Registration No. 333-

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

FORM S-8 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)

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

4400 Route 9 South, Suite 1000

Freehold, NJ 07728

732-514-2636 (Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Chromocell Therapeutics Corporation 2023 Equity Incentive Plan (Full Title of the Plan)

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Francis Knuettel II Chief Executive Officer and Chief Financial Officer, Treasurer and Secretary 4400 Route 9 South, Suite 1000 Freehold, NJ 07728 732-514-2636

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

Copy to: David Danovitch, Esq. Sullivan & Worcester LLP 1633 Broadway, 32nd Floor New York, New York 10019 (212) 660-3060

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 Securities Act.

EXPLANATORY NOTE

This Registration Statement on Form S-8 (this "Registration Statement") is being filed by Chromocell Therapeutics Corporation (the "Registrant") for the purpose of registering an aggregate of 444,444 shares of common stock, par value \$0.0001 per share, of the Registrant ("Common Stock") issuable under the Chromocell Therapeutics Corporation 2023 Equity Incentive Plan, as amended (the "Plan"). The Registrant's board of directors and holders of a majority of the outstanding shares of the Registrant's voting stock each approved the Plan on January 10, 2023.

The Registrant's board of directors and the holders of a majority of the outstanding shares of the Registrant's voting stock each approved on February 14, 2024 and February 15, 2024, respectively, the First Amendment to the Plan to increase the number of shares of Common Stock available for issuance under the Plan from 3,000,000 shares of Common Stock to 4,000,000 shares of Common Stock (prior to giving effect to the Reverse Split (as defined below)). On February 15, 2024, the Registrant effected a 1-for-9 reverse stock split of all outstanding shares of its Common Stock (the "Reverse Split"), and, pursuant to the terms of the Plan, the number of shares of Common Stock reserved to be issued under the Plan was decreased to 444,444.

The Common Stock share amounts stated in the first paragraph are presented on a post-split basis and reflect the Reverse Split.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information specified in Part I of Form S-8 will be delivered to participants in the Plan in accordance with Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act"). Such documents are not required to be filed with the U.S. Securities and Exchange Commission (the "Commission") either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 of the Securities Act. These documents, and the documents incorporated by reference in Item 3 of Part II of this Registration Statement, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

Incorporated by reference in this Registration Statement are the following documents filed by the Registrant with the Commission pursuant to the Securities Act and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), 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:

- (1)Amendment No. 13 to the Registrant's Registration Statement on Form S-1 filed on February 14, 2024 (File No. 333-269188), which contains audited financial statements for the Registrant's latest fiscal year for which such statements have been filed;
- (2)The Registrant's prospectuses filed on February 20, 2024, pursuant to Rule 424(b) under the Securities Act, relating to the Registration Statement on Form S-1, as amended (File No. 333-269188); and
- (3)The description of the Registrant's Common Stock which is contained in the Registrant's Registration Statement on Form 8-A filed on February 15, 2024 (File No. 001-41964) under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

In addition, all documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (other than portions of those made pursuant to Item 2.02 or Item 7.01 of Form 8-K or other information "furnished" and not filed with the Commission), subsequent to the effective date of this Registration Statement, but prior to the filing of a post-effective amendment to this Registration Statement indicating that all securities offered hereby have been sold or deregistering all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein and to be a part hereof shall be deemed to be incorporated by reference herein and to be a part hereof shall be deemed to be incorporated by reference herein and to be a part hereof shall be deemed to be incorporated by reference herein and to be a part hereof shall be deemed to be incorporated by reference herein and to be a part hereof shall be deemed to be incorporated by reference herein and to be a part hereof shall be deemed to be incorporated by reference herein and to be a part hereof shall be deemed to be incorporated by reference herein modified ocument which also is or is deemed to be incorporated by reference herein modified ocument which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

See the description of the Registrant's Common Stock contained in the Registration Statement on Form S-1 (File No. 333-269188).

Item 5. Interests of Named Experts and Counsel.

David Danovitch and John Riley, partner and of counsel of Sullivan & Worcester LLP, respectively, own 61,865 and 108,263 shares of the Registrant's Common Stock, respectively, and each held senior secured convertible notes in the amount of \$18,406 and \$12,152, including principal and interest, respectively, that each automatically converted into 3,880 and 2,554 shares of Common Stock, respectively, upon the consummation of the Registrant's initial public offering.

Item 6. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of the State of Delaware ("DGCL") permits a corporation to include a provision in its certificate of incorporation eliminating or limiting the personal liability of a director to a corporation or its stockholders for monetary damages for certain breaches of the director's fiduciary duty, except (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) the payment of unlawful dividends or unlawful stock repurchases or redemptions or (4) transactions from which the director received an improper personal benefit.

Section 145 of the DGCL ("Section 145") authorizes a corporation to indemnify its directors, officers, employees and agents against certain liabilities (including attorney's fees, judgments, fines and expenses) they may incur in their capacities as such in connection with specified actions, suits or proceedings, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation, or a derivative action), if they acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe their conduct was unlawful. Section 145 also provides that directors and officers have a right to indemnification against expenses where they have been successful on the merits or otherwise in defense of such actions. A similar standard is applicable in the case of derivative actions, except that indemnification only extends to expenses (including attorneys' fees) incurred in connection with defense or settlement of such action, and the statute requires court approval before there can be any indemnification where the person seeking indemnification has been found liable to the corporation. Section 145 also authorizes a corporation to advance expenses incurred in defending such actions, suits or proceedings in advance of their final disposition. Section 145 empowers the corporation to purchase and maintain insurance on behalf of any directors, officers, employees and agent, against any liability asserted against such person and incurred by such person in any such capacity, whether or not the corporation would have the power to indemnify such person against such liability under Section 145.

