

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

**FORM S-1
REGISTRATION STATEMENT**
*under
The Securities Act of 1933*

CHROMOCELL THERAPEUTICS CORPORATION
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2836
(Primary Standard Industrial
Classification Code Number)

86-3335449
(I.R.S. Employer
Identification Number)

4400 Route 9 South, Suite 1000
Freehold, NJ 07728
(877)-265-8266
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Francis Knuettel II
Chief Executive Officer and
Chief Financial Officer, President, Treasurer and Secretary
4400 Route 9 South, Suite 1000
Freehold, NJ 07728
Tel. No.: 732-514-2636
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

David E. Danovitch, Esq.
Charles E. Chambers, Jr., Esq.
Sullivan & Worcester LLP
1251 Avenue of the Americas
New York, NY 10020
(212) 660-3060

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective, as determined by the Selling Stockholder.

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, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐
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 Exchange 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 preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

PROSPECTUS

SUBJECT TO COMPLETION, DATED JULY 29, 2024

CHROMOCELL THERAPEUTICS CORPORATION

chromocell

2,000,000 SHARES OF COMMON STOCK

This prospectus relates to the offer and resale of up to 2,000,000 shares (the "Purchase Shares") of common stock, \$0.0001 par value per share ("Common Stock"), of Chromocell Therapeutics Corporation ("Chromocell", the "Company", "we", "us" or "our") by Tikkun Capital LLC ("Tikkun", "Tikkun Capital" or the "Selling Stockholder") issued pursuant to a common stock purchase agreement, dated July 26, 2024 that we entered into with Tikkun (the "CEF Purchase Agreement").

The shares of Common Stock being offered by Tikkun may be issued pursuant to the CEF Purchase Agreement. We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of our Common Stock by Tikkun. However, we may receive up to \$30.0 million in aggregate gross proceeds from sales of our Common Stock to Tikkun that we may make under the CEF Purchase Agreement, from time to time after the date of this prospectus. See the sections entitled "The Tikkun Committed Equity Financing" beginning on page 21 for a description of the transaction contemplated by the CEF Purchase Agreement and "Selling Stockholder" for additional information regarding Tikkun.

Tikkun may sell the shares of our Common Stock included in this prospectus in a number of different ways and at varying prices. We provide more information about how Tikkun may sell the shares in the section entitled "Plan of Distribution." Tikkun is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended (the "Securities Act").

Tikkun will pay all brokerage fees and commissions and similar expenses in connection with the offer and resale of the shares by Tikkun pursuant to this prospectus. We will pay the expenses (except brokerage fees and commissions and similar expenses) incurred in registering under the Securities Act the offer and resale of the shares included in this prospectus by Tikkun, including legal and accounting fees. See "Plan of Distribution" beginning on page 36.

Pickwick Capital Partners, LLC is acting as placement agent (the "Placement Agent") in connection with the transactions contemplated by the Purchase Agreement. The Placement Agent will receive a cash fee of \$10,000. See "Plan of Distribution" beginning on page 36.

Our Common Stock is listed on the NYSE American LLC ("NYSE American") under the symbol "CHRO." On July 26, 2024, the closing price of our Common Stock was \$1.46.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings. See "Prospectus Summary—Implications of Being an Emerging Growth Company and a Smaller Reporting Company" beginning on page 6.

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

Investing in our Common Stock involves a high degree of risk. See the section entitled "Risk Factors" beginning on page 10. You should carefully consider these risk factors and the documents which are incorporated by reference, as well as the other information contained in this prospectus, before you invest.

The date of this prospectus is , 2024

TABLE OF CONTENTS

	Page
<u>PROSPECTUS SUMMARY</u>	1
<u>THE OFFERING</u>	4
<u>RISK FACTORS</u>	10
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	19
<u>THE TIKKUN COMMITTED EQUITY FINANCING</u>	21
<u>USE OF PROCEEDS</u>	29
<u>DIVIDEND POLICY</u>	30
<u>SELLING STOCKHOLDER</u>	31
<u>DESCRIPTION OF COMMON STOCK</u>	33
<u>PLAN OF DISTRIBUTION</u>	36
<u>LEGAL MATTERS</u>	38
<u>EXPERTS</u>	38
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	38
<u>INCORPORATION BY REFERENCE</u>	39

ABOUT THIS PROSPECTUS

Neither we nor the Selling Stockholder have authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, in any free writing prospectuses or in the documents incorporated by reference prepared by or on behalf of us or to which we have referred you. We and the Selling Stockholder do not take responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the securities offered hereby, and only under circumstances and in jurisdictions where it is lawful to do so. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. This prospectus is not an offer to sell securities, and it is not soliciting an offer to buy securities, in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus only, regardless of the time of delivery of this prospectus or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

For investors outside the United States: we and the Selling Stockholder have not done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about and observe any restrictions relating to this offering of the shares of Common Stock and the distribution of this prospectus outside the United States.

Solely for convenience, our trademarks and tradenames referred to in this prospectus and the registration statement of which it forms a part may appear without the ® or ™ symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights to these trademarks and tradenames.

Information contained in, and that can be accessed through our website, www.chromocell.com, does not constitute part of this prospectus or the registration statement of which it forms a part.

INDUSTRY AND MARKET DATA

We obtained the industry, statistical and market data in this prospectus from our own internal estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. In presenting this information, we have made assumptions based on such data and other similar sources, and on our knowledge of, and our experience to date in, the potential markets for our compounds. Although we believe the data from these third-party sources is reliable, the industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section entitled "Risk Factors" beginning on page 10 and elsewhere in this prospectus and in any documents that we incorporate by reference into this prospectus and the registration statement of which this prospectus forms a part. These and other factors could cause results to differ materially from those expressed in the estimates made by third parties and by us.

BASIS OF PRESENTATION

We were incorporated in Delaware on March 19, 2021. On August 10, 2022, we entered into that certain Contribution Agreement (the "Contribution Agreement") with Chromocell Corporation, a Delaware corporation ("Chromocell Holdings"). Pursuant to the Contribution Agreement, effective July 12, 2022 (the "Contribution Date"), Chromocell Holdings contributed all assets, liabilities and results of operations related to Chromocell Holdings' therapeutic business, including all patents, pre-clinical and Phase 1 study results and data, and trade secrets related to the CC8464 compound, in exchange for the issuance by us of 10,000,000 shares of Common Stock and (ii) 600,000 shares of Series A Convertible Preferred Stock (the "Series A Preferred Stock"). Prior to the Contribution Date, we had only nominal assets and liabilities. Accordingly, the financial statements presented in this prospectus for periods prior to the Contribution Date have been prepared on a "carve-out" basis from the financial statements of Chromocell Holdings to represent our financial position and performance as if it had existed on a stand-alone basis. The financial statements presented in this prospectus for periods from and after the Contribution Date reflect our financial position and performance as a stand-alone entity.

All of the assets, liabilities and results of operations of the Company as of and for the periods prior to the Contribution Date were identified based on the assets contributed to the Company from Chromocell Holdings. Management believes the assumptions underlying the Company's carve-out financial statements are reasonable. Nevertheless, the financial statements may not include all of the actual expenses that would have been incurred had the Company operated as a standalone company during the periods presented, and may not reflect the Company's results of operations, financial position and cash flows had the Company operated as a standalone company during the periods presented. Actual costs that would have been incurred if the Company had operated as a standalone company would depend on multiple factors, including organizational structure and strategic decisions made in various areas, including information technology and infrastructure.

On August 2, 2023, we entered into a Side Letter to the Contribution Agreement with Chromocell Holdings (the "Holdings Side Letter"). Pursuant to the Holdings Side Letter, and upon closing of the initial public offering by the Company on February 21, 2024 (the "IPO"): (a) Chromocell Holdings re-assumed all \$1.6 million in direct liabilities previously assumed by the Company in accordance with the Contribution Agreement, (b) Chromocell Holdings waived the Company's obligations to make a cash payment in the amount of \$0.6 million to Chromocell Holdings, and (c) in consideration thereof, the Company issued to Chromocell Holdings 2,600 shares of Series C Convertible Redeemable Preferred Stock of the Company, par value of \$0.0001 per share (the "Series C Preferred Stock").

In connection with the completion of the IPO: (A) we effected a 1-for-9 reverse stock split with respect to our Common Stock effective February 15, 2024 (the "Reverse Stock Split"), (B) all 600,000 issued and outstanding shares of our Series A Preferred Stock automatically converted into 499,429 shares of Common Stock, (C) \$389,757 and accrued interest of approximately \$28,336 as of February 21, 2024 outstanding under our senior secured convertible notes issued in the April Bridge Financing (as defined below) after giving effect to the Representative Affiliate Transactions (as defined below), automatically converted into approximately 87,109 shares of Common Stock, (D) \$197,421 and accrued interest of \$8,169 as of February 21, 2024 outstanding under our senior secured convertible notes issued in the September Bridge Financing (as defined below) after giving effect to the Representative Affiliate Transactions, automatically converted into approximately 43,385 shares of Common Stock, which includes an additional 549 shares of Common Stock issuable as consideration for the September Bridge Financing (the "Bonus Shares"), (E) we issued 37,500 shares of Common Stock to an investor as consideration for its previous agreement to provide funding that is no longer necessary in connection with the IPO, (F) we effected the Representative Affiliate Transactions, and (G) we effected the transactions contemplated by the Holdings Side Letter, and issue an aggregate of 2,600 shares of Series C Preferred Stock to Chromocell Holdings pursuant thereto. We refer to these actions as the "IPO Transactions." In this prospectus, we include certain metrics on an "as adjusted" basis to give effect to the IPO Transactions.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus or incorporated by reference into this prospectus. It may not contain all the information that may be important to you. You should read the entire prospectus carefully, including the section entitled "Risk Factors" beginning on page 10, the documents incorporated by reference and our financial statements and the related notes included elsewhere in this prospectus before making an investment decision to purchase our securities.

In this prospectus, unless we indicate otherwise or the context requires, references to the "Company," "Chromocell," "we," "our," "ours," and "us" refer to Chromocell Therapeutics Corporation. The following summary is qualified in its entirety by the more detailed information and financial statements and notes thereto included elsewhere in this prospectus.

Our Business

Overview

We are a clinical-stage biotech company focused on developing and commercializing new therapeutics to alleviate pain. Our clinical focus is to selectively target the sodium ion-channel known as "Nav1.7", which has been genetically validated as a pain receptor in human physiology. A Nav1.7 blocker is a chemical entity that modulates the structure of the sodium-channel in a way to prevent the transmission of pain perception to the central nervous system ("CNS"). Our goal is to develop a novel and proprietary class of Nav blockers that target the body's peripheral nervous system.

We have formally launched two programs developing pain treatment therapeutics, both based on the same proprietary molecule, as follows:

Neuropathic Pain: CC8464 is being developed to address certain types of neuropathic pain. The chemical characteristics of CC8464 restrict its entry into the CNS and limit its effect to the Nav1.7 receptors in the peripheral nervous system, which consists of the nerves outside the brain and spinal cord. Activation of other receptors in the CNS can result in side effects, including addiction and other centrally mediated adverse effects. Since CC8464 is designed to not penetrate the CNS it is highly unlikely to produce CNS mediated side effects including euphoria or addiction. Based on its characteristics, preclinical studies (described below) and the Phase 1 studies we have completed to date, we believe that CC8464, if approved, could become an attractive option for both patients and physicians as a treatment for moderate-to-severe pain in Erythromelalgia ("EM") and idiopathic small fiber neuropathy ("iSFN").

We conducted four Phase 1 trials with 207 patients. The results showed that CC8464 has a good overall tolerability and demonstrated no liver or renal toxicity, no central nervous system changes and no cardiovascular findings but may cause rashes in certain patients. The occurrence of rashes is not uncommon in the class of molecules to which CC8464 belongs and the rashes were resolved in all cases with topical steroids and/or topical antihistamines (with the exception of one patient requiring systemic steroids).

As a result of the potential for rashes, following discussions with the U.S. Food and Drug Administration ("FDA"), we decided to launch a slow dose escalation study to further evaluate the incidence of rashes. By titrating the dose over nine weeks, we anticipate that we will reduce or eliminate this side effect. We expect that the slow dose escalation study will also help determine the need for dose escalation in the final treatment regime. Even though the FDA has in the past approved drugs that listed rashes as a potential side effect, we do not know if CC8464 will be approved by the FDA (or any foreign authority).

We anticipate that the dose escalation will enroll the first patient dosing in the third quarter of 2024. The dose escalation trial will enroll approximately 20 healthy volunteers who will receive CC8464 over a period of approximately nine weeks, with the dose escalation study expected to take approximately nine months in total. We anticipate that the slower dose escalation will decrease the likelihood of drug-related skin reactions. The primary endpoint of the dose escalation trial will be safety and tolerability of the slower dose titration; however, we will also be measuring blood concentrations of CC8464, which will allow us to better understand the pharmacokinetics of CC8464. Even if it is ultimately determined that we will need an escalation period for chronic pain treatment therapy, which patients could well take for the remainder of their lives, we do not believe the dose escalation approach is consequential.

We are conducting the escalation trial in Australia to avail ourselves of a 43.5% tax credit for clinical expenses incurred in Australia and, on January 9, 2023, established an Australian subsidiary through which the work will be conducted. The location of the proof-of-concept ("POC") has not been determined at this time, with availability of facilities and patient population, costs, tax credits, centers of excellence in the respective fields (EM or iSFN) are all factors in the ultimate determination of the location.

We are currently working on the development of the Phase 2a POC plan and expect to launch the Phase 2a POC study in 2025 to assess the potential efficacy of CC8464 in EM and iSFN patients. Both are orphan indications for which we plan to apply for orphan drug designations. The orphan indication may decrease the scope of the ultimate development program that is necessary for approval and is associated with a marketing exclusivity period from the FDA along with some tax advantages.

Though the Phase 2a POC study design has not yet been completed, the study will take approximately twelve months after it is initiated. The primary endpoint will be the amount of pain experienced from EM or iSFN with secondary endpoints including other measurements like pain relief and neuropathy scores. The final design may change based on feedback from regulatory authorities or information learned during the dose escalation trial.

The potential population for EM in the United States is estimated to be between 5,000 and 50,000 patients and the potential population for iSFN in the United States is estimated to be between 20,000 and 80,000 patients. In both instances, we expect patients would potentially take our drug for the remainder of their lives, and given the lack of good therapeutic alternatives, we expect to have a robust, ongoing, and durable market.

The Phase 2a results will have significance beyond EM and iSFN and provide important insights about Nav1.7 as a potential target to find novel pain medications as an alternative to opioids, the continuing primary standard of care in analgesics. We believe that positive results from the Phase 2a study could not only act as support for CC8464's potential in EM and iSFN but may also provide guidance of its potential for other indications of peripheral neuropathic pain.

Eye Pain: Based on the same proprietary molecule as CC8464, our newly launched program, titled CT2000, is for the potential treatment of both acute and chronic eye pain. Nav1.7 receptors are present on the cornea, making it a viable biological target for treating eye pain. Eye pain may occur with various conditions, including severe dry eye disease, trauma and surgery. Existing therapies for eye pain (such as steroids, topical non-steroidal anti-inflammatory agents, lubricants, local anesthetics) are limited in their effectiveness and/or limited in the duration that they may be prescribed because of safety issues. We intend to explore the viability of developing CT2000 as a topical agent for the relief of eye pain. A potential advantage of this approach is that topical administration of CT2000 is unlikely to lead to any hypersensitivity or skin reactions, like what was noted with systemic administration of CC8464, because the systemic absorption from a topical administration would be extremely limited. We have commenced development of a topical ophthalmic formulation of CT2000 that would initially be evaluated for ophthalmic toxicology and then followed by a POC trial in patients. We expect the trials for this ophthalmic formulation of CT2000 to start in 2025.

Current options for the treatment of ocular pain center on the use of corticosteroids and non-steroidal anti-inflammatory drug ("NSAID") based therapeutics. These options suffer from sight-threatening complications such as Glaucoma and corneal melting, thus there is a large unmet need for other approaches. As an example of the potential patient population, we estimate that there are approximately 5 million cases of corneal abrasions per year in the United States. In addition, other potential indications associated with eye pain include:

- severe dry eye,
- side effects from photorefractive keratectomy (PRK) and pterygium surgery,
- second eye cataract surgery,
- neuropathic corneal pain, and
- severe uveitis and severe iritis/scleritis.

As Nav1.7 receptors are present on the cornea and is a viable biological target for treating eye pain, we believe that we have a sound scientific basis for our ability to treat a multitude of eye pain indications. We are in the process of formulating CT2000 eye drops and expect to move into animal toxicity studies in the second half of 2024. From there, we intend to move into proof-of-concept studies in humans.

We may further expand our pipeline with other internal or external compounds in the future, but all other internally discovered compounds are pre-clinical and no commercial discussions about in-licensing have been initiated to date, other than as disclosed in this Report with respect to the licensing of the "Spray Formulations."

Corporate Information

Chromocell Holdings, our predecessor, was founded in 2002 to commercialize “Chromovert Technology,” a proprietary discovery technology with a potential broad range of applications in the biomedical field, including the potential capability to create complex targets (cell-lines) needed for effective high-throughput screening that is commonly used both in therapeutics and flavors discovery. Initially, Chromocell Holdings focused on applications in the food and flavors space.

