination of these provisions makes it more difficult for our existing stockholders to replace our Board as well as for another party to obtain control of us by replacing our Board. Since our Board has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our Board to issue preferred stock with voting or other rights or preferences that could impede any attempt to effect a change of control of our company.

These provisions are intended to enhance the likelihood of continued stability in the composition of our Board and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Transfer Agent

The transfer agent and registrar for our Common Stock is Broadridge Corporate Issuer Solutions, Inc.
51 Mercedes Way, Edgewood, New York 11717.

PLAN OF DISTRIBUTION

We are registering Common Shares, including shares of Common Stock and Common Stock issuable upon exercise of the Private Pre-funded Warrants and Warrants, to permit the resale of these Common Shares by the selling securityholders named in this prospectus from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling securityholders of such shares of Common Stock. We will bear all fees and expenses incident to our obligation to register the shares of Common Stock.

The selling securityholders may sell all or a portion of the shares of Common Stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of Common Stock are sold through underwriters or broker-dealers, the selling securityholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of Common Stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions,

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing or settlement of options or other hedging transactions, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- sales pursuant to Rule 144;
- broker-dealers may agree with the selling securityholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

If the selling securityholders effect such transactions by selling shares of Common Stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling securityholders or commissions from purchasers of the shares of Common Stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of Common Stock or otherwise, the selling securityholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of Common Stock in the course of hedging in positions they assume. The selling securityholders may also sell shares of Common Stock short and deliver shares of Common Stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling securityholders may also loan or pledge shares of Common Stock to broker-dealers that in turn may sell such shares.

The selling securityholders may pledge or grant a security interest in some or all of the Private Pre-funded Warrants and Warrants or shares of Common Stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of Common Stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, as amended, amending, if necessary, the list of selling securityholders to include the pledgee, transferee or other successors in interest as selling securityholders under this prospectus. The selling securityholders also may transfer and donate the shares of Common Stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling securityholders and any broker-dealer participating in the distribution of the shares of Common Stock may be deemed to be "underwriters" within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of Common Stock is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of Common Stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling securityholders and any discounts, commissions or concessions allowed or reallocated or paid to broker-dealers.

Under the securities laws of some states, the shares of Common Stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of Common Stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling securityholder will sell any or all of the shares of Common Stock registered pursuant to the registration statement, of which this prospectus forms a part.

The selling securityholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of Common Stock by the selling securityholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of Common Stock to engage in market-making activities with respect to the shares of Common Stock. All of the foregoing may affect the marketability of the shares of Common Stock and the ability of any person or entity to engage in market-making activities with respect to the shares of Common Stock.

We will pay all expenses of the registration of the shares of Common Stock, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, that a selling securityholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling securityholders against liabilities, including some liabilities under the Securities Act, in accordance with the provisions of the Private Agreements and Registered Direct Purchase Agreements, or the selling securityholders will be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of Common Stock will be freely tradable in the hands of persons other than our affiliates.

EXPERTS

The consolidated financial statements of electroCore, Inc. as of December 31, 2023 and 2022 and for the years ended December 31, 2023 and 2022 incorporated by reference in this Prospectus and in the Registration Statement have been so incorporated in reliance on the report of Marcum LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting. The report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

LEGAL MATTERS

Certain legal matters, including the validity of the shares of Common Stock offered pursuant to the registration statement of which this prospectus forms a part, will be passed upon for us by Dentons US LLP, New York, New York. Dentons US LLP and its members currently own shares of our Common Stock with a market value in excess of \$50,000.

This prospectus is part of the registration statement on Form S-1 we filed with the SEC under the Securities Act and does not contain all the information set forth or incorporated by reference in the registration statement. Whenever a reference is made in this prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus for a copy of such contract, agreement or other document. Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information including our financial statements with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge on the Investor section of our website. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our website address is www.electrocore.com. Information contained on or accessible through our website is not a part of this prospectus and is not incorporated by reference herein, and the inclusion of our website address in this prospectus is an inactive textual reference only.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring to those documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information.

We incorporate by reference the following documents we filed with the SEC pursuant to Section 13 of the Exchange Act and any future filings we will make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act after the date of this prospectus until the termination of the offering of the shares covered by this prospectus (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K):

- our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on [March 13, 2024](#);
- our Quarterly Report on Form 10-Q for the quarter ended [March 31, 2024](#) filed with the SEC on May 8, 2024;
- our Current Reports on Form 8-K filed on [January 16, 2024](#); [March 13, 2024](#); [May 8, 2024](#); and [June 3, 2024](#); and
- the description of our Common Stock which is registered under Section 12 of the Exchange Act, in our registration statement on Form 8-A filed with the SEC on [June 18, 2018](#), including any amendments or reports filed for the purpose of updating such description, including Exhibit 4.1 to our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on March 13, 2024.