The Registrant's amended and restated certificate of incorporation includes provisions eliminating the personal liability of the Registrant's directors to the fullest extent permitted by the DGCL, and the Registrant's amended and restated by laws include provisions indemnifying the Registrant's directors and officers to the fullest extent permitted by the DGCL.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit Number	Exhibit Title
<u>4.1</u>	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the Commission on February 22, 2024).
<u>4.2</u>	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed with the Commission on February 22, 2024).
<u>4.3</u>	Chromocell Therapeutics Corporation 2023 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-1, filed with the Commission on January 20, 2023 (Registration No. 333-269188)).
<u>4.4</u>	First Amendment to Chromocell Therapeutics Corporation 2023 Equity Incentive Plan (filed herewith).
<u>4.5</u>	Form of Restricted Stock Unit Agreement (filed herewith).
<u>4.6</u>	Form of Stock Option Agreement (filed herewith).
<u>5.1</u>	Opinion of Sullivan & Worcester LLP (filed herewith).
23.1	Consent of Marcum LLP (filed herewith).
23.2	Consent of Sullivan & Worcester LLP (reference is made to Exhibit 5.1).
<u>24.1</u>	Power of Attorney (set forth on the signature page of this Registration Statement).
<u>107</u>	Filing Fee Table (filed herewith).

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(i) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof; and

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

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

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the 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 any 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 of whether or not 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of North Brunswick, State of New Jersey on the April 12, 2024.

CHROMOCELL THERAPEUTICS CORPORATION

By: /s/ Francis Knuettel II

Francis Knuettel II

Chief Executive Officer and Chief Financial Officer, Treasurer and Secretary

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each individual whose signature appears below constitutes and appoints Francis Knuettel II, as his or her true and lawful attorney-in-fact and agent with full power of substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-infact and agent, or his substitute or substitutes, 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 below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date		
/s/ Francis Knuettel II	Chief Executive Officer and Chief Financial Officer, Treasurer and			
Francis Knuettel II	Secretary (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)	April 12, 2024		
/s/ Ezra Friedberg	Director			
Ezra Friedberg		April 12, 2024		
/s/ Todd Davis	Director			
Todd Davis		April 12, 2024		
/s/ Richard Malamut	Director			
Richard Malamut		April 12, 2024		
/s/ Chia-Lin Simmons	Director			
Chia-Lin Simmons	-	April 12, 2024		

FIRST AMENDMENT TO THE CHROMOCELL THERAPEUTICS CORPORATION 2023 EQUITY INCENTIVE PLAN

As adopted by resolution of the Board of Directors effective as of February 14, 2024

1. Section 3 of the Chromocell Therapeutics Corporation 2023 Equity Incentive Plan (the "2023 Plan") is amended by deleting the number "3,000,000" and inserting therefor "4,000,000"

2. Except as hereinabove amended, the provisions of the 2023 Plan shall remain in full force and effect.

CHROMOCELL THERAPEUTICS CORPORATION 2023 Equity Incentive Plan Restricted Stock Unit Agreement

This Restricted Stock Unit Agreement and the associated grant award information (the "Customizing Information"), which Customizing Information is provided in written form (the "Restricted Stock Unit Schedule") or is available in electronic form from the record keeper for the Chromocell Therapeutics Corporation 2023 Equity Incentive Plan, as amended and in effect from time to time (the "Plan"), made as of the date shown as the "Grant Date" in the Customizing Information (the "Grant Date") by and between Chromocell Therapeutics Corporation, a Delaware corporation (the "Company"), and the individual identified in the Customizing Information (the "Recipient"). This instrument and the Customizing Information are collectively referred to as the "Restricted Stock Unit Agreement."

WITNESSETH THAT:

WHEREAS, the Company has instituted the Plan; and

WHEREAS, the Board or the Compensation Committee (the "Committee") has authorized the grant of restricted stock units with respect to the Company's Common Stock ("Stock") upon the terms and conditions set forth below and pursuant to the Plan, a copy of which is incorporated herein; and

WHEREAS, the Recipient acknowledges that he or she has carefully read this Restricted Stock Unit Agreement and agrees, as provided in Section 16(a) below, that the terms and conditions of the Restricted Stock Unit Agreement reflect the entire understanding between himself or herself and the Company regarding this restricted stock unit award (and the Recipient has not relied upon any statement or promise other than the terms and conditions of the Restricted Stock Unit Agreement with respect to this restricted stock unit award);

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements herein contained and for other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the Company and the Recipient agree as follows.

1. <u>Grant</u>. Subject to the terms of the Plan and this Restricted Stock Unit Agreement, the Company hereby grants to the Recipient that number of restricted stock units ("RSUs") equal to the corresponding number of shares of the Company's Stock (the "Underlying Shares") shown in the Customizing Information under "Restricted Stock Units Granted."

<u>Vesting</u>.

(a) In General. If the Recipient remains in an employment, contractual or other service relationship with the Company ("Relationship") as of a "Vesting Date," as specified in the Customizing Information, and the Recipient as of such date is not in violation of any confidentiality, inventions, non-solicitation and/or non-competition agreement with the Company, all or a portion, as applicable (the "Incremental Amount," as specified in the Customizing Information), of the RSUs shall vest on such date. For the avoidance of doubt, except as otherwise provided pursuant to the terms of the Plan and Section 2(b), if the Recipient's Relationship with the Company is terminated by the Company or by the Recipient for any reason, whether voluntarily or involuntarily, no RSUs granted pursuant to this Restricted Stock Unit Agreement shall vest under any circumstances on and after the date of such termination.