In 2012, Chromocell Holdings started applying the technology in the therapeutics area. Chromocell Holdings focused its efforts on projects where it believed that the discovery of novel medications was largely held back by difficulties creating complex targets (cell lines) needed for effective high-throughput screening. The Nav1.7 ion-channel is a complex target with a well-established role in pain modulation and management believed it presented an opportunity to apply the technology in an area of unmet medical need. Upon creating the necessary Nav1.7 assays and conducting a large high-throughput campaign, Chromocell Holdings’ research team discovered CC8464. After pre-clinical studies and assessments, an Investigational New Drug Application (“IND”) was filed and CC8464 was evaluated in a Phase 1 study with more than 100 subjects. In 2015, Chromocell Holdings signed an agreement with Astellas Pharma Inc. (“Astellas”) for the joint development and commercialization of CC8464. Astellas terminated such agreement in 2018 and returned all rights, including all intellectual property rights on CC8464, to Chromocell Holdings.

As both the flavors and the therapeutics businesses grew and increasingly required different expertise, capital and business concepts, Chromocell Holdings made the strategic decision to separate the two businesses.

Chromocell Therapeutics Corporation (the “Company,” “we,” “us” and “our”) was incorporated in Delaware on March 19, 2021. Our principal executive offices are located at 4400 Route 9 South, Suite 1000, Freehold, NJ 07728, and our telephone number is (877) 265-8266. Our website is www.chromocell.com. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider information on our website to be part of this prospectus.

We make available free of charge under the “Investors” section of our website all of our filings with the Securities and Exchange Commission (the “SEC”), including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and amendments to such documents, each of which is provided on our website as soon as reasonably practicable after we electronically file or furnish, as applicable, the information with the SEC.

THE OFFERING

On July 26, 2024 (the "Closing Date"), we entered into the CEF Purchase Agreement with Tikkun, providing for a committed equity financing facility (the "Committed Equity Financing"), pursuant to which, upon the terms and subject to the satisfaction of the conditions contained in the CEF Purchase Agreement, Tikkun has committed to purchase, at our direction in our sole discretion, up to an aggregate of \$30,000,000 ("Total Commitment") of Purchase Shares, subject to certain limitations set forth in the CEF Purchase Agreement, from time to time during the term of the CEF Purchase Agreement. Concurrently with the execution of the Purchase Agreement, we and Tikkun also entered into a Registration Rights Agreement, dated as of July 26, 2024 (the "Registration Rights Agreement"), pursuant to which we agreed to file with the SEC one or more registration statements to register under the Securities Act the offer and resale by Tikkun of all of the shares of Common Stock that may be issued and sold by us to Tikkun from time to time under the CEF Purchase Agreement.

Sales of Purchase Shares by the Company to Tikkun under the CEF Purchase Agreement, if any, may occur, from time to time at our sole discretion, over a period commencing upon the initial satisfaction of all conditions to Tikkun's purchase obligations set forth in the CEF Purchase Agreement (the "Commencement," and the date on which the Commencement occurs, the "Commencement Date"), including that the initial registration statement we are required to file with the SEC pursuant to the Registration Rights Agreement, which is the registration statement of which this prospectus forms a part, is declared effective by the SEC, and ending on the first day of the month next following the 24-month anniversary of the Closing Date, unless the CEF Purchase Agreement is terminated earlier under its terms.

From and after the Commencement Date, we will have the right, but not the obligation, from time to time at our sole discretion, to direct Tikkun to purchase amounts of Purchase Shares that are specified by the Company to Tikkun in writing, subject to certain maximum amounts calculated pursuant to the CEF Purchase Agreement. The purchase price per share to be paid by Tikkun for Purchase Shares that we may elect to sell to Tikkun will be equal to 90% of the lowest daily VWAP of the Common Stock during the trading day immediately following the date that a VWAP Purchase Notice is timely delivered from us to Tikkun, provided that (i) we may not deliver more than one VWAP Purchase Notice to Tikkun on any single trading day, (ii) at least three trading days have elapsed since the trading day on which the most recent VWAP Purchase Notice was delivered by us to Tikkun, (iii) the closing sale price of the Common Stock on such date is not lower than \$0.10, as adjusted for stock splits and similar transactions (the "Threshold Price"), and (iv) all Purchase Shares subject to all prior VWAP Purchases by Tikkun under the CEF Purchase Agreement have been received by Tikkun electronically as set forth in the CEF Purchase Agreement.

The maximum number of Purchase Shares that may be required to be purchased pursuant to a VWAP Purchase Notice will be equal to the lowest of: (i) 100% of the average daily trading volume in the Common Stock for the five consecutive trading day period ending on (and including) the trading day immediately preceding the applicable day Tikkun receives a VWAP Purchase Notice; (ii) the product obtained by multiplying (A) the daily trading volume in the Common Stock on the applicable day Tikkun receives a VWAP Purchase Notice and (B) 0.30; and (iii) the quotient obtained by dividing (A) \$2,000,000 by (B) the VWAP of the Common Stock on the trading day immediately preceding the applicable day Tikkun receives a VWAP Purchase Notice. There are no upper limits on the price per share that Tikkun must pay for Purchase Shares the Company directs Tikkun to purchase in a VWAP Purchase under the CEF Purchase Agreement. The purchase price per Purchase Share that the Company directs Tikkun to purchase in a VWAP Purchase under the CEF Purchase Agreement will be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction during the period used to determine the purchase price to be paid by Tikkun for such shares in such VWAP Purchase (as defined below).

Tikkun has no right to require us to sell any Purchase Shares to Tikkun, but Tikkun is obligated to make purchases of Purchase Shares as directed by us, subject to the satisfaction of conditions set forth in the CEF Purchase Agreement at Commencement and thereafter at each time that the Company may direct Tikkun to purchase the Purchase Shares under the CEF Purchase Agreement. Actual sales of Purchase Shares by the Company to Tikkun under the CEF Purchase Agreement, if any, will depend on a variety of factors to be determined by us in our sole discretion from time to time, including, among others, market conditions, the trading price of the Common Stock and determinations by the Company as to the appropriate sources of funding for the Company and its operations.

We may not issue or sell any shares of our Common Stock to Tikkun under the CEF Purchase Agreement which, when aggregated with all other shares of Common Stock then beneficially owned by Tikkun and its affiliates (as calculated pursuant to Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Rule 13d-3 promulgated thereunder), would result in Tikkun beneficially owning more than 4.99% of the outstanding shares of the Common Stock (the "Beneficial Ownership Limit").

Under the applicable rules of the NYSE American, in no event may we issue to Tikkun and any of its affiliates under the CEF Purchase Agreement, or otherwise, more than 1,152,764 shares of Common Stock, which number of shares represents 19.99% of the shares of the Common Stock outstanding immediately prior to the execution of the CEF Purchase Agreement (the "Exchange Cap"), unless we obtain stockholder approval to issue shares of Common Stock to Tikkun and any of its affiliates in excess of the Exchange Cap under the CEF Purchase Agreement, or otherwise, and in accordance with applicable NYSE American listing rules (the "Stockholder Approval"). The Exchange Cap will not be applicable to limit the number of shares of Common Stock that we may sell to Tikkun in any VWAP Purchase that we effect pursuant to the CEF Purchase Agreement (if any), to the extent the purchase price per share paid by Tikkun for the shares of Common Stock in such VWAP Purchase is equal to or greater than the greater of book or market value of the Common Stock (calculated in accordance with the applicable listing rules of the NYSE American) at the time we deliver the VWAP Purchase Notice for such VWAP Purchase to Tikkun, adjusted as required by the NYSE American to take into account our payment of the Commitment Fee (as defined below) to Tikkun and the amount paid as reimbursement for the legal fees and disbursements of Tikkun's counsel in connection with this Committed Equity Financing, each as described in more detail below, and otherwise as may be necessary to ensure compliance with the applicable rules of the NYSE American. In any event, the CEF Purchase Agreement specifically provides that we may not issue or sell any shares of Common Stock under the CEF Purchase Agreement if such issuance or sale would breach any applicable rules or regulations of NYSE American.

The net proceeds from sales, if any, under the CEF Purchase Agreement to the Company will depend on the frequency and prices at which we sell shares of our Common Stock to Tikkun. We expect that any proceeds received by us from such sales to Tikkun will be used to continue our clinical and pre-clinical work on CC8464 and CT2000 and for working capital and general corporate purposes.

There are no restrictions on future financings, rights of first refusal, participation rights, penalties or liquidated damages in the CEF Purchase Agreement or Registration Rights Agreement, other than a prohibition (with certain limited exceptions) on the Company entering into specified "Variable Rate Transactions" (as such term is defined in the CEF Purchase Agreement). Such transactions include, among others, the issuance of convertible securities with a conversion or exercise price that is based upon or varies with the trading price of the Common Stock after the date of issuance, or our effecting or entering into an agreement to effect an "equity line of credit," an "at the market offering" or other similar continuous offering with a third party, in which we may offer, issue or sell Common Stock or any securities exercisable, exchangeable or convertible into Common Stock at future determined prices. Subject to specified exceptions included in the CEF Purchase Agreement, such restrictions shall remain in effect for a period commencing on the Closing Date and ending on first day of the month next following the 24-month anniversary of the Closing Date. During the term of the CEF Purchase Agreement, Tikkun covenanted not to enter into or effect, in any manner whatsoever, directly or indirectly, any short sales of the Common Stock or hedging transaction which establishes a net short position with respect to the Common Stock

As consideration for Tikkun's commitment to purchase the Purchase Shares upon the terms of and subject to satisfaction of the conditions set forth in the CEF Purchase Agreement, we have paid \$750,000 in cash to Tikkun as a commitment fee (the "Commitment Fee") on the first trading day immediately following the Closing Date. In addition, as required under the CEF Purchase Agreement, the Company has reimbursed Tikkun for the reasonable legal fees and disbursements of Tikkun's legal counsel in the amount of \$75,000.

The CEF Purchase Agreement will automatically terminate upon the earliest of (i) the first day of the month next following the 24-month anniversary of the Closing Date, (ii) Tikkun's purchase of Purchase Shares having an aggregate purchase price equal to Total Commitment under the CEF Purchase Agreement, or (iii) the occurrence of certain other events set forth in the CEF Purchase Agreement. The Company has the right to terminate the CEF Purchase Agreement at any time after Commencement, at no cost or penalty, upon five trading days' prior written notice to Tikkun, subject to certain conditions and the survival of certain provisions of the CEF Purchase Agreement and the Registration Rights Agreement. Tikkun may terminate the CEF Purchase Agreement upon five trading days' prior written notice after the occurrence of certain events, including the occurrence of a Material Adverse Effect or a Fundamental Transaction (as such terms are defined in the CEF Purchase Agreement) or upon the occurrence of certain other events as set forth in the CEF Purchase Agreement. Neither the Company nor Tikkun may assign or transfer their respective rights and obligations under the CEF Purchase Agreement, and no provision of the CEF Purchase Agreement or the Registration Rights Agreement may be modified or waived by the Company or Tikkun.

The CEF Purchase Agreement and the Registration Rights Agreement contain customary representations, warranties, conditions and indemnification obligations of the parties. The representations, warranties and covenants contained in such agreements were made only for purposes of such agreements and as of specific dates, were solely for the benefit of the parties to such agreements and may be subject to limitations agreed upon by the contracting parties.

We do not know what the purchase price for our Common Stock will be and therefore cannot be certain as to the number of Purchase Shares we might issue to Tikkun under the CEF Purchase Agreement after the Commencement Date. Although the CEF Purchase Agreement provides that we may sell up to \$30.0 million of our Common Stock to Tikkun, only 2,000,000 shares of our Common Stock are being registered for resale by Tikkun under this prospectus, which represents up to 2,000,000 Purchase Shares that may be issued to Tikkun from and after the Commencement Date, if and when we elect to sell shares to Tikkun under the CEF Purchase Agreement. Depending on the market prices of our Common Stock at the time we elect to issue and sell Purchase Shares to Tikkun under the CEF Purchase Agreement, we may need to register for resale under the Securities Act additional Purchase Shares in order to receive aggregate gross proceeds equal to the \$30.0 million Total Commitment available to us under the CEF Purchase Agreement.

As of July 26, 2024, there were 5,766,704 shares of our Common Stock outstanding, of which 2,206,205 shares are estimated to be held by non-affiliates. If all of the 2,000,000 shares offered by Tikkun for resale under this prospectus were issued and outstanding as of the date hereof (without taking into account the Exchange Cap limitation), such shares would represent approximately 25.8% of the total number of shares of our Common Stock outstanding and approximately 47.5% of the total number of shares of our Common Stock held by non-affiliates outstanding, in each case, as of the date hereof. If we issue and sell more than the 2,000,000 shares offered under this prospectus to Tikkun, which we have the right, but not the obligation, to do, we must first (i) the Stockholder Approval and (ii) register for resale under the Securities Act any such additional shares, which could cause additional substantial dilution to our stockholders. The number of shares ultimately offered for resale by Tikkun is dependent upon the number of Purchase Shares we may elect to sell to Tikkun under the CEF Purchase Agreement from and after the Commencement Date.

There are substantial risks to our stockholders as a result of the sale and issuance of Purchase Shares to Tikkun under the CEF Purchase Agreement. These risks include substantial dilution, significant declines in our stock price and our inability to draw sufficient funds when needed. See "Risk Factors" beginning on page 10. Issuances of our Common Stock in this offering will not affect the rights or privileges of our existing stockholders, except that the economic and voting interests of each of our existing stockholders will be diluted as a result of any such issuance. Although the number of shares of our Common Stock that our existing stockholders own will not decrease, the shares owned by our existing stockholders will represent a smaller percentage of our total outstanding shares after any such issuances to Tikkun.

Implications of Being an Emerging Growth and Smaller Reporting Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). An emerging growth company may take advantage of relief from certain reporting requirements and other burdens that are otherwise applicable generally to public companies. These provisions include:

- reduced obligations with respect to financial data;
- an exception from compliance with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act");
- reduced disclosure about our executive compensation arrangements in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirements of holding non-binding advisory votes on executive compensation or golden parachute arrangements.

We may take advantage of these provisions for up to five years or such earlier time that we no longer qualify as an emerging growth company. We would cease to be an emerging growth company upon the earliest of:

- the last day of the fiscal year on which we have \$1.235 billion or more in annual revenue,

- the date on which we become a “large accelerated filer” (i.e., as of our fiscal year end, the total market value of our common equity securities held by non-affiliates is \$700 million or more as of June 30),
- the date on which we issue more than \$1.0 billion of non-convertible debt over a three-year period, or
- the last day of our fiscal year following the fifth anniversary of the date of the completion of the offering of our IPO.

We may choose to take advantage of some but not all of these reduced reporting burdens.

In addition, under the JOBS Act, emerging growth companies can take advantage of an extended transition period and delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to use this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for private companies. If we were to subsequently elect instead to comply with public company effective dates, such election would be irrevocable pursuant to the JOBS Act.

Also, we are a “smaller reporting company” (and may continue to qualify as such even after we no longer qualify as an emerging growth company). For as long as we qualify as a “smaller reporting company,” we may provide reduced disclosure in the public filings that we make with the SEC than larger public companies, such as the inclusion of only two years of audited financial statements and only two years of management's discussion and analysis of financial condition and results of operations disclosure.

As a result of qualifying as an emerging growth company and a smaller reporting company, to the extent we take advantage of the allowable reduced reporting burdens, the information that we provide to our stockholders may be different than what you might receive from other public reporting companies in which you hold equity interests.

Summary Risk Factors

We are subject to a number of risks that you should be aware of before making an investment decision to purchase our securities. You should carefully consider all of the information set forth in this prospectus and, in particular, should evaluate the specific factors set forth in the section titled “Risk Factors”, beginning on page 10, in deciding whether to invest in our securities. Among these important risks are the following:

- The report of the independent registered public accounting firm on our 2023 and 2022 financial statements contains a going concern qualification;
- We have identified material weaknesses in our internal control over financial reporting;
- The market price and trading volume of the Company's Common Stock may experience rapid and substantial volatility, which could cause a purchaser of our Common Stock to incur substantial losses;

- Our Common Stock is currently listed on the NYSE American. NYSE American may delist our Common Stock from trading, which could limit investors' ability to make transactions in our securities and subject us to additional trading restrictions;
- Provisions in our corporate charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management;
- Our amended and restated certificate of incorporation (which, as so amended and restated, we refer to as our "certificate of incorporation") and our bylaws, as amended (which we refer to as our "bylaws") provide that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees;
- The Series C Preferred Stock of the Company has a liquidation preference over our Common Stock;
- The price of our securities may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of our securities;
- Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies, CC8464 or CT2000;
- It is not possible to predict the actual number of shares we will sell under the CEF Purchase Agreement, or the actual gross proceeds resulting from those sales. We may not have access to the full amount available under the CEF Purchase Agreement with Tikkun;
- Sales of a substantial number of our Common Stock in the public market by our existing stockholders could cause the price of our shares of our Common Stock to fall;
- Investors who buy shares of our Common Stock at different times will likely pay different prices;
- We may require additional financing to sustain our operations and, without it, we will not be able to continue operations;
- The terms of the CEF Purchase Agreement limit the amount of shares of Common Stock we may issue to Tikkun, which may have an adverse effect on our liquidity;
- Future sales of substantial amounts of our Common Stock, or the possibility that such sales could occur, could adversely affect the market price of our Common Stock;
- Management will have broad discretion as to the use of the proceeds from our sale of Common Stock to Tikkun under the CEF Purchase Agreement, and such uses may not improve our financial condition or market value; and
- The other factors set forth under "Risk Factors."