You may access Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, Proxy Statement, and amendments, if any, to those documents filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at the SEC's website (www.sec.gov) or our website (www.electrocore.com) as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The reference to our website does not constitute incorporation by reference of the information contained in our website. We do not consider information contained on, or that can be accessed through, our website to be part of this prospectus or the related registration statement.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the information that is incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. You should direct any requests for documents to electroCore, Inc. at 200 Forge Way, Suite 205, Rockaway, New Jersey 07866, Attn: Secretary, or by telephone (973) 290-0097.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following is a statement of the estimated expenses to be incurred by us in connection with the registration of the securities under this registration statement, all of which will be borne by us.

Securities and Exchange Commission Registration Fee	\$	1,772.93
Legal Fees and Expenses	\$	50,000
Accountants' Fees and Expenses	\$	20,000
Miscellaneous	\$	5,000
Total	\$	76,772.93

Item 14. Indemnification of Directors and Officers

Our amended and restated certificate of incorporation contains provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, the personal liability of directors and executive officers for monetary damages for breach of their fiduciary duties as a director or officer. Our amended and restated certificate of incorporation and bylaws provide that we shall indemnify our directors and executive officers and may indemnify our employees and other agents to the fullest extent permitted by the General Corporation Law of the State of Delaware.

Sections 145 and 102(b)(7) of the General Corporation Law of the State of Delaware provide that a corporation may indemnify any person made a party to an action by reason of the fact that he or she was a director, executive officer, employee or agent of the corporation or is or was serving at the request of the corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of an action by or in right of the corporation, no indemnification may generally be made in respect of any claim as to which such person is adjudged to be liable to the corporation.

We have purchased and intend to maintain insurance on behalf of any person who is or was a director or officer of our company against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

We have entered, and intend to continue to enter, into separate indemnification agreements with our directors and executive officers to provide these

directors and executive officers additional contractual assurances regarding the scope of the indemnification set forth in the registrant's amended and restated certificate of incorporation and amended and restated bylaws and to provide additional procedural protections. At present, there is no pending litigation or proceeding involving a director or executive officer of the Company regarding which indemnification is sought. The indemnification provisions in our amended and restated certificate of incorporation, amended and restated bylaws and the indemnification agreements entered into or to be entered into between us and each of our directors and executive officers may be sufficiently broad to permit indemnification of our directors and executive officers for liabilities arising under the Securities Act. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is therefore unenforceable.

Item 15. Recent Sales of Unregistered Securities

Set forth below is information regarding securities sold by us since August 25, 2020 that were not registered under the Securities Act of 1933, as amended (the "Securities Act"). Also included is the consideration, if any, received by us for such shares and options and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed. The information set forth below does not give retroactive effect to the reverse stock split.

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The offers, sales and issuances of the securities described in this section of Item 15 were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act or Rule 506 of Regulation D promulgated under the Securities Act as transactions by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was an accredited investor within the meaning of Rule 501 of Regulation D under the Securities Act and had adequate access, through employment, business or other relationships, to information about the Company.

July 2023 Private Placements

In a concurrent private placement, we issued and sold to certain institutional and accredited investors unregistered PIPE Warrants to purchase up to 837,955 shares of Common Stock. Each share of Common Stock in the Registered Direct Offering was sold together with one-half of one PIPE Warrant at a combined effective offering price of \$4.4125 per share and related warrant. The PIPE Warrants were exercisable commencing six months after the date of issuance at a price of \$4.35 per share and will expire five years on February 2, 2029.

In a separate concurrent private placement, on July 31, 2023, we entered into the Private Agreements with certain officers and directors of the Company, which collectively provided for the sale by the Company of (i) 169,968 shares of Common Stock, and (ii) Private Warrants to purchase up to 84,982 shares of Common Stock. Each share of Common Stock in the concurrent private placement was sold together with one-half of one Private Warrant at a combined effective offering price of \$4.4125 per share and related warrant. The Private Warrants issued and sold to insiders had the same terms as the PIPE Warrants sold to the institutional and accredited investors.

June 2024 Private Placements

In a concurrent private placement, we issued and sold to an institutional and accredited investor unregistered PIPE Warrants to purchase up to 112,500 shares of Common Stock. Each share of Common Stock in the Registered Direct Offering was sold together with one-half of one PIPE Warrant at a combined effective offering price of \$6.4925 per share and related warrant. The PIPE Warrants were immediately exercisable after the date of issuance at a price of \$6.43 per share and will expire five years on June 5, 2029.