(b) <u>Committee Discretion</u>. In the event the Relationship is terminated for any reason (whether voluntary or involuntary), (i) the Recipient's right to vest in the RSU will, except as provided in the Plan or otherwise explicitly in this Section 2(b) or as provided by the Committee, terminate as of the date of the termination of the Relationship (and will not be extended by any notice period mandated under local law) and (ii) the Committee shall have the exclusive discretion to determine when the Relationship has terminated for purposes of this RSU (including when the Recipient is no longer considered to be providing active service while on a leave of absence).

(c) Special Definitions. For purposes of this Section 2, the term "Company" refers to the Company and its Subsidiaries.

3. Dividends. A Recipient shall, if so provided at the time of Grant, be credited with dividend equivalents equal to the dividends the Recipient would have received if the Recipient had been the actual record owner of the Underlying Shares on each dividend record date on or after the Grant Date and through the date the Recipient receives a settlement pursuant to Section 4 below (the "Dividend Equivalent"). If a dividend on the Stock is payable wholly or partially in Stock, the Dividend Equivalent representing that portion shall be in the form of additional RSUs, credited on a one-for-one basis. If a dividend on the Stock is payable wholly or partially in cash, the Dividend Equivalent representing that portion shall also be in the form of cash and a Recipient shall be treated as being credited with any cash dividends, without earnings, until settlement pursuant to Section 4 below. If a dividend on Stock is payable wholly or partially in cash, the Dividend Equivalent swith respect to that portion as it deems appropriate under the circumstances. Dividend Equivalent shall be subject to the same terms and conditions as the originally awarded pursuant to this Restricted Stock Unit Agreement, and they shall vest (or, if applicable, be forfeited) as if they had been granted at the same time as the original RSU. Dividend Equivalents Equivalents presenting the cash portion of a dividend on Stock shall be settled in cash.

4. <u>Delivery of Underlying Shares or Cash Settlement</u>. With respect to any RSUs that become vested RSUs as of a Vesting Date pursuant to Section 2, the Company shall issue and deliver to the Recipient as soon as practicable following the applicable Vesting Date (a) the number of Underlying Shares equal to the number of RSUs vesting on that date or an amount of cash equal to the Fair Market Value, as defined in the Plan, of such Underlying Shares as of that date (or such later delivery date, if applicable) and (b) the amount (and in the form) due with respect to the Dividend Equivalents applicable to such Underlying Shares. Whether Underlying Shares, or the cash value thereof, shall be issued or paid at settlement shall be determined based on the "Form of Settlement" specified in the Customizing Information.

To the extent the vesting of any RSUs occurs during a "blackout" period wherein certain employees, including the Recipient, are precluded from selling Stock, the Committee retains the right, in its sole discretion, to defer the delivery of the Underlying Shares; provided, however, that the Committee shall not exercise its right to defer the Recipient's receipt of the Underlying Shares if the Stock is specifically covered by a Rule 10b5-1 trading plan of the Recipient that causes the Stock to be exempt from any applicable blackout period then in effect. In the event the receipt of any shares of Stock is deferred hereunder due to the existence of a blackout period, the shares shall be issued to the Recipient on the first day following the termination of the blackout period; provided, however, that in no event shall the issuance of the shares be deferred later than the fifteenth day of the third month following the close of the year in which the Underlying Shares otherwise would have been issued.

Any shares issued pursuant to this Restricted Stock Unit Agreement shall be issued, without issue or transfer tax, by (i) delivering a stock certificate or certificates for such shares out of theretofore authorized but unissued shares or treasury shares of its Stock as the Company may elect or (ii) issuance of shares of its Stock in book entry form; provided, however, that the time of such delivery may be postponed by the Company for such period as may be required for it with reasonable diligence to comply with any applicable requirements of law. Notwithstanding the preceding provisions of this Section 4, delivery of Underlying Shares shall be made, or the amount of cash equivalent thereto shall be paid, only if the required purchase price designated as the "Purchase Price" shown in the Customizing Information per underlying RSU is paid to the Company by means of payment acceptable to the Company in accordance with the terms of the Plan. If the Recipient fails to pay for or accept delivery of all of the shares, the right to shares of Stock provided pursuant to this RSU may be terminated by the Company.

5. Withholding Taxes. The Recipient hereby agrees, as a condition of this award, to provide to the Company (or a subsidiary employing the Recipient, as applicable) an amount sufficient to satisfy the Company's and/or subsidiary's obligation to withhold any and all federal, state, local or provincial income tax, social security, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items or statutory withholdings related to the Recipient's participation in the Plan (the "Withholding Amount"), if any, by (a) authorizing the Company and/or any subsidiary employing the Recipient, as applicable, to withhold the Withholding Amount from the Recipient's cash compensation or (b) remitting the Withholding Amount to the Company (or a subsidiary employing the Recipient, as applicable) in cash; provided, however, that to the extent that the Withholding Amount is not provided by one or a combination of such methods, the Company may at its election withhold from the Underlying Shares and Dividend Equivalents that would otherwise be delivered that number of shares (and/or cash) having a Fair Market Value on the date of vesting sufficient to eliminate any deficiency in the Withholding Amount. Regardless of any action that the Company and/or subsidiary takes with respect to any or all federal, state, local or provincial income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items or statutory withholding srelated to the Recipient's participation in the Plan, the Recipient acknowledges that he or she, and not the Company and/or any subsidiary has the ultimate liability for any such items. Further, if the Recipient becomes subject to tax in more than one jurisdiction between the Grant Date and the date of any relevant taxable or tax withholding event, the Recipient acknowledges that the Company and/or such tax-related items in more than one jurisdiction.