These and other risks are more fully described in the section entitled "Risk Factors" beginning on page 10 in this prospectus. If any of these risks actually occurs, our business, financial condition, results of operations, cash flows, and prospects could be materially and adversely affected. As a result, you could lose all or part of your investment in our securities.

Securities Offered

Common Stock offered by the Selling Stockholder	Up to 2,000,000 Purchase Shares.
Common Stock outstanding prior to this offering	5,766,704 shares.
Common Stock outstanding after this offering	7,766,704 shares.
Use of proceeds	<p>We will not receive any proceeds from the resale of shares of our Common Stock included in this prospectus by the Selling Stockholder. We may receive up to \$30.0 million in aggregate gross proceeds under the CEF Purchase Agreement from sales of our Common Stock that we elect to make to Tikkun pursuant to the CEF Purchase Agreement, if any, from time to time in our sole discretion, from and after the Commencement Date.</p> <p>Any proceeds that we receive from the sales of the Purchase Shares to Tikkun under the CEF Purchase Agreement will be used to continue our clinical and pre-clinical work on CC8464 and CT2000. We intend to use the remaining proceeds, if any, for working capital and general corporate purposes. See "Use of Proceeds" beginning on page 29.</p>
Risk factors	See "Risk Factors" beginning on page 10 and other information included in this prospectus and under similar headings in the other documents incorporated by reference into this prospectus for a discussion of factors you should consider carefully before deciding to invest in our securities.
Transfer agent and registrar	Our transfer agent and registrar for our Common Stock is Nevada Agency and Transfer Company, located at 50 W. Liberty Street, Suite 880, Reno, NV 89501.
NYSE American symbol for Common Stock	Our Common Stock is listed on NYSE American under the symbol "CHRO".
<p>Unless we specifically state otherwise or the context otherwise requires, the share information in this prospectus is based on 5,766,704 shares of Common Stock outstanding as of July 26, 2024 and:</p> <ul style="list-style-type: none"> • assumes no conversion of the Series C Preferred Stock issued at the close of the IPO; • assumes no conversion of the Note; • does not reflect 820,448 shares of Common Stock issuable upon the exercise of outstanding options granted under our equity incentive plan, with a weighted average exercise price of \$6.16; • does not reflect 257,993 shares of Common Stock underlying restricted stock units ("RSUs"), granted pursuant to our equity incentive plan; and • does not reflect 1,500,002 shares of Common Stock that are reserved for future grants or sale under our equity incentive plan, as amended by our board of directors on June 12, 2024, which such amendment we expect to be approved by our stockholders at our 2024 annual meeting of stockholders. 	

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the following risks and all other information contained in this prospectus and in the documents that we incorporate by reference herein, including our financial statements and the related notes, before investing in our securities. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, also may become important factors that affect us. If any of the following risks occur, our business, financial condition, results of operations and prospects could be materially and adversely affected. In these circumstances, the market price of our Common Stock could decline, and you may lose all or part of your investment.

Risks Related to Our Business

The report of the independent registered public accounting firm on our 2023 and 2022 financial statements contains a going concern qualification.

The report of the independent registered public accounting firm covering our financial statements for the years ended December 31, 2023 and 2022 stated that certain factors, including that we have suffered recurring losses from operations and have an accumulated deficit at December 31, 2023, raised substantial doubt as to our ability to continue as a going concern. Because we are not yet producing sufficient revenue to sustain our operating costs, we are dependent upon raising capital to continue our business. If we are unable to raise capital, we may be unable to continue as a going concern.

We have identified material weaknesses in our internal control over financial reporting.

Prior to our IPO, we were a private company and had limited accounting and financial reporting personnel and other resources with which to address our internal controls and related procedures. In connection with the audit and review, as applicable, of our financial statements for the years ended December 31, 2023 and 2022, we identified material weaknesses in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses in our case arose from inadequate segregation of duties, ineffective information technology controls and lack of certain financial reporting and transaction processing controls. If we are unable to remedy our material weaknesses, or if we generally fail to establish and maintain effective internal controls appropriate for a public company, we may be unable to produce timely and accurate financial statements, and we may conclude that our internal control over financial reporting is not effective, which could adversely impact our investors' confidence and our stock price.

Risks Related to this Offering and Ownership of our Common Stock

The market price and trading volume of the Company's Common Stock may experience rapid and substantial volatility, which could cause a purchaser of our Common Stock to incur substantial losses.

Recently, the market prices and trading volume of shares of Common Stock of other small publicly traded companies with a limited number of shares available to purchasers, have experienced rapid and substantial price volatility unrelated to the financial performance of those companies. Similarly, shares of our Common Stock may experience similar rapid and substantial price volatility unrelated to our financial performance, which could cause purchasers of our Common Stock to incur substantial losses, which may be unpredictable and not bear any relationship to our business and financial performance. Extreme fluctuations in the market price of our Common Stock may occur in response to strong and atypical retail investor interest, including on social media and online forums, the direct access by retail investors to broadly available trading platforms, the amount and status of short interest in our Common Stock and our other securities, access to margin debt, trading in options and other derivatives on our shares of Common Stock and any related hedging and other trading factors.

If there is extreme market volatility and trading patterns in our Common Stock, it may create several risks for investors, including the following:

- the market price of our Common Stock may experience rapid and substantial increases or decreases unrelated to our operating performance or prospects, or macro or industry fundamentals;
- if our future market capitalization reflects trading dynamics unrelated to our financial performance or prospects, purchasers of our Common Stock could incur substantial losses as prices decline once the level of market volatility has abated;
- if the future market price of our Common Stock declines, purchasers of shares of Common Stock may be unable to resell such shares at or above the price at which they acquired them. We cannot assure such purchasers that the market of our Common Stock will not fluctuate or decline significantly in the future, in which case investors could incur substantial losses.

Further, we may incur rapid and substantial increases or decreases in our Common Stock price in the foreseeable future that may not coincide in timing with the disclosure of news or developments by or affecting us. Accordingly, the market price of our Common Stock may fluctuate dramatically, and may decline rapidly, regardless of any developments in our business. Overall, there are various factors, many of which are beyond our control, that could negatively affect the market price of our Common Stock or result in fluctuations in the price or trading volume of our Common Stock, including:

- actual or anticipated variations in our annual or quarterly results of operations, including our earnings estimates and whether we meet market expectations with regard to our earnings;
- our current inability to pay dividends or other distributions;
- publication of research reports by analysts or others about us or the industry in which we operate, including the pharmaceutical or biotechnology industry which may be unfavorable, inaccurate, inconsistent or not disseminated on a regular basis;
- changes in market valuations of similar companies;
- market reaction to any additional equity, debt or other securities that we may issue in the future, and which may or may not dilute the holdings of our existing stockholders;
- additions or departures of key personnel;
- actions by institutional or significant stockholders;
- short interest in our Common Stock or our other securities and the market response to such short interest;
- the dramatic increase in the number of individual holders of our Common Stock and their participation in social media platforms targeted at speculative investing;
- speculation in the press or investment community about our company or industries in which we operate;
- strategic actions by us or our competitors, such as acquisitions or other investments;
- legislative, administrative, regulatory or other actions affecting our business, our industry, including positions taken by the FDA;
- investigations, proceedings, or litigation that involve or affect us;
- the occurrence of any of the other risk factors included in this registration statement of which this prospectus forms a part and in the documents incorporated by reference; and
- general market and economic conditions.

Our Common Stock is currently listed on the NYSE American. NYSE American may delist our Common Stock from trading, which could limit investors' ability to make transactions in our securities and subject us to additional trading restrictions.

Should we fail to satisfy the continued listing requirements for remaining listed on NYSE American, such as the corporate governance requirements or the minimum closing bid price requirement, NYSE American may take steps to delist our Common Stock. Such a delisting would likely have a negative effect on the price of our Common Stock and would impair your ability to sell or purchase our Common Stock when you wish to do so. In the event of a delisting, we would take actions to restore our compliance with NYSE American's listing requirements, but we can provide no assurance that any such action taken by us would allow our Common Stock to become listed again, stabilize the market price or improve the liquidity of our Common Stock, prevent our Common Stock from dropping below NYSE American's minimum bid price requirement or prevent future non-compliance with such listing requirements.

If we cannot maintain the listing of our Common Stock for trading on NYSE American, we could face significant material adverse consequences, including:

- a limited availability of market quotations for our Common Stock;
- reduced liquidity for our Common Stock;
- a determination that our Common Stock is a "penny stock" which will require brokers trading in our Common Stock to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our Common Stock;
- a limited amount of news and analyst coverage; and
- a decreased ability to issue additional Common Stock or obtain additional financing in the future.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our corporate charter and our bylaws may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our Common Stock, thereby depressing the market price of our Common Stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from the board;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- limit who may call stockholder meetings;
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a stockholder rights plan, or so-called “poison pill,” that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and
- authorize “blank check” preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend, and other rights superior to our Common Stock.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware (the “DGCL”), which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Our certificate of incorporation and our bylaws provide that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our certificate of incorporation and our bylaws provide that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, our certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. Notwithstanding the foregoing, the exclusive forum provision does not apply to suits brought to enforce any liability or duty created by the Securities Act, the Exchange Act, or any other claim for which the federal courts have exclusive or concurrent jurisdiction. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act of the rules and regulations thereunder, and Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder, and notwithstanding the provisions of our certificate of incorporation and our bylaws, compliance with the federal securities laws and the rules and regulations thereunder may not be waived by our investors. The choice of forum provision may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the choice of forum provision contained in our certificate of incorporation and our bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially and adversely affect our business, financial condition, and results of operation.

A significant portion of our total outstanding shares are restricted from immediate resale but may be sold into the market in the near future, which could cause the market price of our Common Stock to drop significantly, even if our business is performing well.

Sales of substantial amounts of our shares of Common Stock in the public market following the offering, or the perception that these sales could occur, could cause the market price of our securities to decline. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

All of the shares of Common Stock in the offering are immediately tradable without restriction under the Securities Act, except for any securities held by "affiliates," as that term is defined in Rule 144 under the Securities Act ("Rule 144").

The remaining shares of Common Stock of the Company outstanding, other than the 2,969,823 shares (the "Existing Selling Stockholder Shares") of Common Stock that we have registered on behalf of certain selling stockholders (the "Existing Selling Stockholders") identified in a separate prospectus (the "Existing Resale Prospectus") and which may be resold by such Existing Selling Stockholders from time to time, are restricted securities within the meaning of Rule 144 under the Securities Act but will be eligible for resale subject to applicable volume, means of sale, holding period and other limitations of Rule 144 under the Securities Act or pursuant to an exception from registration under Rule 701 under the Securities Act, subject to the lock-up agreements executed in conjunction with the IPO or the offering.

In addition, we have registered the Existing Selling Stockholder Shares pursuant to the Resale Prospectus and, as a result, all of the Existing Selling Stockholder Shares are freely tradable under the Securities Act, subject to the terms of the lock up agreements.

We have filed a Registration Statement on Form S-8 under the Securities Act to register the shares of Common Stock to be issued under our equity compensation plans and, as a result, all shares of Common Stock acquired under our plans will also be freely tradable under the Securities Act, subject to the terms of the lock-up agreements, unless purchased by our affiliates. In addition, 1,500,002 shares of our Common Stock are reserved for future issuances under the equity incentive plan that our board of directors amended on June 12, 2024, which such amendment we expect to be approved by our stockholders at our 2024 annual meeting of stockholders.

In connection with the Bridge Financings (defined below), we are required to file a registration statement within 180 calendar days after the consummation of the IPO, providing for the resale of Common Stock, which includes 549 Bonus Shares, received by holders of the senior secured convertible notes upon conversion of such notes.

In the future, we may issue additional shares of Common Stock or other equity or debt securities convertible into Common Stock in connection with a financing, acquisition, litigation settlement or employee arrangement or otherwise. Any of these issuances could result in substantial dilution to our existing stockholders and could cause the trading price of our securities to decline.

The Series C Preferred Stock has a liquidation preference over our Common Stock.

The Series C Preferred Stock has a liquidation preference that gets paid prior to any payment on our Common Stock. As a result, if we were to liquidate, dissolve or wind-up, each holder of our Series C Preferred Stock would have the right to receive payment out of our assets available for distribution, before any amount is paid to the holders of our Common Stock, in an amount in cash equal to the aggregate liquidation value of all of the shares of preferred stock held by such holder. Holders of the Series C Preferred Stock will not be entitled to dividends. The payment of the liquidation preferences on the Series C Preferred Stock could result in holders of our Common Stock not receiving any proceeds if we were to liquidate, dissolve or wind up, either voluntarily or involuntarily.

The existence of the liquidation preferences may reduce the value of our Common Stock, make it harder for us to sell shares of Common Stock in offerings in the future, or prevent or delay a change of control.

If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline.

The trading market for our Common Stock relies, in part, on the research and reports that industry or financial analysts publish about us or our business. If securities analysts do not commence coverage of us, the trading price of our stock could decrease. Additionally, if one or more of the analysts covering our business downgrade their evaluations of our stock, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline.

The price of our securities may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of our securities.

The offering price for our securities may not reflect the market price of our securities following this offering. In addition, the market price of our securities is likely to be highly volatile due to many factors, including:

- our ability to successfully proceed to and conduct clinical trials;
- results of pre-clinical and clinical trials of our existing lead or new future compounds or those of our competitors;
- the success of competitive products or technologies;
- commencement or termination of collaborations;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our current or future compounds or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional compounds;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- our inability to obtain or delays in obtaining adequate product supply for any approved product or inability to do so at acceptable prices;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions; and
- the other factors described in this "Risk Factors" section.

The stock markets have experienced extreme volatility in recent years that has been unrelated to operating performance. These broad market fluctuations may adversely affect the trading price of our securities. In the past, following periods of volatility in the market price of a company's securities, class action litigation has often been instituted against the affected company. Any litigation of this type brought against us could result in substantial costs and a diversion of our management's attention and resources, which would harm our business, results of operations, financial condition and cash flows.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies, CC8464 or CT2000.

We may seek additional capital through a combination of draw-downs under public and private equity offerings, debt financings, collaborations and licensing arrangements. To the extent that we raise additional capital through the sale of equity or debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. The incurrence of indebtedness would result in increased fixed payment obligations and could involve restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, CC8464 or CT2000 or grant licenses on terms unfavorable to us.

We are an “emerging growth company” and the reduced disclosure requirements applicable to emerging growth companies may make our Common Stock less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act, and we may take advantage of certain exemptions and relief from various reporting requirements that are applicable to other public companies that are not “emerging growth companies.” In particular, while we are an “emerging growth company: (i) we will not be required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act; (ii) we will be exempt from any rules that may be adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotations or a supplement to the auditor’s report on financial statements; (iii) we will be subject to reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements; and (iv) we will not be required to hold nonbinding advisory votes on executive compensation or stockholder approval of any golden parachute payments not previously approved. Investors may find our Common Stock less attractive if we rely on the exemptions and relief granted by the JOBS Act. If some investors find our Common Stock less attractive as a result, there may be a less active trading market for our Common Stock and our stock price may decline or become more volatile.

We have taken advantage of reduced reporting burdens in this prospectus and in the documents incorporated by reference. In particular, we have not included all of the executive compensation information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our Common Stock less attractive if we rely on certain or all of these exemptions. If some investors find our Common Stock less attractive as a result, there may be a less active trading market for our Common Stock and our stock price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company may take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

We will incur increased costs as a result of operating as a smaller reporting public company, and our management will be required to devote substantial time to new compliance initiatives.

As a smaller reporting public company, and particularly after we are no longer an emerging growth company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act and rules subsequently implemented by the SEC and NYSE American have imposed various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance.

Pursuant to Section 404, we will be required to furnish a report by our management on our internal control over financial reporting, including an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that neither we nor our independent registered public accounting firm will be able to conclude within the prescribed timeframe that our internal control over financial reporting is effective as required by Section 404. This could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our Common Stock will be your sole source of gain for the foreseeable future.

It is not possible to predict the actual number of Purchase Shares we will sell under the CEF Purchase Agreement, or the actual gross proceeds resulting from those sales. We may not have access to the full amount available under the CEF Purchase Agreement with Tikkun.

On July 26, 2024, we entered into the CEF Purchase Agreement with Tikkun, pursuant to which Tikkun committed to purchase up to \$30.0 million in shares of our Common Stock, subject to certain limitations and conditions set forth in the CEF Purchase Agreement.

The Purchase Shares that may be issued under the CEF Purchase Agreement may be sold by us to Tikkun at our discretion from time to time until July 26, 2026, commencing after the satisfaction of certain conditions set forth in the CEF Purchase Agreement, including a registration statement covering the resale of shares of Common Stock that may be issued under the CEF Purchase Agreement is declared effective by the SEC, a final prospectus in connection therewith is filed, and the other conditions set forth in the CEF Purchase Agreement are satisfied. We generally have the right to control the timing and amount of any sales of Purchase Shares to Tikkun under the CEF Purchase Agreement. Sales of Purchase Shares to Tikkun under the CEF Purchase Agreement will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell to Tikkun all or a portion of the Purchase Shares that may be available pursuant to the CEF Purchase Agreement.