In a separate concurrent private placement, on May 31, 2024, we entered into the Private Agreements with certain officers and directors of the Company, which collectively provided for the sale by the Company of (i) 438,191 shares of Common Stock, (ii) Private Pre-funded Warrants to purchase up to 770,119 shares of Common Stock and (iii) Private Warrants to purchase up to 604,150 shares of Common Stock. Each share of Common Stock in this concurrent private placement was sold together with one-half of one Private Warrant at a combined effective offering price of \$6.4925 per share and related warrant. The Private Warrants issued and sold to certain institutional and accredited investors and directors of the Company had the same terms as the PIPE Warrants sold to the institutional and accredited investor.

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Item 16. Exhibits and Financial Statement Schedules

(a) The following exhibits are filed herewith or incorporated herein by reference:
Exhibits

Exhibit No.

3.1** [Certificate of Incorporation of electroCore, Inc. \(Incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 2018 as filed with the Commission on August 14, 2018\)](#)

3.2** [Amended and Restated Bylaws of electroCore, Inc. \(Incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K as filed with Commission on December 3, 2021\)](#)

5.1* [Opinion of Dentons US LLP](#)

10.1**† [electroCore, Inc. 2018 Omnibus Equity Incentive Plan \(Incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-K as filed with Commission on May3, 2023\)](#)

10.2**† [Form of Employee Incentive Stock Option Agreement for electroCore, Inc. 2018 Omnibus Equity Incentive Plan](#)

10.3**† [Form of Non-qualified Stock Option Agreement for electroCore, Inc. 2018 Omnibus Equity Incentive Plan \(Incorporated by reference to Exhibit 10.4 to the Registrant's Annual Report on Form 10-K as filed with Commission on March 8, 2023\)](#)

10.4**† [Form of Employee Restricted Stock Unit Agreement for electroCore, Inc. 2018 Omnibus Equity Incentive Plan \(Incorporated by reference to Exhibit 10.3 to the Registrant's Annual Report on Form 10-K as filed with Commission on March 8, 2023\)](#)

10.5**† [Form of Non-Employee Director Inaugural Deferred Stock Unit Award Agreement for electroCore, Inc. 2018 Omnibus Equity Incentive Plan](#)

10.6**†	Form of Non-Employee Director Inaugural Non-qualified Stock Option Agreement for electroCore, Inc. 2018 Omnibus Equity Incentive Plan
10.7**†	Form of Non-Employee Director Inaugural Restricted Stock Unit Agreement for electroCore, Inc. 2018 Omnibus Equity Incentive Plan
10.8**†	Form of Non-Employee Director Annual Deferred Stock Unit Award Agreement for electroCore, Inc. 2018 Omnibus Equity Incentive Plan
10.9**†	Form of Non-Employee Director Annual Non-qualified Stock Option Agreement for electroCore, Inc. 2018 Omnibus Equity Incentive Plan
10.10**†	Form of Non-Employee Director Annual Restricted Stock Unit Agreement for electroCore, Inc. 2018 Omnibus Equity Incentive Plan
10.11**†	Form of Indemnification Agreement between the Registrant and each of its executive officers and directors

10.12**†	Form of electroCore, Inc. Non-Employee Director Compensation Policy (Incorporated by reference to exhibit 10.14 to the Registrant's Registration Statement on Form S-1, Registration No. 333-274199, as filed with the Commission on August 24, 2023.)
10.13**†	Employment Offer Letter, dated as of September 26, 2019, between electroCore, Inc. and Daniel Goldberger (Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, as filed with the Commission on October 2, 2019)
10.14**†	Brian Posner Employment Agreement, dated as of January 30, 2019 (Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, as filed with the Commission on March 12, 2019)
10.15**†	Amendment to Brian Posner Employment Agreement, dated as of August 8, 2019, (Incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q, as filed with the Commission on August 14, 2019)
10.16**	Form of Pre-Funded Warrant (Incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on July 31, 2023)
10.17**	Form of Common Warrant (Incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on July 31, 2023)
10.18**	Securities Purchase Agreement, dated July 31, 2023 (Registered Direct), by and among the Company and the purchasers named therein (Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on July 31, 2023).
10.19**	Securities Purchase Agreement, dated July 31, 2023 (Private), by and among the Company and the purchasers named therein (Incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on July 31, 2023).
10.20**	Form of Pre-Funded Warrant (Registered Direct) (Incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on June 3, 2024)
10.21**	Form of Common Warrant (Incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on June 3, 2024)
10.22**	Form of Pre-Funded Warrant (Private) (Incorporated by reference to Exhibit 4.3 to the Registrant's Current Report on Form 8-K, filed with the SEC on June 3, 2024)
10.23**	Securities Purchase Agreement, dated June 3, 2024 (Registered Direct), by and among the Company and the purchasers named therein (Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on June 3, 2024).
10.24**	Securities Purchase Agreement, dated May 31, 2024 (Private), by and among the Company and the purchasers named therein (Incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on June 3, 2024).
10.25**†	electroCore, Inc. Executive Severance Policy (Incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q, as filed with the Commission on May 8, 2024)
21.1**	List of subsidiaries of electroCore, Inc. (Incorporated by reference to Exhibit 21.1 to the Registrant's Annual Report on Form 10-K as filed with Commission on March 13, 2024)
23.1*	Consent of Dentons US LLP (included as part of Exhibit 5.1)