6. <u>Non-assignability of RSUs and Dividend Equivalents</u>. RSUs and Dividend Equivalents shall not be assignable or transferable by the Recipient except by will or by the laws of descent and distribution or as permitted by the Committee in its discretion pursuant to the terms of the Plan. During the life of the Recipient, delivery of shares of Stock or payment of cash as settlement of RSUs and Dividend Equivalents shall be made only to the Recipient, to a conservator or guardian duly appointed for the Recipient by reason of the Recipient's incapacity or to the person appointed by the Recipient in a durable power of attorney acceptable to the Company's counsel.

7. <u>Compliance with Securities Act: Lock-Up Agreement</u> The Company shall not be obligated to sell or issue any Underlying Shares or other securities in settlement of RSUs and Dividend Equivalents hereunder unless the shares of Stock or other securities are at that time effectively registered or exempt from registration under the Securities Act and applicable state or provincial securities laws. In the event shares or other securities shall be issued that shall not be so registered, the Recipient hereby represents, warrants and agrees that the Recipient will receive such shares or other securities for investment and not with a view to their resale or distribution, and will execute an appropriate investment letter satisfactory to the Company and its counsel. The Recipient further hereby agrees that as a condition to the settlement of RSUs and Dividend Equivalents, the Recipient will execute an agreement in a form acceptable to the Company to the effect that the shares shall be subject to any underwriter's lock-up agreement in a greement or a successor agreement must be in full force and effect.

8. Legends. The Recipient hereby acknowledges that the stock certificate or certificates (or entries in the case of book entry form) evidencing shares of Stock or other securities issued pursuant to any settlement of an RSU or Dividend Equivalent hereunder may bear a legend (or provide a restriction) setting forth the restrictions on their transferability described in Section 7 hereof, if such restrictions are then in effect.

9. <u>Rights as Stockholder</u>. The Recipient shall have no rights as a stockholder with respect to any RSUs, Dividend Equivalents or Underlying Shares until the date of issuance of a stock certificate (or appropriate entry is made in the case of book entry form) for Underlying Shares and any Dividend Equivalents. Except as provided by Section 3, no adjustment shall be made for any rights for which the record date is prior to the date such stock certificate is issued (or appropriate entry is made in the case of book entry form), except to the extent the Committee so provides, pursuant to the terms of the Plan and upon such terms and conditions it may establish.

10. <u>Effect Upon Employment and Performance of Services</u>. Nothing in this Restricted Stock Unit Agreement or the Plan shall be construed to impose any obligation upon the Company or any subsidiary to employ or utilize the services of the Recipient or to retain the Recipient in its employ or to engage or retain the services of the Recipient.

11. <u>Time for Acceptance</u>. Unless the Recipient shall evidence acceptance of this Restricted Stock Unit Agreement by electronic or other means prescribed by the Committee within sixty (60) days after its delivery, the RSUs and Dividend Equivalents shall be null and void (unless waived by the Committee).

12. Section 409A of the Internal Revenue Code The RSUs and Dividend Equivalents granted hereunder are intended to avoid the potential adverse tax consequences to the Recipient of Section 409A of the Code and the Committee may make such modifications to this Restricted Stock Unit Agreement as it deems necessary or advisable to avoid such adverse tax consequences. If and to the extent that the RSUs and Dividend Equivalents are subject to Section 409A, in addition to the provisions of Section 12(e) of the Plan, any payment upon termination of the Relationship shall be made only upon a "separation from service" under Section 409A, and the Recipient may not directly or indirectly designate the calendar year of a payment.

13. <u>Electronic Delivery</u>. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Recipient consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

14. <u>Company Policies</u>. This RSU shall be subject to any applicable clawback or recoupment policies, share trading policies, and other policies that may be implemented by the Board from time to time, in accordance with applicable law.

15. Nature of Award. By accepting this RSU, the Recipient acknowledges, understands and agrees that:

(a) the Plan is established voluntarily by the Company, is discretionary in nature and may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan and this Restricted Stock Unit Agreement;

(b) the grant of this RSU is voluntary and occasional and does not create any contractual or other right to receive future awards under the Plan or benefits in lieu of Plan awards, even if RSUs or other Plan awards have been granted in the past;

- (c) all decisions with respect to future RSU awards will be at the sole discretion of the Committee;
- (d) he or she is voluntarily participating in the Plan;
- (e) the future value of the Underlying Shares is unknown and cannot be predicted with certainty;
- (f) if the Recipient resides and/or works outside the United States, the following additional provisions shall apply:
 - (i) this RSU, including any Dividend Equivalents, and the Underlying Shares are not intended to replace any pension rights or compensation;
 - this RSU, including any Dividend Equivalents, and the Underlying Shares (including value attributable to each) do not constitute compensation of any kind for services of any kind rendered to the Company and/or any subsidiary thereof and are outside the scope of the Recipient's employment contract, if any;