Because the purchase price per share to be paid by Tikkun for the Purchase Shares that we may elect to sell to Tikkun under the CEF Purchase Agreement will fluctuate based on the market prices of our Common Stock during the applicable VWAP Purchase Valuation Period (as defined below) for each purchase, it is not possible for us to predict, as of the date of this prospectus, the number of Purchase Shares that we will sell to Tikkun under the CEF Purchase Agreement, the purchase price per share that Tikkun will pay for shares purchased from us under the CEF Purchase Agreement, or the aggregate gross proceeds that we will receive from those purchases by Tikkun under the CEF Purchase Agreement.

Although the CEF Purchase Agreement provides that we may sell up to an aggregate of \$30.0 million of Purchase Shares to Tikkun, only 2,000,000 Purchase Shares are being registered for resale by Tikkun under the registration statement that includes this prospectus, which we may elect to sell to Tikkun, in our sole discretion, from time to time from and after the Commencement Date under the CEF Purchase Agreement.

If after the Commencement Date, we elect to sell to Tikkun all of the 2,000,000 Purchase Shares being registered for resale under this prospectus that are available for sale by us to Tikkun in purchases under the CEF Purchase Agreement, depending on the market prices of our Common Stock during the applicable VWAP Purchase Valuation Period for each purchase made pursuant to the CEF Purchase Agreement, the actual gross proceeds from the sale of all such shares may be substantially less than the \$30.0 million Total Commitment available to us under the CEF Purchase Agreement, which could materially adversely affect our liquidity.

If it becomes necessary for us to issue and sell to Tikkun under the CEF Purchase Agreement more than 2,000,000 Purchase Shares being registered for resale under the registration statement that includes this prospectus in order to receive aggregate gross proceeds equal to the Total Commitment of an aggregate of \$30.0 million under the CEF Purchase Agreement, we must file with the SEC one or more additional registration statements to register under the Securities Act the resale by Tikkun of any such additional Purchase Shares we wish to sell from time to time under the CEF Purchase Agreement, which the SEC must declare effective. In addition, we will need to obtain stockholder approval to issue Purchase Shares in excess of the Exchange Cap under the CEF Purchase Agreement in accordance with the NYSE American listing rules, unless the price per share paid by Tikkun for the Purchase Shares sold under the CEF Purchase Agreement equals or exceeds the greater of book or market value of the Common Stock (calculated in accordance with the applicable listing rules of the NYSE American) at the time the Company delivers the VWAP Purchase Notice for such VWAP Purchase to Tikkun, adjusted as required by the NYSE American to take into account the Company's payment of the Commitment Fee to Tikkun and the amount paid as reimbursement for the legal fees and disbursements of Tikkun's counsel in connection with this Committed Equity Financing, and otherwise as may be necessary to ensure compliance with the applicable rules of the NYSE American, in which case, under the NYSE American listing rules, the Exchange Cap limitation will not apply to issuances and sales of Purchase Shares under the CEF Purchase Agreement, in each case, before we may elect to sell any additional Purchase Shares to Tikkun under the CEF Purchase Agreement, as the case may be. In addition, Tikkun will not be required to purchase any Purchase Shares if such sale would result in Tikkun and its affiliates' beneficial ownership exceeding Beneficial Ownership Limit.

Any issuance and sale by us under the CEF Purchase Agreement of a substantial amount of Purchase Shares in addition to the 2,000,000 Purchase Shares being registered for resale by Tikkun under this prospectus could cause additional substantial dilution to our stockholders. The number of Purchase Shares ultimately offered for resale by Tikkun is dependent upon the number of Purchase Shares we ultimately sell to Tikkun under the CEF Purchase Agreement.

Our inability to access a portion or the full amount available under the CEF Purchase Agreement, in the absence of any other financing sources, could have a material adverse effect on our business.

Sales of a substantial number of our Common Stock in the public market by our existing stockholders could cause the price of our shares of our Common Stock to fall.

Tikkun can resell, under this prospectus, up to 2,000,000 Purchase Shares, from time to time after the date of this prospectus and during the term of the CEF Purchase Agreement. If all of the 2,000,000 shares offered for resale by Tikkun under this prospectus were issued and outstanding as of the date hereof (without taking into account the Exchange Cap limitation), such shares would represent approximately 25.8% of the total number of outstanding shares of our Common Stock and approximately 47.5% of the total number of outstanding shares of our Common Stock held by non-affiliates of our Company, in each case as of July 26, 2024.

Sales of a substantial number of our shares of our Common Stock in the public market by Tikkun and/or by our other existing stockholders, or the perception that those sales might occur, could depress the market price of shares of our Common Stock and could impair our ability to raise capital through the sale of additional equity securities.

Investors who buy shares of our Common Stock at different times will likely pay different prices.

Pursuant to the CEF Purchase Agreement, we will have discretion, subject to market demand, to vary the timing, prices, and numbers of Purchase Shares sold to Tikkun. If and when we do elect to sell Purchase Shares to Tikkun under the CEF Purchase Agreement, after Tikkun has acquired such shares, Tikkun may resell all or a portion of such shares at any time or from time to time in its discretion and at different prices. As a result, investors who purchase shares of our Common Stock from Tikkun at different times will likely pay different prices for those shares, and so may experience different levels of dilution and in some cases substantial dilution and different outcomes in their investment results. Investors may experience a decline in the value of the shares they purchase from Tikkun as a result of future sales made by us to Tikkun at prices lower than the prices such investors paid for their shares.

We may require additional financing to sustain our operations and, without it, we will not be able to continue operations.

The extent to which we rely on Tikkun as a source of funding will depend on a number of factors, including the prevailing market price of our Common Stock and the extent to which we are able to secure working capital from other sources. If obtaining sufficient funding from Tikkun were to prove unavailable or prohibitively dilutive, we may need to secure another source of funding in order to satisfy our working capital needs. Even if we were to sell to Tikkun all of the shares of our Common Stock available for sale to Tikkun under the CEF Purchase Agreement, we will still need additional capital to fully implement our business plan. Should the financing we require to sustain our working capital needs be unavailable or prohibitively expensive when we require it, the consequences would be a material adverse effect on our business, operating results, financial condition and prospects.

If we were to default on the Note and such default is not waived, the Note shall bear interest at a rate of 12 % per annum, and the Holder may require us to redeem all or any portion of the Note. The Note also imposes certain restrictions on us and our subsidiaries. These restrictions limit us and our subsidiaries' ability, among other things, to incur or guarantee certain additional indebtedness, engage in transactions with affiliates, sell certain assets, and create liens, and they place restrictions on the ability of us to make dividends and our subsidiaries to pay dividends. If we fail to maintain compliance with the restrictions and covenants under the Securities Purchase Agreement and the Note, we would be subject to events of default which in turn would materially and adversely affect our business, financial condition, and results of operations and our liquidity.

The terms of the CEF Purchase Agreement limit the amount of shares of Common Stock we may issue to Tikkun, which may have an adverse effect on our liquidity.

The CEF Purchase Agreement includes restrictions on our ability to sell shares of our Common Stock to Tikkun, including, subject to specified limitations, if a sale would cause Tikkun and its affiliates to beneficially own more than the Beneficial Ownership Limit. Accordingly, we cannot guarantee that we will be able to sell all \$30.0 million of shares of Common Stock in this offering. If we cannot sell the full amount of the shares that Tikkun has committed to purchase because of these limitations, we may be required to utilize more costly and time-consuming means of accessing the capital markets, which could materially adversely affect our liquidity and cash position.

Future sales of substantial amounts of our Common Stock, or the possibility that such sales could occur, could adversely affect the market price of our Common Stock.

In order to raise additional capital, we may in the future offer additional shares of our Common Stock or other securities convertible into or exchangeable for our Common Stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing shareholders. The price per share at which we sell additional shares of our Common Stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

Management will have broad discretion as to the use of the proceeds from our sale of Purchase Shares to Tikkun under the CEF Purchase Agreement, and such uses may not improve our financial condition or market value.

Because we have not designated the amount of net proceeds from our sale to Tikkun of Purchase Shares to be used for any particular purpose, our management will have broad discretion as to the application of such net proceeds and could use them for purposes other than those contemplated hereby. Our management may use the net proceeds for corporate purposes that may not improve our financial condition or advance our business objectives.

We currently intend to use the proceeds of this offering, if any, to continue our clinical and pre-clinical work on CC8464 and CT2000. We intend to use the remaining proceeds, if any, for working capital and general corporate purposes. This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. Because the number and variability of factors that will determine our use of the proceeds from this offering, their ultimate use may vary substantially from their currently intended use. As a result, our management will retain broad discretion over the allocation of the proceeds from this offering and could spend the proceeds in ways that do not necessarily improve our operating results or enhance the value of our Common Stock. See "Use of Proceeds" beginning on page 29.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any amendment and the information incorporated by reference into this prospectus, including the section entitled "Risk Factors" beginning on page 10, contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act, and Section 21E of the Exchange Act, that involve substantial risks and uncertainties. The forward-looking statements are contained principally in the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business." Forward-looking statements include information concerning our strategy, future operations, future financial position, future revenue, projected expenses, prospects and plans and objectives of management. Forward-looking statements include all statements that are not historical facts and can be identified by terms such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "seek," "should," "target," "will," "would" or similar expressions and the negatives of those terms.

Forward-looking statements contained in this prospectus include, but are not limited to, statements about the following:

- the initiation, timing, progress and results of preclinical and clinical trials for CC8464, CT2000 and any other compounds, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available and our research and development programs;
- the timing, scope or results of regulatory filings and approvals, including timing of final FDA marketing and other regulatory approval of CC8464 and CT2000;
- our ability to achieve certain accelerated or orphan drug designations from the FDA;
- our estimates regarding the potential market opportunity for CC8464 and CT2000;
- our research and development programs for our lead compounds, CC8464 and CT2000;
- our plans and ability to successfully develop and commercialize future compounds, including CC8464 and CT2000;
- our ability to identify and develop new compounds;
- our ability to identify, recruit and retain key personnel;
- our commercialization, marketing and manufacturing capabilities and strategy;
- the implementation of our business model, strategic plans for our business, lead compounds and technology;
- the scalability and commercial viability of our proprietary manufacturing methods and processes;
- the rate and degree of market acceptance and clinical utility of our lead and any other future compounds;
- our competitive position;
- our intellectual property position and our ability to protect our intellectual property and enforce our intellectual property rights;
- our financial performance;
- developments and projections relating to our competitors and our industry;
- our ability to establish and maintain collaborations or obtain additional funding;
- our expectations related to the use of proceeds from the offering of the shares registered in the Company's IPO;

- our estimates regarding expenses, future revenue, capital requirements and needs for or ability to obtain additional financing;
- the impact of laws and regulations; and
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act.

Forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in "Risk Factors" and elsewhere in this prospectus. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge 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 forward-looking events and circumstances 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. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Also, forward-looking statements represent our management's beliefs and assumptions only as of the date of this prospectus. You should read this prospectus and the documents that we have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

For discussion of factors that we believe could cause our actual results to differ materially from expected and historical results, see the section entitled "Risk Factors" beginning on page 10. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

THE TIKKUN COMMITTED EQUITY FINANCING

On July 26, 2024, we entered into the CEF Purchase Agreement with Tikkun, pursuant to which Tikkun has committed to purchase up to \$30.0 million of our Common Stock, at our direction in one or more purchases from time to time beginning on the Commencement Date and ending on the first day of the month next following the 24-month anniversary of the Closing Date, subject to certain terms, conditions and limitations in the CEF Purchase Agreement. We also entered into the Registration Rights Agreement with Tikkun, pursuant to which we have filed with the SEC the registration statement that includes this prospectus registering for resale under the Securities Act, the Purchase Shares that may be issued to Tikkun under the CEF Purchase Agreement.

Under the terms and subject to the conditions of the CEF Purchase Agreement, we have the right, but not the obligation, to sell to Tikkun, and Tikkun is obligated to purchase up to \$30.0 million of our Common Stock. Sales of common stock by the Company to Tikkun under the CEF Purchase Agreement, if any, may occur, from time to time at our sole discretion, over the period commencing upon the Commencement, or the initial satisfaction of all conditions to Tikkun's purchase obligations set forth in the CEF Purchase Agreement, including that the initial registration statement we are required to file with the SEC pursuant to the Registration Rights Agreement, which is the registration statement of which this prospectus forms a part, is declared effective by the SEC, and ending on the first day of the month next following the 24-month anniversary of the Closing Date, unless the Purchase Agreement is terminated earlier under its terms.

We will control the timing and amount of any sales of our Common Stock to Tikkun. Tikkun has no right to require us to sell any Purchase Shares to Tikkun, but Tikkun is obligated to make purchases at our direction subject to certain conditions. There is no upper limit on the price per share that Tikkun could be obligated to pay for the Common Stock under the CEF Purchase Agreement. Actual sales of Purchase Shares to Tikkun will depend on a variety of factors to be determined by us from time to time, including, among others, market conditions, the trading price of our Common Stock and determinations by us as to the appropriate sources of funding for us and our operations. The gross proceeds to us from sales that we elect to make to Tikkun under the CEF Purchase Agreement, if any, will depend on the frequency and prices at which we sell shares of our Common Stock to Tikkun.

We do not know what the purchase price for our Common Stock will be and therefore cannot be certain as to the number of Purchase Shares we might issue to Tikkun under the CEF Purchase Agreement after the Commencement Date. Although the CEF Purchase Agreement provides that we may sell up to \$30.0 million of our Common Stock to Tikkun, only 2,000,000 Purchase Shares are being registered under the Securities Act for resale by Tikkun under this prospectus, which may be issued to Tikkun from and after the Commencement Date, if and when we elect to sell shares to Tikkun in the future under the CEF Purchase Agreement.

Under the applicable NYSE American listing rules, in no event may we issue to Tikkun and its affiliates under the CEF Purchase Agreement, or otherwise, more than more than 1,152,764 Purchase Shares, representing 19.99% of the number of shares of Common Stock outstanding immediately prior to the Closing Date, unless the Company obtains the Stockholder Approval; provided that the Exchange Cap will not apply to the extent that the price per Purchase Share is equal to or greater than the greater of book or market value of the Common Stock (calculated in accordance with applicable NYSE American listing rules) at the time the Company delivers the VWAP Purchase Notice for such VWAP Purchase to Tikkun, after taking into account the Company's payment of the Commitment Fee, amount paid as reimbursement for the legal fees and disbursements of Tikkun's counsel in connection with this Committed Equity Financing, and otherwise as may be necessary to ensure compliance with the applicable rules of the NYSE American. In addition, Tikkun is limited to purchasing such number of Purchase Shares that, when aggregated with all other shares of Common Stock then beneficially owned by Tikkun and its affiliates (as calculated pursuant to Section 13(d) of the Exchange Act and Rule 13d-3 promulgated thereunder), would not result in Tikkun beneficially owning more than the Beneficial Ownership Limit.

The net proceeds under the CEF Purchase Agreement to us will depend on the frequency and prices at which we sell shares of our stock to Tikkun. We expect that any proceeds received by us from the sales to Tikkun will be used to continue our clinical and pre-clinical work on CC8464 and CT2000. We intend to use the remaining proceeds, if any, for working capital and general corporate purposes.

As consideration for Tikkun's commitment to purchase shares of Common Stock upon the terms of and subject to satisfaction of the conditions set forth in the Purchase Agreement, the Company paid a cash fee of \$750,000 to Tikkun as the Commitment Fee on the first trading day immediately following the Closing Date. In addition, as required under the Purchase Agreement, the Company has reimbursed Tikkun for the reasonable legal fees and disbursements of Tikkun's legal counsel in the amount of \$75,000.

The terms and conditions of the Purchase Agreement and the Registration Rights Agreement are further described below.

Purchase of Purchase Shares Under the CEF Purchase Agreement

Upon the Commencement and subject to the conditions set forth in the CEF Purchase Agreement, we have the right, but not the obligation, from time to time at our sole discretion over a period ending on the 24-month anniversary of the Closing Date, to direct Tikkun to purchase a specified number of shares of our common stock up to a certain maximum amount (described below) in a "VWAP Purchase," by our timely delivery of a written purchase notice, or a VWAP Purchase Notice, to Tikkun, between 4:00 p.m., New York time, and 6:30 p.m., New York time, on any trading day selected by us as the "VWAP Purchase Exercise Date" for such VWAP Purchase, so long as:

- the Company has not previously delivered a VWAP Purchase Notice to Tikkun on the same VWAP Purchase Exercise Date;
- at least three trading days shall have elapsed since the most recent prior VWAP Purchase Exercise Date on which we have delivered a VWAP Purchase Notice to Tikkun pursuant to the CEF Purchase Agreement;
- the closing sale price of our Common Stock on such VWAP Purchase Exercise Date is not less than the Threshold Price; and
- all Purchase Shares subject to all prior VWAP Purchase Notices delivered by us to Tikkun pursuant to the Purchase Agreement have been received by Tikkun in accordance with the CEF Purchase Agreement prior to our delivery to Tikkun of such VWAP Purchase Notice for such VWAP Purchase on such VWAP Purchase Exercise Date.