23.2*	Consent of Marcum LLP, independent registered public accounting firm
24.1*	Powers of Attorney (included on signature pages)

107*	Filing Fee Table
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- * Filed herewith
- ** Previously filed
- † Indicates management contract or compensatory plan.
- Schedules and exhibits to the Agreement have been omitted pursuant to Item 601(a)(5) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the Securities and Exchange Commission upon request.

(b) Financial Statement Schedules

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or related notes, which are incorporated herein by reference.

Item 17. Undertakings

The undersigned registrant hereby undertakes as follows:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement: (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933; (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; *provided, however,* that paragraphs (1)(i), (ii), and (iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) that are incorporated by reference in the registration statement,
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

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(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser: each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness; *provided,* however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Rockaway, State of New Jersey on July 10, 2024.

electroCore, Inc.

By: /s/ Daniel S. Goldberger

Daniel S. Goldberger
Chief Executive Officer

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POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Daniel S. Goldberger and Brian M. Posner, and each of them, his or her true and lawful attorneys-in-fact and agents with full power of substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by the registration statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, his, hers or their substitute or substitutes, may lawfully do or cause to be done or by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities indicated on the dates indicated.

Signature	Title	Date
/s/ Daniel S. Goldberger Daniel S. Goldberger	Chief Executive Officer and Director (<i>Principal Executive Officer</i>)	July 10, 2024
/s/ Brian M. Posner Brian M. Posner	Chief Financial Officer (<i>Principal Financial Officer and Principal Accounting Officer</i>)	July 10, 2024
/s/ F. Peter Cuneo F. Peter Cuneo	Chairman of the Board of Directors	July 10, 2024
/s/ Thomas J. Errico, M.D. Thomas J. Errico, M.D.	Director	July 10, 2024
/s/ John P. Gandolfo John P. Gandolfo	Director	July 10, 2024
/s/ Julie A. Goldstein Julie A. Goldstein	Director	July 10, 2024
/s/ Thomas M. Patton Thomas M. Patton	Director	July 10, 2024
/s/ Charles S. Theofilos, M.D. Charles S. Theofilos, M.D.	Director	July 10, 2024
/s/ Patricia Wilber Patricia Wilber	Director	July 10, 2024



Dentons US LLP
1221 Avenue of the Americas New
York, NY 10020-1089
United States

dentons.com

July 10, 2024

ELECTROCORE, INC.
200 Forge Way, Suite 205
Rockaway, NJ 07866

Re: [electroCore, Inc. Registration Statement on Form S-1](#)

Ladies and Gentlemen:

In our capacity as counsel to electroCore, Inc., a Delaware corporation (the "Company"), we have been asked to render this opinion in connection with a Registration Statement on Form S-1, filed by the Company with the Securities and Exchange Commission on July 10, 2024 (the "Registration Statement," and the prospectus which forms a part of the Registration Statement, the "Prospectus") under the Securities Act of 1933, as amended (the "Act"), covering the resale by selling securityholders named in the Prospectus of up to an aggregate of 1,924,960 shares (the "Shares") of the Company's common stock, par value \$0.001 per share (the "Common Stock"), consisting of (i) up to 438,191 previously issued shares (the "Shares") of Common Stock, (ii) up to 770,119 shares of Common Stock (the "Pre-funded Warrant Shares") issuable upon exercise of previously issued pre-funded warrants (the "Pre-funded Warrants") and (iii) up to 716,650 shares of Common Stock (the "Warrant Shares") issuable upon exercise of certain previously issued and outstanding warrants (the "Warrants").

We are delivering this opinion to you at your request in accordance with the requirements of Item 16 of Form S-1 and Item 601(b)(5) of Regulation S-K under the Act.