- (iii) this RSU, including any Dividend Equivalents, and any Underlying Shares (including the value attributable to each) are not part of normal or expected compensation or salary, including, but not limited to, for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, service awards, pension or retirement or welfare benefits or similar payments unless such other arrangement explicitly provides to the contrary;
- (iv) no claim or entitlement to compensation or damages shall arise from forfeiture of the RSU, including any Dividend Equivalents, resulting from the Recipient's termination of the Relationship for any reason, and in consideration of this RSU, including any Dividend Equivalents, the Recipient irrevocably agrees never to institute a claim against the Company and/or subsidiary, waives his or her ability to bring such claim and releases the Company and/or subsidiary from any claim; if, notwithstanding the foregoing, such claim is allowed by a court of competent jurisdiction, then by accepting this RSU, including any Dividend Equivalents, the Recipient is deemed irrevocably to have agreed not to pursue such claim and agrees to execute any and all documents necessary to request dismissal or withdrawal of such claims; and

(g) the Company shall not be liable for any foreign exchange rate fluctuation between the Recipient's local currency and the United States dollar that may affect the value of this RSU or any amounts due pursuant to the settlement of the RSU or the subsequent sale of any Underlying Shares acquired upon settlement.

16. <u>General Provisions</u>.

(a) <u>Amendment: Waivers</u>. This Restricted Stock Unit Agreement, including the Plan, contains the full and complete understanding and agreement of the parties hereto as to the subject matter hereof, and except as otherwise permitted by the express terms of the Plan and this Restricted Stock Unit Agreement and applicable law, it may not be modified or amended nor may any provision hereof be waived without a further written agreement duly signed by each of the parties; provided, however, that a modification or amendment that does not materially diminish the rights of the Recipient hereunder, as they may exist immediately before the effective date of the modification or amendment, shall be effective upon written notice of its provisions to the Recipient, to the extent permitted by applicable law. The waiver by either of the parties hereto of any provision hereof in any instance shall not operate as a waiver of any other provision hereof or in any other instance. The Recipient shall have the right to receive, upon request, a written confirmation from the Company of the Customizing Information.

(b) <u>Binding Effect</u>. This Restricted Stock Unit Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, representatives, successors and assigns.

(c) <u>Fractional RSUs, Underlying Shares and Dividend Equivalents</u>. All fractional Underlying Shares and Dividend Equivalents settled in Stock resulting from the application of the Vesting Schedule or the adjustment provisions contained in the Plan shall be rounded down to the nearest whole share. If cash in lieu of Underlying Shares is delivered at settlement, or Dividend Equivalents are settled in cash, the amount paid shall be rounded down to the nearest penny.

(d) <u>Governing Law</u>. This Restricted Stock Unit Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to the principles of conflicts of law.

(e) <u>Construction</u>. This Restricted Stock Unit Agreement is to be construed in accordance with the terms of the Plan. In case of any conflict between the Plan and this Restricted Stock Unit Agreement, the Plan shall control. The titles of the sections of this Restricted Stock Unit Agreement and of the Plan are included for convenience only and shall not be construed as modifying or affecting their provisions. The masculine gender shall include both sexes; the singular shall include the plural and the plural the singular unless the context otherwise requires. Capitalized terms not defined herein shall have the meanings given to them in the Plan.

(f) Language. If the Recipient receives this Restricted Stock Unit Agreement, or any other document related to this RSU and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

(g) <u>Data Privacy</u>.

- (i) The Recipient hereby explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, of the Recipient's personal data as described in this Restricted Stock Unit Agreement by and among, as applicable, his or her employer, the Company and its subsidiaries for the exclusive purpose of implementing, administering and managing the Recipient's participation in the Plan.
- (ii) The Recipient understands that his or her employer, the Company and its subsidiaries, as applicable, hold certain personal information about the Recipient regarding his or her employment, the nature and amount of the Recipient's compensation and the fact and conditions of the Recipient's participation in the Plan, including, but not limited to, the Recipient's name, home address, telephone number and e-mail address, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company and its subsidiaries, details of all options, awards or any other entitlement to shares of stock awarded, canceled, exercised, vested, unvested or outstanding in the Recipient's favor, for the purpose of implementing, administering and managing the Plan (the "Data").

(iii) The Recipient understands that the Data may be transferred to any third parties assisting in the implementation, administration and management of the Plan, that these third parties may be located in the Recipient's country, or elsewhere, and that the third party's country may have different data privacy laws and protections than the Recipient's country. The Recipient understands that the Recipient may request a list with the names and addresses of any potential recipients of the Data by contacting his or her local human resources representative. The Recipient authorizes the recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing the Recipient is participation in the Plan, including any requisite transfer of such Data as may be required to a broker or other third party. The Recipient understands that the Data will be held only as long as is necessary to implement, administer and manage Recipient's participation in the Plan. The Recipient understands that he or she may, at any time, view the Data, request additional information about the storage and processing of the Data, require any necessary amendments to the Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing the Recipient's local human resources representative. The Recipient understands, however, that refusing or withdrawing his or her consent may affect the Recipient's ability to participate in the Plan. For more information on the consequences of refusal to consent or withdrawal of consent, the Recipient understands that the Recipient may contact his or her local human resources representative.