The maximum number of shares that may be purchased pursuant to a Purchase is equal to a number of shares of our Common Stock equal to the lowest of (the "VWAP Purchase Maximum Amount"):

- 100% of the average daily trading volume in the Common Stock on the NYSE American for the five (5) consecutive trading day period ending on (and including) the trading day immediately preceding the applicable VWAP Purchase Exercise Date for such VWAP Purchase;
- the product (rounded up or down to the nearest whole number) obtained by multiplying (A) the daily trading volume in the Common Stock on the NYSE American on the applicable VWAP Purchase Exercise Date for such VWAP Purchase by (B) 0.30; and
- the quotient (rounded up or down to the nearest whole number) obtained by dividing (A) \$2,000,000 by (B) the VWAP on the NYSE American on the trading day immediately preceding the applicable VWAP Purchase Exercise Date for such VWAP Purchase.

The purchase price of Purchase Shares that we may direct Tikkun to purchase pursuant to a VWAP Purchase under the CEF Purchase Agreement will be equal to the product obtained by multiplying (i) the daily VWAP during the applicable VWAP Purchase Valuation Period for such VWAP Purchase by (ii) 0.90 (in each case to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction during the applicable period). "VWAP Purchase Valuation Period" means, with respect to a VWAP Purchase, the trading period on the trading day immediately following the applicable VWAP Purchase Exercise Date for such VWAP Purchase, beginning at 9:30:01 a.m., New York City time, or such other time publicly announced by the NYSE American as the official open (or commencement) of trading on such trading day, and ending at 4:00:00 p.m., New York City time, or such other time publicly announced by the NYSE American as the official close of trading on the NYSE American on such trading day.

The payment for, against simultaneous delivery of, shares in respect of each VWAP Purchase under the CEF Purchase Agreement will be settled on the applicable Purchase Settlement Date (as defined in the CEF Purchase Agreement) immediately following the applicable VWAP Purchase Valuation Period for such VWAP Purchase, as set forth in the CEF Purchase Agreement.

Conditions to Commencement and Delivery of Purchase Notices

Our ability to deliver purchase notices to Tikkun under the CEF Purchase Agreement arises upon the occurrence of Commencement, which is subject to the satisfaction of certain conditions, all of which are entirely outside of Tikkun's control, including, among other things, the following:

- the accuracy in all material respects of our representations and warranties included in the CEF Purchase Agreement;

- us having performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the CEF Purchase Agreement to be performed, satisfied or complied with by us;
- the effectiveness of this registration statement that includes this prospectus;
- the SEC shall not have issued any stop order suspending the effectiveness, prohibiting or suspending the use of the registration statement that includes this prospectus;
- this prospectus, in final form, shall have been filed with the SEC under the Securities Act, and all reports, schedules, registrations, forms, statements, information and other documents required to have been filed by the Company with the SEC pursuant to the reporting requirements of the Exchange Act, shall have been filed with the SEC;
- trading in our Common Stock shall not have been suspended by the SEC, the NYSE American or the Financial Industry Regulatory Authority ("FINRA"), we shall not have received any final and non-appealable notice that the listing or quotation of the Common Stock on the NYSE American shall be terminated on a date certain (unless, prior to such date, the Common Stock is listed or quoted on the New York Stock Exchange, The Nasdaq Capital Market, The Nasdaq Global Market, The Nasdaq Global Select Market or the NYSE Arca (or any nationally recognized successor to any of the foregoing) (each, an "Eligible Market"), and there shall be no suspension of, or restriction on, accepting additional deposits of the Common Stock, electronic trading or book-entry services by DTC with respect to the Common Stock;
- we shall have complied with all applicable federal, state and local governmental laws, rules, regulations and ordinances in connection with the execution, delivery and performance of the CEF Purchase Agreement and the Registration Rights Agreement;
- the absence of any statute, regulation, order, decree, writ, ruling or injunction by any court or governmental authority of competent jurisdiction which prohibits the consummation of or that would materially modify or delay any of the transactions contemplated by the CEF Purchase Agreement or the Registration Rights Agreement;
- the absence of any action, suit or proceeding before any arbitrator or any court or governmental authority seeking to restrain, prevent or change the transactions contemplated by the CEF Purchase Agreement or the Registration Rights Agreement, or seeking material damages in connection with such transactions;
- all of the Purchase Shares that may be issued pursuant to the CEF Purchase Agreement shall have been approved for listing or quotation on the NYSE American (or if the Purchase Shares not then listed on the NYSE American, on any Eligible Market);
- no condition, occurrence, state of facts or event constituting a material adverse effect shall have occurred and be continuing;
- any voluntary or involuntary participation or threatened participation in insolvency or bankruptcy proceedings by or against us;
- the delivery to the Company's transfer agent of instructions and a notice of effectiveness relating to this registration statement directing the Company's transfer agent to issue to Tikkun all the Purchase Shares as DWAC Shares (as defined in the CEF Purchase Agreement);
- the Company having reserved certain number of shares of our Common Stock for the purpose of issuing Purchase Shares;
- the receipt by Tikkun of the opinions and negative assurances from outside counsel to us substantially in the forms mutually agreed to by us and Tikkun prior to the date of the CEF Purchase Agreement; and
- the receipt by Tikkun of the comfort letter from the Accountant (as defined in the CEF Purchase Agreement), dated the Commencement Date and addressed to Tikkun, to us substantially in the form, scope and substance mutually agreed to by us and Tikkun prior to the date on which the registration statement of which this prospectus forms a part is first filed in the SEC.

Our ability to deliver VWAP Purchase Notices to Tikkun under the CEF Purchase Agreement is subject to the satisfaction of certain conditions at time of each delivery of a Purchase notice, all of which are entirely outside of Tikkun's control, including, among other things, the following:

- the accuracy in all material respects of our representations and warranties included in the CEF Purchase Agreement;
- us having performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the CEF Purchase Agreement to be performed, satisfied or complied with by us;
- we shall have complied with all applicable federal, state and local governmental laws, rules, regulations and ordinances in connection with the execution, delivery and performance of the CEF Purchase Agreement and the Registration Rights Agreement;
- the absence of any statute, regulation, order, decree, writ, ruling or injunction by any court or governmental authority of competent jurisdiction which prohibits the consummation of or that would materially modify or delay any of the transactions contemplated by the CEF Purchase Agreement or the Registration Rights Agreement;
- the absence of any action, suit or proceeding before any arbitrator or any court or governmental authority seeking to restrain, prevent or change the transactions contemplated by the CEF Purchase Agreement or the Registration Rights Agreement, or seeking material damages in connection with such transactions;
- all of the Purchase Shares that may be issued pursuant to the CEF Purchase Agreement shall have been approved for listing or quotation on the NYSE American (or if the Common Stock is not then listed on the NYSE American, on any Eligible Market);
- no condition, occurrence, state of facts or event constituting a material adverse effect shall have occurred and be continuing;
- any voluntary or involuntary participation or threatened participation in insolvency or bankruptcy proceedings by or against us;
- the effectiveness of this registration statement that includes this prospectus (and any one or more additional registration statements filed with the SEC that include Purchase Shares that may be issued and sold by us to Tikkun under the CEF Purchase Agreement);
- the delivery to the Company's transfer agent of instructions and a notice of effectiveness relating to any other additional registration statement filed with the SEC that includes Purchase Shares that may be issued and sold by us to Tikkun under the CEF Purchase Agreement directing the Company's transfer agent to issue to Tikkun all the Purchase Shares as DWAC Shares;
- the SEC shall not have issued any stop order suspending the effectiveness, prohibiting or suspending the use of the registration statement that includes this prospectus (or any one or more additional registration statements filed with the SEC that include Purchase Shares that may be issued and sold by us to Tikkun under the CEF Purchase Agreement);
- this prospectus (or any one or more additional registration statements filed with the SEC that include Purchase Shares that may be issued and sold by us to Tikkun under the CEF Purchase Agreement), in final form, shall have been filed with the SEC under the Securities Act, and all reports, schedules, registrations, forms, statements, information and other documents required to have been filed by the Company with the SEC pursuant to the reporting requirements of the Exchange Act, shall have been filed with the SEC;
- trading in our Common Stock shall not have been suspended by the SEC, the NYSE American or FINRA, we shall not have received any final and non-appealable notice that the listing or quotation of the Common Stock on the NYSE American shall be terminated on a date certain (unless, prior to such date, the Common Stock is listed or quoted on an Eligible Market), and there shall be no suspension of, or restriction on, accepting additional deposits of the Common Stock, electronic trading or book-entry services by DTC with respect to the Common Stock;

- the issuance and sale of the Purchase Shares subject to a Purchase notice shall not exceed the VWAP Purchase Maximum Amount or cause the Total Commitment, Beneficial Ownership Limit or Exchange Cap to be exceeded;
- the Purchase Shares shall have been duly authorized and all Purchase Shares issued under prior Purchase notices shall have been delivered as DWAC Shares; and
- the receipt by Tikkun of the opinions, bring-down opinions, negative assurances and compliance certificates from outside counsel to us in the forms mutually agreed to by us and Tikkun prior to the date of the CEF Purchase Agreement.

No Short-Selling or Hedging by Tikkun

Tikkun has agreed that neither it nor any of its affiliates or any entity managed or controlled by Tikkun shall, directly or indirectly, (i) engage in or effect any "short sales" (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of our Common Stock or (ii) execute any stock pledge, forward sales contract, option, put, call, swap or similar hedging arrangement (including on a total return basis), which establishes a net short position with respect to our Common Stock, during the term of the CEF Purchase Agreement.

Prohibition on Variable Rate Transactions

Subject to specified exceptions included in the CEF Purchase Agreement, we are limited in our ability to enter into specified "Variable Rate Transactions" (as such term is defined in the CEF Purchase Agreement) during the term of the CEF Purchase Agreement and until the first day of the month next following the 24-month anniversary of the Closing Date. Such transactions include, among others, the issuance of convertible securities with a conversion or exercise price that is based upon or varies with the trading price of our Common Stock after the date of issuance, or our effecting or entering into an agreement to effect an "equity line of credit" or other substantially similar continuous offering with a third party, in which we may offer, issue or sell common stock or any securities exercisable, exchangeable or convertible into common stock at a future determined price.

Termination of the CEF Purchase Agreement

Unless earlier terminated as provided in the CEF Purchase Agreement, the CEF Purchase Agreement will terminate automatically on the earliest to occur of:

- the first day of the month next following the 24-month anniversary of the date of the CEF Purchase Agreement;
- the date on which Tikkun shall have purchased shares of our Common Stock under the CEF Purchase Agreement for an aggregate gross purchase price equal to its \$30.0 million Total Commitment under the CEF Purchase Agreement;
- the date on which the Common Stock shall have failed to be listed or quoted on the NYSE American or any other Eligible Market;
- the thirtieth (30th) trading day next following the date on which we commence a voluntary bankruptcy case or any third party commences a bankruptcy proceeding against us, in each case that is not discharged or dismissed prior to such trading day; and
- the date on which, pursuant to or within the meaning of any Bankruptcy Law (as defined in the CEF Purchase Agreement), a Custodian (as defined in the CEF Purchase Agreement) is appointed for the Company for all or substantially all of its property, or the Company makes a general assignment for the benefit of its creditors.

We have the right to terminate the CEF Purchase Agreement at any time after the Commencement Date, at no cost or penalty, upon five trading days' prior written notice to Tikkun. We and Tikkun may also terminate the CEF Purchase Agreement at any time by mutual written consent.

Tikkun also has the right to terminate the CEF Purchase Agreement upon five (5) trading days' prior written notice to us, but only upon the occurrence of certain events, including:

- the occurrence of a Material Adverse Effect (as defined in the CEF Purchase Agreement);
- the occurrence of a Fundamental Transaction (as defined in the CEF Purchase Agreement) involving us;
- the Initial Registration Statement (as defined in the CEF Purchase Agreement) and any New Registration Statement (as defined in the CEF Purchase Agreement) is not filed by the applicable Filing Deadline (as defined in the CEF Purchase Agreement) therefor or declared effective by the SEC by the applicable Effectiveness Deadline (as defined in the Registration Rights Agreement) therefor, or the Company is otherwise in breach or default in any material respect under any of the other provisions of the Registration Rights Agreement, and, if such failure, breach or default is capable of being cured, such failure, breach or default is not cured within 10 trading days after notice of such failure, breach or default is delivered to the Company pursuant to Section 10.4 of the CEF Purchase Agreement;

- while the registration statement that includes this prospectus or any additional registration statement or any post-effective amendments thereto are required to be maintained effective pursuant to the Registration Rights Agreement, the effectiveness of such registration statements or post-effective amendments lapse for any reason (including the issuance of a stop order by the SEC), or this prospectus or the prospectus included in any additional registration statement we file with the SEC pursuant to the Registration Rights Agreement otherwise becomes unavailable to Tikkun for the resale of all of the shares of Common Stock included therein, and such lapse or unavailability continues for a period of 20 consecutive trading days or for more than an aggregate of 60 trading days in any 365-day period, other than due to acts of Tikkun;
- trading in the Common Stock on the NYSE American LLC (or if the Common Stock is then listed on an Eligible Market, trading in the co Common Stock on such Eligible Market) has been suspended for a period of three consecutive trading days; or
- the Company is in material breach or default of this Agreement, and, if such breach or default is capable of being cured, such breach or default is not cured within 10 trading days after notice of such breach or default is delivered to the Company pursuant to Section 10.4 of the CEF Purchase Agreement.

No termination of the CEF Purchase Agreement by us or by Tikkun will become effective prior to the fifth trading day immediately following the applicable settlement date related to any pending VWAP Purchase that has not been fully settled in accordance with the terms and conditions of the CEF Purchase Agreement, and will not affect any of our respective rights and obligations under the CEF Purchase Agreement with respect to any pending VWAP Purchase, and both we and Tikkun have agreed to fully perform our respective obligations with respect to any such pending VWAP Purchase under the CEF Purchase Agreement. Furthermore, no termination of the CEF Purchase Agreement will affect the Registration Rights Agreement, which will survive any termination of the CEF Purchase Agreement.

Effect of Performance of the CEF Purchase Agreement on our Stockholders

The Purchase Shares may be issued and sold by us to Tikkun from time to time at our discretion over the period beginning on the Commencement Date and ending on the first day of the month next following the 24-month anniversary of the Closing Date, unless the Purchase Agreement is terminated earlier under its terms. All Purchase Shares that have been or may be issued or sold by us to Tikkun under the CEF Purchase Agreement that are being registered under the Securities Act for resale by Tikkun in this offering are expected to be freely tradable. The resale by Tikkun of a significant amount of Purchase Shares registered for resale in this offering at any given time, or the perception that these sales may occur, could cause the market price of our Common Stock to decline and to be highly volatile.

We do not know what the purchase price will be for Purchase Shares that we may issue and sell to Tikkun under the CEF Purchase Agreement, if any, and therefore cannot be certain as to the number of shares of our Common Stock we might issue to Tikkun under the CEF Purchase Agreement after the Commencement Date. As of July 26, 2024, there were 5,766,704 shares of our Common Stock outstanding, of which 2,206,205 shares are estimated to be held by non-affiliates. Although the CEF Purchase Agreement provides that we may sell up to \$30.0 million of Common Stock to Tikkun, only 2,000,000 shares of our Common Stock are being registered for resale by the Tikkun by means of this prospectus, which may be issued and sold by us to Tikkun as Purchase Shares under the CEF Purchase Agreement from and after the Commencement Date, if and when we elect to sell Purchase Shares to Tikkun under the Purchase Agreement. Depending on the market prices of our Common Stock at the time we elect to issue and sell Purchase Shares to Tikkun under the CEF Purchase Agreement, we may need to register for resale under the Securities Act additional shares of our Common Stock in order to receive aggregate gross proceeds equal to the aggregate \$30.0 million available to us under the Purchase Agreement. If all of the 2,000,000 Purchase Shares that may be offered and resold by Tikkun by means of this prospectus were issued and outstanding as of the date hereof without taking into account the Exchange Cap limitation), such Purchase Shares would represent approximately 25.8% of the total number of shares of our Common Stock outstanding and approximately 47.5% of the total number of outstanding shares held by non-affiliates, in each case as of July 26, 2024.

If we elect to issue and sell more than the 2,000,000 Purchase Shares offered by means of this prospectus to Tikkun, which we have the right, but not the obligation, to do, we must first (i) the Stockholder Approval and (ii) register for resale under the Securities Act any such additional shares, which could cause additional substantial dilution to our stockholders. The total number of shares of Common Stock ultimately offered for resale by Tikkun by means of this prospectus is dependent upon the number of Purchase Shares that we may ultimately elect to sell to Tikkun under the CEF Purchase Agreement from and after the Commencement Date.