In connection with rendering this opinion, we have examined and are familiar with (i) the Company's certificate of incorporation and bylaws, as amended and restated; (ii) the Registration Statement, including the Prospectus; (iii) the Pre-funded Warrants, (iv) the Warrants, (v) corporate proceedings of the Company relating to the issuance of the securities described herein; and (vi) and such other instruments and documents as we have deemed relevant under the circumstances.

In making the aforesaid examinations, we have assumed the genuineness of all signatures and the conformity to original documents of all copies furnished to us as original or photostatic copies. We have also assumed that the corporate records furnished to us by the Company include all corporate proceedings taken by the Company to date. We have assumed without investigation that there has been no relevant change or development between the dates as of which the information cited in the preceding sentence was given and the date of this letter. As to certain factual matters, we have relied upon a certificate of officers of the Company and have not sought to independently verify such matters.



dentons.com

July 10, 2024
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Based upon the foregoing, and in reliance thereon, and subject to the qualifications, limitations and exceptions stated herein, we are of the opinion, having due regard for such legal considerations as we deem relevant, that (i) the Shares have been duly authorized by the Company, and are validly issued, fully paid and non-assessable, (ii) the Pre-funded Warrant Shares have been duly authorized by the Company, and when issued upon exercise thereof in accordance with the terms and conditions of the Pre-funded Warrants, will be validly issued, fully paid and non-assessable and (iii) the Warrant Shares have been duly authorized by the Company, and when issued upon exercise thereof in accordance with the terms and conditions of the Warrants, will be validly issued, fully paid and non-assessable.

Our opinion herein is expressed solely with respect to the General Corporation Law of the State of Delaware including applicable provisions of the Delaware constitution, but excluding other local laws. Our opinion is based on these laws as in effect on the date hereof and as of the effective date of the Registration Statement, and we assume no obligation to revise or supplement this opinion after the effective date of the Registration Statement should the law be changed by legislative action, judicial decision or otherwise. Where our opinions expressed herein refer to events to occur at a future date, we have assumed that there will have been no changes in the relevant law or facts between the date hereof and such future date. Our opinions expressed herein are limited to the matters expressly stated herein and no opinion is implied or may be inferred beyond the matters expressly stated. Without limiting the foregoing, we are not rendering any opinion as to the compliance with any other federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof.

We hereby consent to the use of our opinion as Exhibit 5.1 to the Registration Statement and to the reference to this firm and this opinion under the heading "Legal Matters" in the Prospectus comprising a part of the Registration Statement and any amendment thereto. In giving such consent, we do not hereby admit that we come within the category of persons whose consent is required under Section 7 of the Act, or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Dentons US LLP

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of electroCore, Inc. on Form S-1 of our report dated March 13, 2024, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, with respect to our audits of the consolidated financial statements of electroCore, Inc. and Subsidiaries as of December 31, 2023 and 2022 and for the years ended December 31, 2023 and 2022, appearing in the Annual Report on Form 10-K of electroCore, Inc. for the year ended December 31, 2023. We also consent to the reference to our firm under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Marcum LLP

Marcum LLP
New York, NY
July 10, 2024

Calculation of Filing Fee Tables

Form S-1
(Form Type)

electroCore, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Fees to Be Paid	Security Type	Security Class Title	Fee Calculation Rule	Amount Registered ⁽¹⁾ (2)	Proposed Maximum Offering Price Per Unit ⁽³⁾	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Fees to Be Paid	Equity	Common Stock, \$0.001 par value	457(c)	1,924,960	\$ 6.24	\$ 12,011,750.40	0.00014760	\$ 1,772.93
						\$ 12,011,750.40		\$ 1,772.93
								—
								—
								\$ 1,772.93

(1) Represents the shares of Common Stock, par value \$0.001 per share (the "Common Stock"), of electroCore, Inc. (the "Registrant") that will be offered for resale by the selling stockholders pursuant to the prospectus to which this exhibit is attached. In addition, pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), the shares being registered hereunder include such indeterminate number of shares of Common Stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

(2) This registration statement registers the resale of 1,924,960 shares of the Registrant's common stock, which consists of (i) 438,191 shares of Common Stock, (ii) 770,119 shares of Common Stock issuable upon the exercise of outstanding pre-funded warrants to purchase shares of Common Stock and (iii) 716,650 shares of Common Stock issuable upon the exercise of outstanding warrants to purchase shares of Common Stock.

(3) With respect to the Common Stock offered by the selling securityholders, estimated at \$6.24 per share, the average of the high and low prices as reported on The Nasdaq Capital Market on July 3, 2024, for the purpose of calculating the registration fee in accordance with Rule 457(c) under the Securities Act.