(h) <u>Notices</u>. Any notice in connection with this Restricted Stock Unit Agreement shall be deemed to have been properly delivered if it is delivered in the form specified by the Committee as follows:

To the Recipient:	Last address provided to the Company
ro me reespient.	East address provided to the company

To the Company: Chromocell Therapeutics Corporation 685 US Highway One North Brunswick, NH 08902 Attn: Chief Financial Officer

(i))
Agreement	•

CHROMOCELL THERAPEUTICS CORPORATION 2023 Equity Incentive Plan Stock Option Agreement

This Stock Option Agreement and the associated grant award information (the "Customizing Information"), which Customizing Information is provided in written form (the "Stock Option Schedule") or is available in electronic form from the record keeper for the Chromocell Therapeutics Corporation 2023 Equity Incentive Plan, as amended and in effect from time to time (the "Plan"), made as of the date shown as the "Grant Date" in the Customizing Information (the "Grant Date") by and between Chromocell Therapeutics Corporation, a Delaware corporation (the "Company"), and the individual identified in the Customizing Information (the "Optionee"). This instrument and the Customizing Information are collectively referred to as the "Option Agreement."

WITNESSETH THAT:

WHEREAS, the Company has instituted the Plan; and

WHEREAS, the Board or the Compensation Committee (the "Committee") has authorized the grant of a stock option upon the terms and conditions set forth below and pursuant to the Plan, a copy of which is incorporated herein; and

WHEREAS, the Optionee acknowledges that he or she has carefully read this Option Agreement and agrees, as provided in Section 16(a) below, that the terms and conditions of the Option Agreement reflect the entire understanding between himself or herself and the Company regarding this stock option (and the Optionee has not relied upon any statement or promise other than the terms and conditions of the Option Agreement with respect to this stock option);

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements herein contained and for other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the Company and the Optionee agree as follows.

1. <u>Grant</u>. Subject to the terms of the Plan and this Option Agreement, the Company hereby grants to the Optione a stock option (the "Option") to purchase from the Company the amount of Common Stock ("Stock") shown in the Customizing Information under "Shares Granted." If so provided in the "Grant Type" shown in the Customizing Information, this Option is intended to constitute for United States income tax purposes an Incentive Stock Option and to qualify for special United States federal income tax treatment under Section 422 of the Code and upon exercise, the maximum number of shares that can be treated as Incentive Stock Options shall be so treated, and the remainder shall be treated as Nonstatutory Stock Options.

2. <u>Grant Price</u>. This Option may be exercised at the "Grant Price" per share shown in the Customizing Information, subject to adjustment as provided herein and in the Plan.

3. <u>Term and Exercisability of Option</u>. This Option shall expire at 4:00 p.m. Eastern Time on the "Expiration Date" shown in the Customizing Information, unless the Option expires earlier pursuant to this Section 3 or any provision of the Plan. At any time before its expiration, this Option may be exercised to the extent vested, as shown in the Customizing Information, provided that:

 (a) at the time of exercise the Optionee is not in violation of any confidentiality, inventions, non-solicitation and/or non-competition agreement with the Company;

(b) the Optionee's employment, contractual or other service relationship with the Company ("Relationship") must be in effect on a given date in order for any scheduled increment in vesting, as set forth in the "Vesting Schedule" shown in the Customizing Information, to become effective, except as provided in Section 3(c) below

(c) this Option may not be exercised after the ninetieth (90^{h}) day following the date of termination of the Relationship between the Optionee and the Company, except that if the Relationship terminates by reason of the Optionee's death or total and permanent disability (as determined by the Board on the basis of medical advice satisfactory to it), the vested and unexercised portion of the Option shall remain exercisable thereafter for one (1) year; and

(d) in the event the Relationship is terminated for any reason (whether voluntary or involuntary), (i) the Optionee's right to vest in the Option will, except as provided in the Plan or otherwise explicitly in Sections 3(c) and 3(d) or as provided by the Committee, terminate as of the date of termination of the Relationship (and such right shall not be extended by any notice period mandated under local law), (ii) the Optionee's continuing right (if any) to exercise the Option after termination of the Relationship will be measured from the date of termination of the Relationship (and such right will not be extended by any notice period mandated under local law), (ii) the Optionee's continuing right (if any) to exercise the Option after termination of the Relationship (iii) the Committee shall have the exclusive discretion to determine when the Relationship has terminated for purposes of this Option (including determining when the Optionee is no longer considered to be providing active service while on a leave of absence).

For purposes of this Section 3, the term "Company" refers to the Company and its Subsidiaries.

It is the Optionee's responsibility to be aware of the date that the Option expires.

4. <u>Method of Exercise</u>. Prior to its expiration and to the extent that the right to purchase shares of Stock has vested hereunder, this Option may be exercised in whole or in part from time to time by notice provided in a manner consistent with the requirements of Section 5(d) of the Plan, accompanied by payment in full of the Grant Price by means of payment acceptable to the Company in accordance with Section 5(e) of the Plan.

As soon as practicable after its receipt of notice, the Company shall, without transfer or issue tax to the Optionee (or other person entitled to exercise this Option), (i) deliver to the Optionee (or other person entitled to exercise this Option), at the principal executive offices of the Company or such other place as shall be mutually acceptable, a stock certificate or certificates for such shares out of theretofore authorized but unissued shares or treasury shares of its Stock as the Company may elect or (ii) issue shares of its Stock in book entry form; provided, however, that the time of delivery or issuance may be postponed by the Company for such period as may be required for it with reasonable diligence to comply with any applicable requirements of law; and provided, further, that any shares delivered or issued shall remain subject to any applicable securities law or trading restrictions imposed pursuant to the terms of this Option Agreement and the Plan.

If the Optione (or other person entitled to exercise this Option) fails to pay for and accept delivery of all of the shares specified in the notice upon tender of delivery thereof, his or her right to exercise this Option with respect to such shares not paid for may be terminated by the Company.