Sales of Purchase Shares, if any, to Tikkun under the CEF Purchase Agreement will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell to Tikkun all, some or none of the Purchase Shares that may be available for us to sell to Tikkun pursuant to the CEF Purchase Agreement. If and when we do sell shares to Tikkun, after Tikkun has acquired the shares, Tikkun may resell all, some or none of those shares at any time or from time to time in its discretion. Therefore, sales to Tikkun by us under the CEF Purchase Agreement may result in substantial dilution to the interests of other holders of our Common Stock. In addition, if we sell a substantial number of shares to Tikkun under the CEF Purchase Agreement, or if investors expect that we will do so, the actual sales of shares or the mere existence of our arrangement with Tikkun may make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect such sales. However, we have the right to control the timing and amount of any additional sales of our shares to Tikkun and the CEF Purchase Agreement may be terminated by us at any time at our discretion without any cost to us.

Pursuant to the terms of the CEF Purchase Agreement, we have the right, but not the obligation, to direct Tikkun to purchase up to \$30.0 million of our Common Stock, subject to certain limitations. We have registered only a portion of the shares that may be issuable under the CEF Purchase Agreement and, therefore, we may seek to issue and sell to Tikkun under the CEF Purchase Agreement more Purchase Shares than are offered under this prospectus in order to receive the aggregate gross proceeds equal to the \$30.0 million Total Commitment available to us under the CEF Purchase Agreement. If we choose to do so, we must first register for resale under the Securities Act any such additional shares, which could cause additional substantial dilution to our stockholders. The number of shares ultimately offered for resale under this prospectus is dependent upon the number of shares we direct Tikkun to purchase under the CEF Purchase Agreement.

The following table sets forth the amount of gross proceeds we would receive from Tikkun from our sale of Purchase Shares to Tikkun under the CEF Purchase Agreement at varying purchase prices:

Assumed Average Purchase Price Per Share	Number of Registered Shares to be Issued if Full Purchase⁽¹⁾	Percentage of Outstanding Shares After Giving Effect to the Issuance to Tikkun⁽²⁾	Gross Proceeds from the Sale of Shares to Tikkun Under the Purchase Agreement⁽⁴⁾
\$0.75	1,152,764	16.66%	\$ 864,573
\$1.25	1,152,764	16.66%	\$ 1,440,955
\$1.46 ⁽³⁾	1,152,764	16.66%	\$ 1,683,035
\$1.50	1,152,764	16.66%	\$ 1,729,146
\$2.00	1,152,764	16.66%	\$ 2,305,528

(1) Although the CEF Purchase Agreement provides that we may sell up to \$30.0 million of our Common Stock to Tikkun, we are only registering 2,000,000 shares under this prospectus which represents 2,000,000 Purchase Shares that may be issued to Tikkun in the future under the CEF Purchase Agreement, if and when we sell shares to Tikkun under the CEF Purchase Agreement, and which may or may not cover all the shares we ultimately sell to Tikkun under the CEF Purchase Agreement, depending on the purchase price per share. We will not issue more than an aggregate of 1,152,764 Purchase Shares (the Exchange Cap, unless otherwise approved by our stockholders or if the shares of Common Stock in a VWAP Purchase is equal to or greater than the greater of book or market value of the Common Stock (calculated in accordance with the applicable listing rules of the NYSE American) at the time we deliver the VWAP Purchase Notice for such VWAP Purchase to Tikkun, adjusted as required by the NYSE American. The number of shares to be issued as set forth in this column (i) gives effect to the Exchange Cap and (ii) is without regard for the Beneficial Ownership Limit.

(2) The denominator is based on 5,766,704 shares outstanding as of July 26, 2024, which is adjusted to include the number of shares set forth in the adjacent column which we would have sold to Tikkun, assuming the purchase price in the first column. The numerator is based on the number of shares issuable under the CEF Purchase Agreement at the corresponding assumed purchase price set forth in the first column.

(3) The closing sale price of our Common Stock on July 26, 2024.

(4) For illustration purposes only. Gross proceeds from the sale of shares to Tikkun under the CEF Purchase Agreement cannot exceed \$30.0 million in the aggregate.

USE OF PROCEEDS

This prospectus relates to shares of our Common Stock that may be offered and sold from time to time by Tikkun. All of the Common Stock offered by Tikkun pursuant to this prospectus will be sold by Tikkun for its own account. We may receive up to \$30.0 million aggregate gross proceeds under the CEF Purchase Agreement from any sales of Purchase Shares we make to Tikkun pursuant to the CEF Purchase Agreement. The net proceeds from sales, if any, under the CEF Purchase Agreement, will depend on the frequency and prices at which we sell shares of Common Stock to Tikkun after the date of this prospectus. See "Plan of Distribution" beginning on page 36 for more information.

We expect to use any proceeds received by us under the CEF Purchase Agreement to continue our clinical and pre-clinical work on CC8464 and CT2000. We intend to use the remaining proceeds, if any, for working capital and general corporate purposes. As of the date of this prospectus, we cannot specify with certainty all of the particular uses, and the respective amounts we may allocate to those uses, for any net proceeds we receive. Accordingly, we will retain broad discretion over the use of these proceeds. Pending our use of the net proceeds as described above, we intend to invest the net proceeds pursuant to the CEF Purchase Agreement in interest-bearing, investment-grade instruments.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our Common Stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

SELLING STOCKHOLDER

This prospectus relates to the offer and sale by Tikkun Capital of up to 2,000,000 shares of our Common Stock that have been and may be issued by us to Tikkun Capital under the CEF Purchase Agreement. For additional information regarding the shares of our Common Stock included in this prospectus, see the section titled “The Tikkun Committed Equity Financing” above. We are registering the shares of our Common Stock included in this prospectus pursuant to the provisions of the Registration Rights Agreement we entered into with Tikkun Capital on July 26, 2024 in order to permit the selling stockholder to offer the shares included in this prospectus for resale from time to time. Except for the transactions contemplated by the CEF Purchase Agreement and the Registration Rights Agreement and as set forth elsewhere in this prospectus, Tikkun Capital has not had any material relationship with us within the past three years. As used in this prospectus, the term “selling stockholder” means Tikkun Capital LLC.

The table below presents information regarding the selling stockholder and the shares of our Common Stock that may be resold by the selling stockholder from time to time under this prospectus. This table is prepared based on information supplied to us by the selling stockholder, and reflects holdings as of July 26, 2024. The number of shares in the column “Maximum Number of Shares of Common Stock to be Offered Pursuant to this Prospectus” represents all of the shares of our Common Stock being offered for resale by the selling stockholder under this prospectus. The selling stockholder may sell some, all or none of the shares being offered for resale in this offering. We do not know how long the selling stockholder will hold the shares before selling them and, except as set forth in the section titled “Plan of Distribution” in this prospectus, we are not aware of any existing arrangements between the selling stockholder and any other stockholder, broker, dealer, underwriter or agent relating to the sale or distribution of the shares of our Common Stock being offered for resale by this prospectus.

Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Exchange Act, and includes shares of our Common Stock with respect to which the selling stockholder has sole or shared voting and investment power. The percentage of shares of our Common Stock beneficially owned by the selling stockholder prior to the offering shown in the table below is based on an aggregate of 5,766,704 shares of our Common Stock outstanding on July 26, 2024. Because the purchase price to be paid by the selling stockholder for shares of our Common Stock, if any, that we may elect to sell to the selling stockholder in one or more VWAP Purchases from time to time under the CEF Purchase Agreement will be determined at the end of the applicable VWAP Purchase Valuation Period therefor, the actual number of shares of our Common Stock that we may sell to the selling stockholder under the CEF Purchase Agreement may be fewer than the number of shares being offered for resale under this prospectus. The fourth column assumes the resale by the selling stockholder of all of the shares of our Common Stock being offered for resale pursuant to this prospectus.

Name of Selling Stockholder	Number of Shares of Common Stock Beneficially Owned Prior to Offering		Maximum Number of Shares of Common Stock to be Offered Pursuant to this Prospectus	Number of Shares of Common Stock Beneficially Owned After Offering ⁽³⁾	
	Number ⁽¹⁾	Percent ⁽²⁾		Number	Percent
Tikkun Capital LLC ⁽⁴⁾	0	0	2,000,000	--	--

(1) In accordance with Rule 13d-3(d) under the Exchange Act, we have excluded from the number of shares beneficially owned prior to the offering all of the shares that Tikkun Capital may be required to purchase under the CEF Purchase Agreement, because the issuance of such shares is solely at our discretion and is subject to conditions contained in the CEF Purchase Agreement, the satisfaction of which are entirely outside of Tikkun Capital's control, including the registration statement that includes this prospectus becoming and remaining effective. Furthermore, VWAP Purchases of our Common Stock under the CEF Purchase Agreement are subject to certain agreed upon maximum amount limitations set forth in the CEF Purchase Agreement. Also, the CEF Purchase Agreement prohibits us from issuing and selling any shares of our Common Stock to Tikkun Capital to the extent such shares, when aggregated with all other shares of our Common Stock then beneficially owned by Tikkun Capital, would cause Tikkun Capital's beneficial ownership of our Common Stock to exceed the Beneficial Ownership Limit. The CEF Purchase Agreement also prohibits us from issuing or selling shares of our Common Stock under the CEF Purchase Agreement in excess of the Exchange Cap, unless we obtain stockholder approval to do so, or unless sales of our Common Stock are made by us to Tikkun Capital at a price equal to or greater than the applicable "minimum price" (as defined in the applicable listing rules of the NYSE American LLC) of the Common Stock, calculated at the time VWAP Purchases are effected by us under the CEF Purchase Agreement, if any, as adjusted to take into account our payment of the Commitment Fee to Tikkun Capital and our reimbursement of a certain amount of Tikkun Capital's legal fees and expenses, such that the Exchange Cap limitation would not apply under applicable rules of the NYSE American LLC. Neither the Beneficial Ownership Limit nor the Exchange Cap (to the extent applicable under the applicable rules of the NYSE American LLC) may be amended or waived under the CEF Purchase Agreement.

(2) Applicable percentage ownership is based on 5,766,704 shares of our Common Stock outstanding as of July 26, 2024.

(3) Assumes the sale of all shares of our Common Stock being offered for resale pursuant to this prospectus.

(4) The business address of Tikkun Capital LLC is 2 Wooster Street, 2nd Floor, New York, NY 10013. Tikkun Capital LLC's principal business is that of a private investor. Maier Joshua Tarlow is the manager of 3i Management, LLC, the general partner of 3i, LP, which is the sole member of Tikkun Capital, LLC, and has sole voting control and investment discretion over securities beneficially owned directly by Tikkun Capital LLC and indirectly by 3i Management, LLC and 3i, LP. 3i Management, LLC is also the manager of Tikkun Capital LLC. We have been advised that none of Mr. Tarlow, 3i Management, LLC, 3i, LP or Tikkun Capital LLC is a member of the Financial Industry Regulatory Authority, or FINRA, or an independent broker-dealer, or an affiliate or associated person of a FINRA member or independent broker-dealer. The foregoing should not be construed in and of itself as an admission by Mr. Tarlow as to beneficial ownership of the securities beneficially owned directly by Tikkun Capital LLC and indirectly by 3i Management, LLC and 3i, LP.

DESCRIPTION OF COMMON STOCK

Our authorized capital stock consists of 200,000,000 shares of Common Stock and 20,000,000 shares of preferred stock, \$0.0001 par value per share (5,000 of which has been designated as Series C Convertible Redeemable Preferred Stock). The following description summarizes the most important terms of our Common Stock. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description, you should refer to our certificate of incorporation and bylaws, each as amended, which will be included as exhibits to the registration statement of which this prospectus forms a part.

Common Stock

Authorized Shares

The Company has authorized for issuance an aggregate of 200,000,000 shares of Common Stock.

Dividend Rights

The holders of our Common Stock are entitled to receive dividends out of funds legally available if our board of directors, in its discretion, determines to issue dividends and then only at the times and in the amounts that our board of directors may determine. See "Dividend Policy" beginning on page 30.

Voting Rights

Holders of our Common Stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. We have not provided for cumulative voting for the election of directors.

No Preemptive or Similar Rights

Our Common Stock is not entitled to preemptive rights, and is not subject to conversion, redemption or sinking fund provisions.

Liquidation Rights

Any distribution or payment made to holders of Common Stock in the event of a dissolution, liquidation or winding up of the Company will be made in a pro rata fashion on the basis of the number of shares of Common Stock held by each such holder.

Anti-Takeover Provisions

The provisions of Delaware law, our certificate of incorporation and our bylaws could have the effect of delaying, deferring or discouraging another person from acquiring control of us. 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 of directors. 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.

Delaware Law

We are subject to the provisions of Section 203 of the DGCL regulating corporate takeovers. In general, Section 203 of the DGCL prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years following the date on which the person became an interested stockholder unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which 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 commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder: (i) shares owned by persons who are directors and also officers; and (ii) shares owned by 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
- at or subsequent to the date of the transaction, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66.67% of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction or series of transactions together resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 of the DGCL may also discourage attempts that might result in a premium over the market price for the shares of Common Stock held by stockholders.

Certificate of Incorporation and Bylaws Provisions

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

- *Board of Directors Vacancies*. Our certificate of incorporation and bylaws will authorize only our board of directors to fill vacant directorships, including newly created seats. In addition, the number of directors constituting our board of directors will be permitted to be set only by a resolution adopted by a majority vote of our entire board of directors. These provisions would prevent a stockholder from increasing the size of our board of directors and then gaining control of our board of directors by filling the resulting vacancies with its own nominees. This makes it more difficult to change the composition of our board of directors but promotes continuity of management.
- *Stockholder Action; Special Meetings of Stockholders*. Our certificate of incorporation will provide that our stockholders may not take action by written consent but may only take action at annual or special meetings of our stockholders. As a result, a holder controlling a majority of our capital stock would not be able to amend our bylaws or remove directors without holding a meeting of our stockholders called in accordance with our bylaws. Further, our bylaws and certificate of incorporation will provide that special meetings of our stockholders may be called only by a majority of our board of directors, the chairman of our board of directors, or our Chief Executive Officer, thus prohibiting a stockholder from calling a special meeting. These provisions might delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take any action, including the removal of directors.
- *Advance Notice Requirements for Stockholder Proposals and Director Nominations*. Our bylaws will provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at our annual meeting of stockholders. Our bylaws also will specify certain requirements regarding the form and content of a stockholder's notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions might also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of the Company.

- *No Cumulative Voting*. The DGCL provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless a corporation's certificate of incorporation provides otherwise. Our certificate of incorporation will not provide for cumulative voting.
- *Directors Removed Only for Cause*. Our certificate of incorporation will provide that stockholders may remove directors only for cause and only by the affirmative vote of the holders of at least two-thirds of our outstanding Common Stock.
- *Amendment of Charter Provisions*. Any amendment of the above expected provisions in our certificate of incorporation would require approval by holders of at least two-thirds of our outstanding Common Stock.
- *Issuance of Undesignated Preferred Stock*. Our board of directors has the authority, without further action by the stockholders, to issue up to 20,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock would enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or other means.
- *Choice of Forum*. Our certificate of incorporation will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, our certificate of incorporation or our bylaws; any action to interpret, apply, enforce or determine the validity of our certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. Notwithstanding the foregoing, the exclusive forum provision does not apply to suits brought to enforce any liability or duty created by the Securities Act, the Exchange Act or any other claim for which the federal courts have exclusive or concurrent jurisdiction. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act of the rules and regulations thereunder, and Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder, and notwithstanding the provisions of our certificate of incorporation and our bylaws, compliance with the federal securities laws and the rules and regulations thereunder may not be waived by our investors. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable.

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is Nevada Agency and Transfer Company. The transfer agent's address 50 W. Liberty Street, Suite 880, Reno, NV 89501, and its telephone number is (775) 322-0626. Our shares of Common Stock will be issued in uncertificated form only, subject to limited circumstances.

Market Listing

Our Common Stock is listed on NYSE American under the symbol "CHRO".

PLAN OF DISTRIBUTION

The shares of our Common Stock offered by this prospectus are being offered by the Selling Stockholder, Tikkun Capital LLC. The shares may be sold or distributed from time to time by the Selling Stockholder directly to one or more purchasers or through brokers, dealers, or underwriters who may act solely as agents at market prices prevailing at the time of sale, at prices related to the prevailing market prices, at negotiated prices, or at fixed prices, which may be changed. The sale of the shares of our Common Stock offered by this prospectus could be effected in one or more of the following methods:

- ordinary brokers' transactions;
- transactions involving cross or block trades;
- through brokers, dealers, or underwriters who may act solely as agents;
- "at the market" into an existing market for our Common Stock;
- in other ways not involving market makers or established business markets, including direct sales to purchasers or sales effected through agents;
- in privately negotiated transactions; or
- any combination of the foregoing.

In order to comply with the securities laws of certain states, if applicable, the shares may be sold only through registered or licensed brokers or dealers. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the state or an exemption from the state's registration or qualification requirement is available and complied with.

Tikkun Capital is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act.

Tikkun Capital has informed us that it intends to use one or more registered broker-dealers to effectuate all sales, if any, of our Common Stock that it has acquired and may in the future acquire from us pursuant to the Purchase Agreement. Such sales will be made at prices and at terms then prevailing or at prices related to the then current market price. Each such registered broker-dealer will be an underwriter within the meaning of Section 2(a)(11) of the Securities Act. Tikkun Capital has informed us that each such broker-dealer will receive commissions from Tikkun Capital that will not exceed customary brokerage commissions.