5. <u>Withholding Taxes</u>. The Optionee hereby agrees, as a condition to any exercise of this Option, to provide to the Company (or a subsidiary employing the Optionee, as applicable) an amount sufficient to satisfy the Company's and/or subsidiary's obligation to withhold any and all federal, state, local or provincial income tax, social security, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items or statutory withholdings related to the Optionee's participation in the Plan (the "Withholding Amount"), if any, by (a) authorizing the Company and/or any subsidiary employing the Optionee, as applicable, to withhold the Withholding Amount from the Optionee's cash compensation or (b) remitting the Withholding Amount to the Company (or a subsidiary employing the Optionee, as applicable) in cash; provided, however, that to the extent that the Withholding Amount is not provided by one or a combination of such methods, the Company may at its election withhold from the Stock that would otherwise be delivered upon exercise of this Option that number of shares having a Fair Market Value on the date of exercise sufficient to eliminate any deficiency in the Withholding Amount. Regardless of any action that the Company and/or subsidiary takes with respect to any or all federal, state, local or provincial income tax, social security, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items or statutory withholdings related to the Optionee's participation in the Plan, the Optionee acknowledges that he or she, and not the Company and/or any subsidiary, has the ultimate liability for any such items. Further, if the Optionee becomes subject to tax in more than one jurisdiction between the Grant Date and the date of any relevant taxable or tax withholding event, the Optionee acknowledges that the Company and/or subsidiary may be required to withhold or account for such tax-related items in more than one jurisdiction between the Grant Date and the da

6. <u>Non-assignability of Option</u>. This Option shall not be assignable or transferable by the Optione except by will or by the laws of descent and distribution or as permitted by the Committee in its discretion pursuant to the terms of the Plan. During the life of the Optionee, this Option shall be exercisable only by him or her, by a conservator or guardian duly appointed for him or her by reason of the Optionee's incapacity or by the person appointed by the Optionee in a durable power of attorney acceptable to the Company's counsel.

7. <u>Compliance with Securities Act; Lock-Up Agreement</u> The Company shall not be obligated to sell or issue any shares of Stock or other securities pursuant to the exercise of this Option unless the shares of Stock or other securities with respect to which this Option is being exercised are at that time effectively registered or exempt from registration under the Securities Act and applicable state or provincial securities laws. In the event shares or other securities shall be issued that shall not be so registered, the Optione hereby represents, warrants and agrees that he or she will receive such shares or other securities for investment and not with a view to their resale or distribution, and will execute an appropriate investment letter satisfactory to the Company and its counsel. The Optionee further hereby agrees that as a condition to the purchase of shares upon exercise of this Option, he or she will execute an agreement in a form acceptable to the Company to the effect that the shares shall be subject to any underwriter's lock-up agreement in connection with a public offering of any securities of the Company that may from time to time apply to shares held by officers and employees of the Company, and such agreement or a successor agreement must be in full force and effect.

8. <u>Legends</u>. The Optionee hereby acknowledges that the stock certificate or certificates (or entries in the case of book entry form) evidencing shares of Stock or other securities issued pursuant to any exercise of this Option may bear a legend (or provide a restriction) setting forth the restrictions on their transferability described in Section 7 hereof, if such restrictions are then in effect.

9. <u>Rights as Stockholder</u>. The Optionee shall have no rights as a stockholder with respect to any shares covered by this Option until the date of issuance of a stock certificate (or appropriate entry is made in the case of book entry form) to him or her for such shares. No adjustment shall be made for dividends or other rights for which the record date is prior to the date such stock certificate is issued (or appropriate entry is made in the case of book entry form).

10. <u>Effect Upon Employment and Performance of Services</u>. Nothing in this Option or the Plan shall be construed to impose any obligation upon the Company or any subsidiary to employ or utilize the services of the Optionee or to retain the Optionee in its employ or to engage or retain the services of the Optionee.

11. <u>Time for Acceptance</u>. Unless the Optionee shall evidence his or her acceptance of this Option by electronic or other means prescribed by the Committee within sixty (60) days after its delivery, the Option shall be null and void (unless waived by the Committee).

12. <u>Notice of Disqualifying Disposition</u>. If the "Grant Type" shown in the Customizing Information indicates that the Option is an Incentive Stock Option, the Optione agrees to notify the Company promptly in the event that he or she sells, transfers, exchanges or otherwise disposes of any shares of Stock issued upon exercise of the Option before the later of (a) the second anniversary of the date of grant of the Option and (b) the first anniversary of the date the shares were issued upon his or her exercise of the Option.

13. <u>Electronic Delivery</u>. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Optionee consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

14. <u>Company Policies</u>. This Option shall be subject to any applicable clawback or recoupment policies, share trading policies, and other policies that may be implemented by the Board from time to time, in accordance with applicable law.