Brokers, dealers, underwriters or agents participating in the distribution of the shares of our Common Stock offered by this prospectus may receive compensation in the form of commissions, discounts, or concessions from the purchasers, for whom the broker-dealers may act as agent, of the shares sold by the selling stockholder through this prospectus. The compensation paid to any such particular broker-dealer by any such purchasers of shares of our Common Stock sold by the selling stockholder may be less than or in excess of customary commissions. Neither we nor the selling stockholder can presently estimate the amount of compensation that any agent will receive from any purchasers of shares of our Common Stock sold by the Selling Stockholder.

We know of no existing arrangements between the Selling Stockholder or any other stockholder, broker, dealer, underwriter or agent relating to the sale or distribution of the shares of our Common Stock offered by this prospectus.

We may from time to time file with the SEC one or more supplements to this prospectus or amendments to the registration statement of which this prospectus forms a part to amend, supplement or update information contained in this prospectus, including, if and when required under the Securities Act, to disclose certain information relating to a particular sale of shares offered by this prospectus by the Selling Stockholder, including the names of any brokers, dealers, underwriters or agents participating in the distribution of such shares by the Selling Stockholder, any compensation paid by the Selling Stockholder to any such brokers, dealers, underwriters or agents, and any other required information.

We will pay the expenses incident to the registration under the Securities Act of the offer and sale of the shares of our Common Stock covered by this prospectus by the Selling Stockholder. As consideration for its irrevocable commitment to purchase our Common Stock under the CEF Purchase Agreement, we have paid \$750,000 in cash to Tikkun as a commitment fee. We also have agreed to reimburse Tikkun Capital for the fees and disbursements of its counsel, payable upon execution of the CEF Purchase Agreement, in an amount not to exceed \$75,000.

We also have agreed to indemnify Tikkun Capital and certain other persons against certain liabilities in connection with the offering of shares of our Common Stock offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Tikkun Capital has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by Tikkun Capital specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons, we have been advised that in the opinion of the SEC this indemnification is against public policy as expressed in the Securities Act and is therefore, unenforceable.

We have entered into a Private Placement Agreement ("Placement Agreement") with Pickwick Capital Partners, LLC ("Pickwick"), a registered broker-dealer and member of the Financial Industry Regulatory Authority, Inc. ("FINRA"), pursuant to which Pickwick agreed to act as the placement agent in connection with the transactions contemplated by the CEF Purchase Agreement. Pursuant to such Placement Agreement, we have agreed to pay Pickwick a cash fee of \$10,000. Such fee is subjected to the rules of FINRA and FINRA's determination not to raise any objection with respect to the fairness or reasonableness of the terms of compensation to be received by Pickwick. We have also agreed to provide indemnification and contribution to Pickwick with respect to its engagement by the Company pursuant to the Placement Agreement.

We estimate that the total expenses for the offering will be approximately \$179,392.62.

Tikkun Capital has represented to us that at no time prior to the date of the CEF Purchase Agreement has Tikkun Capital or its agents, representatives or affiliates engaged in or effected, in any manner whatsoever, directly or indirectly, any short sale (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of our Common Stock or any hedging transaction, which establishes a net short position with respect to our Common Stock. Tikkun Capital has agreed that during the term of the CEF Purchase Agreement, neither Tikkun Capital, nor any of its agents, representatives or affiliates will enter into or effect, directly or indirectly, any of the foregoing transactions.

We have advised the Selling Stockholder that it is required to comply with Regulation M promulgated under the Exchange Act. With certain exceptions, Regulation M precludes the Selling Stockholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the securities offered by this prospectus.

This offering will terminate on the date that all shares of our Common Stock offered by this prospectus have been sold by the Selling Stockholder.

Our Common Stock is currently listed on the NYSE American LLC under the symbol "CHRO".

LEGAL MATTERS

The validity of the Common Stock offered by this prospectus will be passed upon for us by Sullivan & Worcester LLP, New York, New York.

Interests of named experts and counsel

David Danovitch and John Riley, partner and of counsel of Sullivan & Worcester LLP, respectively, own 65,746 and 110,818 shares of our Common Stock, respectively.

EXPERTS

The financial statements of Chromocell Therapeutics Corporation as of December 31, 2023 and 2022 and for each of the two years in the period ended December 31, 2023, incorporated in this prospectus by reference have been audited by Marcum LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph relating to substantial doubt about the ability of Chromocell Therapeutics Corporation to continue as a going concern as described in Note 2 to the financial statements and an emphasis of matter paragraph related to the preparation of certain financial statements on a carve-out basis as described in Note 4), appearing elsewhere in the documents incorporated by reference, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some of which is contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and these securities, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The SEC maintains an Internet website that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

We are subject to the information and reporting requirements of the Exchange Act and, in accordance with this law, we file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information are available for inspection and copying at the SEC's public reference facilities and the website of the SEC referred to above. We also maintain a website at www.chromocell.com. You may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on our website is not a part of this prospectus and the inclusion of our website address in this prospectus is an inactive textual reference only.

INCORPORATION BY REFERENCE

We incorporate by reference the filed documents listed below (excluding those portions of any Current Report on Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K), except as superseded, supplemented or modified by this prospectus or any subsequently filed document incorporated by reference herein as described below:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on April 16, 2024;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, filed with the SEC on May 15, 2024;
- our Current Reports on Forms 8-K filed with the SEC on February 22, 2024, March 13, 2024, March 18, 2024, March 21, 2024, April 9, 2024 and July 29, 2024; and
- our registration statement on Form 8-A filed with the SEC on February 15, 2024, including any amendments or reports filed for the purpose of updating such description and (ii) Exhibit 4.2 - Description of the Registrant's Securities Registered Pursuant to Section 12 of the Exchange Act, to our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on April 16, 2024.

We also incorporate by reference into this prospectus additional documents we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act: (i) on or after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of the registration statement, and (ii) on or after the date of this prospectus but before the completion or termination of this offering (excluding any information not deemed "filed" with the SEC). Any statement contained in a previously filed document is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in a subsequently filed document incorporated by reference herein modifies or supersedes the statement, and any statement contained in this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in a subsequently filed document incorporated by reference herein modifies or supersedes the statement.

We will provide, without charge, to each person to whom a copy of this prospectus is delivered, including any beneficial owner, upon the written or oral request of such person, a copy of any or all of the documents incorporated by reference herein, but not delivered with such prospectus. Requests should be directed to:

Chromocell Therapeutics Corporation
4400 Route 9 South, Suite 1000
Freehold, NJ 07728
(877) 265-8266
info@chromocell.com

Copies of these filings are also available on our website at www.chromocell.com. For other ways to obtain a copy of these filings, please refer to "Where You Can Find More Information" above.

2,000,000 SHARES OF COMMON STOCK



**CHROMOCELL THERAPEUTICS
CORPORATION**

**PRELIMINARY
PROSPECTUS**

The date of this prospectus is _____, 2024

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by the registrant in connection with the sale of our securities being registered. All amounts are estimates except for the Securities and Exchange Commission ("SEC") registration fee.

	Amount Paid or to be Paid
SEC registration fee	\$ 392.62
Legal fees and expenses	150,000
Accounting fees and expenses	26,000
Transfer agent fees and expenses	500
Printing and related fees	2,500
Total	<u>\$ 179,392.62</u>

Item 14. Indemnification of Directors and Officers.

We are incorporated under the laws of the State of Delaware. Section 102 of the General Corporation Law of the State of Delaware (the "DGCL") permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

As permitted by the DGCL, our certificate of incorporation and bylaws to be in effect upon the closing of our initial public offering on February 21, 2024 (the "IPO") provide that: (i) we are required to indemnify our directors and officers to the fullest extent permitted by the DGCL; (ii) we may, in our discretion, indemnify our employees and agents as set forth in the DGCL; (iii) we are required, upon satisfaction of certain conditions, to advance all expenses incurred by our directors and officers in connection with certain legal proceedings; (iv) the rights conferred in the bylaws are not exclusive; and (v) we are authorized to enter into indemnification agreements with our directors, officers, employees and agents.

We have entered into indemnification agreements with our directors and executive officers that require us to indemnify them against expenses, judgments, fines, settlements and other amounts that any such person becomes legally obligated to pay (including with respect to a derivative action) in connection with any proceeding, whether actual or threatened, to which such person may be made a party by reason of the fact that such person is or was a director or officer of us or any of our affiliates, provided such person acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, our best interests. We maintain a directors' and officers' liability insurance policy. The policy insures directors and officers against uninsured losses arising from certain wrongful acts in their capacities as directors and officers and reimburses us for those losses for which we have lawfully indemnified the directors and officers. The policy contains various exclusions.

Item 15. Recent Sales of Unregistered Securities.

On August 10, 2022, we entered into that certain Contribution Agreement (the "Contribution Agreement") with Chromocell Corporation, a Delaware corporation ("Chromocell Holdings"). Pursuant to the Contribution Agreement, we issued to Chromocell Holdings 1,111,111 shares of our common stock, \$0.0001 par value per share (the "Common Stock") and 600,000 shares of our Series A Convertible Preferred Stock.

On January 10, 2023, pursuant to the Chromocell Therapeutics Corporation 2023 Equity Incentive Plan (the "2023 Plan"), we granted: (a) options to purchase up to an aggregate of 141,667 shares of Common Stock to employees and directors and (b) 16,667 restricted stock units ("RSUs") to employees. The RSUs were cancelled on June 23, 2023 and as they had not vested, no expense was recorded on the Company's historical financial statements.

On March 9, 2023, pursuant to the 2023 Plan, we granted to a director options to purchase up to an aggregate of 15,000 shares of Common Stock.

On June 23, 2023, pursuant to the 2023 Plan, we granted to two employees options to purchase up to an aggregate of 52,000 shares of Common Stock, which include options that have not yet been granted but the Company has agreed to grant in connection with the closing of the offering of shares registered in the IPO.

On June 23, 2023, we entered into a side letter with the holder of the promissory note (the "Holder of the Investor Note"), as amended from time to time, in the aggregate principal amount of \$450,000 that the Company entered into on February 4, 2022, as amended (the "Investor Note") (the "June Investor Note Side Letter"). On June 23, 2023, pursuant to the June Investor Note Side Letter, we issued 5,556 shares of Common Stock to the Holder of the Investor Note.

On August 17, 2023, we entered into a side letter with the Holder of the Investor Note (the "August Investor Note Side Letter"). On August 17, 2023, pursuant to the August Investor Note Side Letter, we issued 3,334 shares of Common Stock to the Holder of the Investor Note.

Effective October 10, 2023, we entered into a side letter with the Holder of the Investor Note (the "October Investor Note Side Letter"). Effective October 10, 2023, pursuant to the October Investor Note Side Letter, we issued 3,334 shares of Common Stock to the Holder of the Investor Note.

Effective November 13, 2023, we entered into the November Investor Note Side Letter (the "November Investor Note Side Letter"). Effective November 13, 2023, pursuant to the November Investor Note Side Letter, we agreed to issue 3,334 shares of Common Stock to the Holder of the Investor Note on each of November 29, 2023, December 29, 2023 and January 29, 2024, provided the Investor Note remained outstanding as of such date.

On April 17, 2023, the Company entered into a bridge loan for working capital purposes, with various accredited investors, all of whom are pre-existing stockholders, in the aggregate principal amount of \$393,808 (the "April Bridge Financing"). On September 1, 2023, the Company entered into a bridge loan for working capital purposes, with various accredited investors, certain of which are pre-existing stockholders, in the aggregate principal amount of \$198,128 (the "September Bridge Financing"). On November 22, 2023, we commenced a rights offering (the "Rights Offering") pursuant to which we distributed non-transferable subscription rights to each holder of our Common Stock held as of 5:00 p.m. Eastern Standard Time on November 22, 2023, the record date for the Rights Offering. On February 8, 2024, we and certain affiliates of A.G.P./ Alliance Global Partners (the "Representative") entered into amendments to the senior secured convertible notes issued to such affiliates of the Representative in the April Bridge Financing and September Bridge Financing to remove the automatic conversion features from such notes (the "Bridge Financing Note Amendments"). On February 10, 2024, we entered into a Stock Rescission Agreement with certain affiliates of the Representative (the "Stock Rescission Agreement" and, together with the Bridge Financing Note Amendments, the "Representative Affiliate Transactions"), pursuant to which we rescinded 111,129 shares of our Common Stock held by such affiliates of the Representative and agreed to refund an aggregate of \$91,512.53 paid by such affiliates of the Representative in consideration thereof within 30 days of the effective date of the Stock Rescission Agreement. On December 1, 2023, we issued 2,442,469 shares of Common Stock in connection with our Rights Offering, after giving effect to the Representative Affiliate Transactions.

On December 23, 2023, we entered into an exclusive licensing agreement (the "Benuvia License Agreement") with Benuvia Operations LLC ("Benuvia"). In addition, on December 23, 2023, we entered into a stock issuance agreement with Benuvia (the "Benuvia Stock Issuance Agreement"). On December 23, 2023, in connection with the Benuvia License Agreement, we issued 384,226 shares of Common Stock to Benuvia pursuant to the Benuvia Stock Issuance Agreement.

Effective January 30, 2024, the Company entered into another side letter with the Holder of the Investor Note (the "January Investor Note Side Letter"). Effective January 30, 2024, pursuant to the January Investor Note Side Letter, we agreed to issue 77,778 shares of Common Stock on the earlier to occur of the IPO or February 29, 2024.

On June 12, 2024, we issued up to an aggregate of 140,000 shares of Common Stock to two vendors in considerations for the services provided by each vendor to the Company.

On July 24, 2024, we issued a senior unsecured convertible note to an accredited investor in the aggregate principal amount of \$750,000, with an interest rate of six percent (6.0%) per annum (which increases to 12% in the event of a default) (the "Note"). The Note is convertible into 496,689 shares of Common Stock based on the conversion price of \$1.506, subject to be adjusted as set forth in the Note. The conversion of the Note is subject to beneficial ownership limitations and share issuance limitations specified therein.

The offers and sales of the above securities were deemed to be exempt from registration under the Securities Act in reliance upon Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act") or Regulation D promulgated thereunder, or Rule 701 promulgated under Section 3(b) of the Securities Act, as transactions by an issuer not involving any public offering or pursuant to benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of the above securities represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

We have filed the exhibits listed on the accompanying Exhibit Index of this registration statement, which Exhibit Index is incorporated herein by reference.

(b) Financial Statement Schedules.

All other schedules have been omitted because the information required to be presented in them is not applicable or is shown in the financial statements or notes.

Item 17. Undertakings.

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

The undersigned Registrant hereby undertakes that:

- 1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;
- 2) For determining liability under the Securities Act, treat each post-effective amendment as a new registration statement of the securities offered, and the offering of the securities at that time to be the initial bona fide offering.
- 3) File a post-effective amendment to remove from registration any of the securities that remain unsold at the end of the offering.
- 4) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

- 5) For the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to the Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- 6) That, for purposes of determining any liability under the Securities Act of 1933, as amended, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934, as amended) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

EXHIBIT INDEX

Exhibit No.	Description of Exhibit
2.1	Contribution Agreement (filed as Exhibit 2.1 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 20, 2023 and incorporated by reference herein).
2.2	Side Letter to Contribution Agreement (filed as Exhibit 2.2 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on September 1, 2023 and incorporated by reference herein).
3.1	Amended and Restated Certificate of Incorporation (filed as Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed with the SEC on February 22, 2024 and incorporated by reference herein).
3.2	Certificate of Designation of Series A Convertible Preferred Stock, as currently in effect (filed as Exhibit 3.2 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 20, 2023 and incorporated by reference herein).
3.3	Certificate of Designation of Series C Convertible Preferred Stock (filed as Exhibit 3.3 to Registrant's Annual Report on Form 10-K, filed with the SEC on April 16, 2024 and incorporated by reference herein).
3.4	Amended and Restated By-Laws (filed as Exhibit 3.2 to Registrant's Current Report on Form 8-K, filed with the SEC on February 22, 2024 and incorporated by reference herein).
4.1	Representative's Warrant (filed as Exhibit 4.1 to Registrant's Current Report on Form 8-K, filed with the SEC on February 22, 2024 and incorporated by reference herein).
4.2	Investor Promissory Note Issued by the Company (filed as Exhibit 4.6 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 20, 2023 and incorporated by reference herein).
4.3	Side Letter to Amended and Restated Investor Promissory Note issued by the Company (filed as Exhibit 4.7 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on June 30, 2023 and incorporated by reference herein).
4.4	Second Amended and Restated Investor Promissory Note Issued by the Company (filed as Exhibit 4.6 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on June 30, 2023 and incorporated by reference herein).
4.5	Third Amended and Restated Investor Promissory Note Issued by the Company (filed as Exhibit 4.4 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on September 1, 2023 and incorporated by reference herein).
4.6	Side Letter to Second Amended and Restated Investor Promissory Note Issued by the Company (filed as Exhibit 4.5 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on September 1, 2023 and incorporated by reference herein).
4.7	Director Promissory Note Issued by the Company (filed as Exhibit 4.7 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 20, 2023 and incorporated by reference herein).
4.8	Form of Senior Secured Convertible Promissory Note (April Bridge Financing; included in Exhibit 10.4) (filed as Exhibit 4.6 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on July 20, 2023 and incorporated by reference herein).
4.9	Form of Senior Secured Convertible Promissory Note (September Bridge Financing; included in Exhibit 10.6) (filed as Exhibit 4.8 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on September 1, 2023 and incorporated by reference herein).
4.10	Amendment No. 1 to Third Amended and Restated Investor Promissory Note Issued by the Company (filed as Exhibit 4.8 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 16, 2023 and incorporated by reference herein).
4.11	Side Letter to Third Amended and Restated Investor Promissory Note Issued by the Company (filed as Exhibit 4.9 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 16, 2023 and incorporated by reference herein).
4.12	Fourth Amended and Restated Investor Promissory Note Issued by the Company (filed as Exhibit 4.10 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 16, 2023 and incorporated by reference herein).
4.13	First Amendment to Senior Secured Convertible Note (April Bridge Financing) (filed as Exhibit 4.11 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 25, 2023 and incorporated by reference herein).
4.14	October Promissory Note Issued by the Company (AME Equities LLC) (filed as Exhibit 4.12 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 16, 2023 and incorporated by reference herein).
4.15	October Promissory Note Issued by the Company (Balmoral Financial Group LLC) (filed as Exhibit 4.13 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 16, 2023 and incorporated by reference herein).
4.16	October Promissory Note Issued by the Company (Camden Capital LLC) (filed as Exhibit 4.14 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 16, 2023 and incorporated by reference herein).
4.17	October Promissory Note Issued by the Company (MDB Merchants Park LLC) (filed as Exhibit 4.15 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 16, 2023 and incorporated by reference herein).
4.18	Second Amendment to Senior Secured Convertible Note (April Bridge Financing) (filed as Exhibit 4.16 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 25, 2023 and incorporated by reference herein).
4.19	Amended and Restated October Promissory Note Issued by the Company (AME Equities LLC) (filed as Exhibit 4.17 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on November 8, 2023 and incorporated by reference herein).
4.20	Amended and Restated October Promissory Note Issued by the Company (Balmoral Financial Group LLC) (filed as Exhibit 4.18 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on November 8, 2023 and incorporated by reference herein).
4.21	Amended and Restated October Promissory Note Issued by the Company (Camden Capital LLC) (filed as Exhibit 4.19 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on November 8, 2023 and incorporated by reference herein).
4.22	Amended and Restated October Promissory Note Issued by the Company (MDB Merchants Park LLC) (filed as Exhibit 4.20 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on November 8, 2023 and incorporated by reference herein).
4.23	Third Amendment to Senior Secured Convertible Note (April Bridge Financing) (filed as Exhibit 4.21 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 16, 2024 and incorporated by reference herein).

<u>4.24</u>	<u>Side Letter to Fourth Amended and Restated Investor Promissory Note Issued by the Company (filed as Exhibit 4.22 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 16, 2024 and incorporated by reference herein).</u>
<u>4.25</u>	<u>Fifth Amended and Restated Investor Promissory Note Issued by the Company (filed as Exhibit 4.23 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 16, 2024 and incorporated by reference herein).</u>
<u>4.26</u>	<u>Second Amended and Restated October Promissory Note Issued by the Company (AME Equities LLC) (filed as Exhibit 4.24 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 16, 2024 and incorporated by reference herein).</u>
<u>4.27</u>	<u>Second Amended and Restated October Promissory Note Issued by the Company (Balmoral Financial Group LLC) (filed as Exhibit 4.25 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 16, 2024 and incorporated by reference herein).</u>
<u>4.28</u>	<u>Second Amended and Restated October Promissory Note Issued by the Company (Camden Capital LLC) (filed as Exhibit 4.26 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 16, 2024 and incorporated by reference herein).</u>
<u>4.29</u>	<u>Second Amended and Restated October Promissory Note Issued by the Company (MDB Merchants Park LLC) (filed as Exhibit 4.27 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 16, 2024 and incorporated by reference herein).</u>
<u>4.30</u>	<u>Stock Issuance Agreement (Benuvia License Agreement) (filed as Exhibit 4.28 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 16, 2024 and incorporated by reference herein).</u>
<u>4.31</u>	<u>Amendment No. 1 to Director Promissory Note Issued by the Company (filed as Exhibit 4.29 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 16, 2024 and incorporated by reference herein).</u>
<u>4.32</u>	<u>Side Letter to Fifth Amended and Restated Investor Promissory Note Issued by the Company (filed as Exhibit 4.30 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 30, 2024 and incorporated by reference herein).</u>
<u>4.33</u>	<u>Sixth Amended and Restated Investor Promissory Note Issued by the Company (filed as Exhibit 4.31 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 30, 2024 and incorporated by reference herein).</u>
<u>4.34</u>	<u>Fourth Amendment to Senior Secured Convertible Note (April Bridge Financing) (filed as Exhibit 4.32 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on February 12, 2024 and incorporated by reference herein).</u>
<u>4.35</u>	<u>First Amendment to Senior Secured Convertible Note (September Bridge Financing) (filed as Exhibit 4.33 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on February 12, 2024 and incorporated by reference herein).</u>
<u>4.36</u>	<u>Stock Rescission Agreement (filed as Exhibit 4.34 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on February 12, 2024 and incorporated by reference herein).</u>
<u>4.37</u>	<u>Convertible Note (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on July 29, 2024).</u>
<u>5.1*</u>	<u>Opinion of Sullivan & Worcester LLP</u>
<u>10.1+</u>	<u>Chromocell Therapeutics Corporation 2023 Equity Incentive Plan (filed as Exhibit 10.1 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 20, 2023 and incorporated by reference herein).</u>
<u>10.2+</u>	<u>Amended and Restated Employment Agreement (Christian Kopfli) (filed as Exhibit 10.2 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on September 1, 2023 and incorporated by reference herein).</u>
<u>10.3+</u>	<u>Amended and Restated Consultant Agreement (Camden Capital LLC) (filed as Exhibit 10.3 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on June 30, 2023 and incorporated by reference herein).</u>
<u>10.4</u>	<u>Securities Purchase Agreement (April Bridge Financing) (filed as Exhibit 10.4 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on July 20, 2023 and incorporated by reference herein).</u>

<u>10.5</u>	<u>Security Agreement (April Bridge Financing) (filed as Exhibit 10.5 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on July 20, 2023 and incorporated by reference herein).</u>
<u>10.6</u>	<u>Securities Purchase Agreement (September Bridge Financing) (filed as Exhibit 10.6 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 16, 2023 and incorporated by reference herein).</u>
<u>10.7</u>	<u>Security Agreement (September Bridge Financing) (filed as Exhibit 10.7 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on September 1, 2023 and incorporated by reference herein).</u>
<u>10.8</u>	<u>Subordination and Intercreditor Agreement (September Bridge Financing) (filed as Exhibit 10.8 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on September 1, 2023 and incorporated by reference herein).</u>
<u>10.9</u>	<u>Securities Purchase Agreement (Series B Preferred Stock) (filed as Exhibit 10.9 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 16, 2023 and incorporated by reference herein).</u>
<u>10.10</u>	<u>Registration Rights Agreement (Series B Preferred Stock) (filed as Exhibit 10.10 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on October 16, 2023 and incorporated by reference herein).</u>
<u>10.11+</u>	<u>Employment Agreement (Eric Lang) (filed as Exhibit 10.7 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on June 30, 2023 and incorporated by reference herein).</u>
<u>10.12+</u>	<u>First Amendment to Chromocell Therapeutics Corporation 2023 Equity Incentive Plan (filed as Exhibit 4.4 to Registrant's Registration Statement on Form S-8, filed with the SEC on April 15, 2024 and incorporated by reference herein).</u>
<u>10.13</u>	<u>Side Letter re Securities Purchase Agreement (Standby Shares) (filed as Exhibit 10.13 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 16, 2024 and incorporated by reference herein).</u>
<u>10.14+</u>	<u>Benuvia License Agreement (filed as Exhibit 10.14 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 16, 2024 and incorporated by reference herein).</u>
<u>10.15+</u>	<u>Consulting Agreement (Francis Knuettel II) (filed as Exhibit 10.3 to Registrant's Registration Statement on Form S-1/A, filed with the SEC on January 20, 2023 and incorporated by reference herein).</u>
<u>10.16</u>	<u>Form of Restricted Stock Unit Agreement under the Chromocell Therapeutics Corporation 2023 Equity Incentive Plan (filed as Exhibit 4.5 to Registrant's Registration Statement on Form S-8, filed with the SEC on April 15, 2024 and incorporated by reference herein).</u>
<u>10.17</u>	<u>Form of Stock Option Agreement under the Chromocell Therapeutics Corporation 2023 Equity Incentive Plan (filed as Exhibit 4.6 to Registrant's Registration Statement on Form S-8, filed with the SEC on April 15, 2024 and incorporated by reference herein).</u>
<u>10.18+</u>	<u>Side Letter to Amended and Restated Consultant Agreement (Camden Capital) (filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q, filed with the SEC on May 15, 2024 and incorporated by reference herein).</u>
<u>10.19+</u>	<u>Promissory Note Issued by the Company (Camden Capital) (filed as Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q, filed with the SEC on May 15, 2024 and incorporated by reference herein).</u>
<u>10.20+</u>	<u>Employment Agreement (Francis Knuettel II) (filed as Exhibit 10.3 to Registrant's Quarterly Report on Form 10-Q, filed with the SEC on May 15, 2024 and incorporated by reference herein).</u>
<u>10.21</u>	<u>Securities Purchase Agreement (Convertible Note) by and between Chromocell Therapeutics Corporation and an accredited investor, dated July 24, 2024 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on July 29, 2024).</u>
<u>10.22</u>	<u>Common Stock Purchase Agreement by and between Chromocell Therapeutics Corporation and Tikkun Capital LLC, dated July 26, 2024 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on July 29, 2024).</u>
<u>10.23</u>	<u>Registration Rights Agreement by and between Chromocell Therapeutics Corporation and Tikkun Capital, LLC dated July 26, 2024 (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on July 29, 2024).</u>
<u>23.1*</u>	<u>Consent of Marcum LLP</u>
<u>23.2*</u>	<u>Consent of Sullivan & Worcester LLP (included in Exhibit 5.1)</u>
<u>24.1*</u>	<u>Power of Attorney (included on signature page)</u>
<u>107*</u>	<u>Filing Fee Table</u>

* Filed herewith.

+ Indicates management contract or compensatory plan.

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 North Brunswick, State of New Jersey, on July 29, 2024.

CHROMOCELL THERAPEUTICS CORPORATION

By: /s/ Francis Knuettel II

Name: Francis Knuettel II

Title: Chief Executive Officer and President, Chief Financial Officer, Treasurer and Secretary

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose individual signature appears below hereby authorizes and appoints Francis Knuettel II with full power of substitution and resubstitution and full power to act, as his true and lawful attorney-in-fact and agent to act in his name, place and stead, and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this registration statement, any related registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and any or all pre- or post-effective amendments thereto, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the U.S. Securities and Exchange Commission, granting unto said attorney-in-fact and agent, and 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 for all intents and purposes as he might or could do in person, hereby ratifying and confirming that said attorney-in-fact and agent, or any substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated below:

Signature	Title	Date
<u>/s/ Francis Knuettel II</u> Francis Knuettel II	Chief Executive Officer and Chief Financial Officer, President, Treasurer and Secretary (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)	July 29, 2024
<u>/s/ Ezra Friedberg</u> Ezra Friedberg	Director	July 29, 2024
<u>/s/ Todd Davis</u> Todd Davis	Director	July 29, 2024
<u>/s/ Richard Malamut</u> Richard Malamut	Director	July 29, 2024
<u>/s/ Chia-Lin Simmons</u> Chia-Lin Simmons	Director	July 29, 2024



Sullivan & Worcester LLP
1251 Avenue of the Americas
New York, NY 10020

212 660 3000
sullivanlaw.com

July 29, 2024

Chromocell Therapeutics Corporation
4400 Route 9 South, Suite 1000
Freehold, NJ 07728

Ladies and Gentlemen:

We have acted as special counsel to Chromocell Therapeutics Corporation, a Delaware corporation (the "**Company**"), in connection with a Registration Statement on Form S-1 (as amended from time to time, the "**Registration Statement**") filed on July 29, 2024 by the Company with the U.S. Securities and Exchange Commission (the "**Commission**") under the Securities Act of 1933, as amended (the "**Securities Act**"), for the proposed resale from time to time by Tikkun Capital LLC (the "**Selling Stockholder**") of an aggregate of up to 2,000,000 shares (the "**Shares**") of common stock, par value \$0.0001 per share, of the Company (the "**Common Stock**") issuable to the Selling Stockholder pursuant to that certain Common Stock Purchase Agreement, dated as of July 26, 2024 (the "**Purchase Agreement**"), by and between the Company and the Selling Stockholder.

In connection with this opinion, we have examined and relied upon the originals or copies certified or otherwise identified to our satisfaction of the following: (i) the Registration Statement, including the exhibits filed therewith, (ii) the Purchase Agreement and all exhibits and schedules attached thereto, and all documentation provided by the Company in connection therewith, (iii) the minutes of meetings and resolutions of the board of directors of the Company as provided to us by the Company, (iv) the Amended and Restated Certificate of Incorporation and the Amended and Restated Bylaws of the Company and (v) such other documents as we have deemed necessary for purposes of rendering the opinion hereinafter set forth.

In addition to the foregoing, we have relied as to matters of fact upon the representations made by the Company and its representatives and upon representations made by the Selling Stockholder. We also have assumed the genuineness of all signatures on original documents, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of the originals of such latter documents and the due authorization, execution and delivery of all documents where authorization, execution and delivery are prerequisites to the effectiveness of such documents. Other than our examination of the documents indicated above, we have made no other examination in connection with this opinion.

We are members of the Bar of the State of New York. We do not hold ourselves out as being conversant with, or expressing any opinion with respect to, the laws of any jurisdiction other than the laws of the State of New York and the General Corporation Law of the State of Delaware (the "**DGCL**"). Accordingly, the opinions expressed herein are expressly limited to the laws of the State of New York and the DGCL. Our opinion is based on these laws as in effect on the date hereof. We express no opinion as to whether the laws of any other jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof.

Based upon the foregoing and in reliance thereon, and subject to the qualifications, limitations, exceptions and assumptions set forth herein, we are of the opinion that the Shares have been duly authorized for issuance by all necessary corporate action by the Company, and such Shares, when issued and paid for by the Selling Stockholder pursuant to the terms of the Purchase Agreement upon payment to the Company of the required consideration in accordance with the terms of the Purchase Agreement, and when issued and sold as described in the Registration Statement, will be validly issued, fully paid and non-assessable shares of Common Stock.

This opinion letter speaks only as of the date hereof and we assume no obligation to update or supplement this opinion letter if any applicable laws change after the date of this opinion letter or if we become aware after the date of this opinion letter of any facts, whether existing before or arising after the date hereof, that might change the opinions expressed above.

BOSTON LONDON NEW YORK TEL AVIV WASHINGTON, DC

This opinion is furnished in connection with the filing of the Registration Statement and may not be relied upon for any other purpose without our prior written consent in each instance. Further, no portion of this opinion may be quoted, circulated or referred to in any other document for any other purpose without our prior written consent.

We hereby consent to the filing of this opinion with the Commission as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the caption "*Legal Matters*" in the prospectus which forms part of the Registration Statement. In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ SULLIVAN & WORCESTER LLP

Sullivan & Worcester LLP

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Chromocell Therapeutics Corporation on Form S-1 of our report dated April 16, 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 financial statements of Chromocell Therapeutics Corporation 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 Chromocell Therapeutics Corporation 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
Hartford, CT
July 29, 2024

Calculation of Filing Fee Tables

Form S-1
(Form Type)Chromocell Therapeutics Corporation
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount To Be Registered (1)(3)	Maximum Offering Price Per Share (2)	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid in Connection with Unsold Securities to be Carried Forward
Newly Registered Securities											
	Common stock, \$0.0001 par value per share										
Fees to Be Paid	Equity	Rule 457(c)	2,000,000	\$ 1.33	\$ 2,660,000	0.0001476	\$ 392.62				
Fees Previously Paid	—	—	—	—	—	—	—				
Carry Forward Securities											
Carry Forward Securities	—	—	—	—	—	—	—	—	—	—	—
Total Offering Amounts					\$ 2,660,000		\$ 392.62				
Total Fees Previously Paid							—				
Total Fee Offset							—				
Net Fee Due							\$ 392.62				

- (1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), includes any additional shares of common stock, \$0.0001 par value per share (the "Common Stock"), of Chromocell Therapeutics Corporation (the "Registrant") that may from time to time be offered or issued to prevent dilution from any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of outstanding shares of Common Stock.

- (2) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(c) of the Securities Act, based upon the average of the high and low prices for a share of Common Stock as reported on July 26, 2024 on the NYSE American LLC, which date is a date within five business days of the filing of this registration statement filed by the Registrant for the registration of the shares of Common Stock listed in the table above (the "Registration Statement").
 - (3) Represents shares of Common Stock registered for resale on this Registration Statement by the selling stockholder (the "Selling Stockholder") named in this Registration Statement or its permitted transferees. Such number of shares of Common Stock is a portion of the maximum number of shares of Common Stock that may be issued by the Company from time to time to the Selling Stockholder named in the Registration Statement pursuant to that certain Common Stock Purchase Agreement, dated as of July 26, 2024, by and between the Registrant and such Selling Stockholder.
-