15. <u>Nature of Award</u>. By accepting this Option, the Optionee acknowledges, understands and agrees that:

(a) the Plan is established voluntarily by the Company, is discretionary in nature and may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan and this Option Agreement;

(b) the grant of this Option is voluntary and occasional and does not create any contractual or other right to receive future awards under the Plan or benefits in lieu of Plan awards, even if Options or other Plan awards have been granted in the past;

- (c) all decisions with respect to future Option grants or Plan awards will be at the sole discretion of the Committee;
- (d) he or she is voluntarily participating in the Plan;
- (e) the future value of shares of Stock underlying the Option is unknown and cannot be predicted with certainty;

(f) if the underlying shares of Stock do not increase in value, the Option, as measured by the difference between the fair market value of the Stock and the Grant Price, will have no value;

- (g) if the Optionee exercises the Option and acquires shares of Stock, the value of such shares may increase or decrease in value;
- (h) if the Optionee resides and/or works outside the United States, the following additional provisions shall apply:
 - (i) the Option and any shares of Stock acquired under the Plan do not replace any pension or retirement rights or compensation;
 - the Option and any shares of Stock acquired under the Plan (including the value attributable to each) do not constitute compensation of any kind for services of any kind rendered to the Company and/or any subsidiary thereof and are outside the scope of the Optionee's employment contract, if any;
 - (iii) the Option and any shares of Stock acquired under the Plan (including the value attributable to each) are not part of normal or expected compensation or salary, including, but not limited to, for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, service awards, pension or retirement or welfare benefits or similar payments unless such other arrangement explicitly provides to the contrary;

- (iv) no claim or entitlement to compensation or damages shall arise from forfeiture of the Option resulting from a termination of the Relationship for any reason and in consideration of the grant of the Option, the Optionee irrevocably agrees never to institute a claim against the Company and/or any subsidiary, waives his or her ability to bring such claim and releases the Company and/or its subsidiaries from any claim; if, notwithstanding the foregoing, such claim is allowed by a court of competent jurisdiction, then by accepting this Option, the Optionee is deemed irrevocably to have agreed not to pursue such claim and agrees to execute any and all documents necessary to request dismissal or withdrawal of such claims; and
- (v) the Company shall not be liable for any foreign exchange rate fluctuation between the Optionee's local currency and the United States dollar that may affect the value of the Option or any amounts due pursuant to the exercise of the Option or the subsequent sale of any shares of Stock acquired upon settlement.

16. <u>General Provisions</u>.

(a) <u>Amendment; Waivers</u>. This Option Agreement, including the Plan, contains the full and complete understanding and agreement of the parties hereto as to the subject matter hereof, and except as otherwise permitted by the express terms of the Plan, this Option Agreement and applicable law, it may not be modified or amended nor may any provision hereof be waived without a further written agreement duly signed by each of the parties; provided, however, that a modification or amendment that does not materially diminish the rights of the Optionee hereunder, as they may exist immediately before the effective date of the modification or amendment, shall be effective upon written notice of its provisions to the Optionee, to the extent permitted by applicable law. The waiver by either of the parties hereto of any provision hereof in any instance shall not operate as a waiver of any other provision hereof or in any other instance. The Optionee shall have the right to receive, upon request, a written confirmation from the Company of the Customizing Information.

(b) <u>Binding Effect</u>. This Option Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, representatives, successors and assigns.

(c) <u>Governing Law</u>. This Option Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to the principles of conflicts of law.

(d) <u>Construction</u>. This Option Agreement is to be construed in accordance with the terms of the Plan. In case of any conflict between the Plan and this Option Agreement, the Plan shall control. The titles of the sections of this Option Agreement and of the Plan are included for convenience only and shall not be construed as modifying or affecting their provisions. The masculine gender shall include both sexes; the singular shall include the plural and the plural the singular unless the context otherwise requires. Capitalized terms not defined herein shall have the meanings given to them in the Plan.

(e) Language. If the Optione receives this Option Agreement, or any other document related to the Option and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

(f) <u>Data Privacy</u>.

- (i) The Optionee hereby explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, of the Optionee's personal data as described in this Option Agreement by and among, as applicable, his or her employer, the Company and its subsidiaries for the exclusive purpose of implementing, administering and managing the Optionee's participation in the Plan.
- (ii) The Optionee understands that his or her employer, the Company and its subsidiaries, as applicable, hold certain personal information about the Optionee regarding his or her employment, the nature and amount of the Optionee's compensation and the fact and conditions of the Optionee's participation in the Plan, including, but not limited to, the Optionee's name, home address, telephone number and e-mail address, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company and its subsidiaries, details of all options, awards or any other entitlement to shares of stock awarded, canceled, exercised, vested, unvested or outstanding in the Optionee's favor, for the purpose of implementing, administering and managing the Plan (the "Data").
- (iii) The Optionee understands that the Data may be transferred to any third parties assisting in the implementation, administration and management of the Plan, that these third parties may be located in the Optionee's country, or elsewhere, and that the third party's country may have different data privacy laws and protections than the Optionee's country. The Optionee understands that the Optionee may request a list with the names and addresses of any potential recipients of the Data by contacting his or her local human resources representative. The Optionee authorizes the recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing the Optionee's participation in the Plan, including any requisite transfer of such Data as may be required to a broker or other third party. The Optionee understands that the Data will be held only as long as is necessary to implement, administer and manage Optionee's participation in the Plan. The Optionee understands that he Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing the Optionee's local human resources representative. The Optionee understands, however, that refusing or withdrawing his or her consent may affect the Optionee's ability to participate in the Plan. For more information on the consequences of refusal to consent or withdrawal of consent, the Optionee understands that the Optionee may contact his or her local human resources representative.



(g) <u>Notices</u>. Any notice in connection with this Option Agreement shall be deemed to have been properly delivered if it is delivered in the form specified by the Committee as follows:

To the Optionee: To his or her last address provided to the Company

To the Company:	Chromocell Therapeutics Corporation					
	685 US Highway One					
	North Brunswick, NH 08902					
	Attn: Chief Financial Officer					

(h) <u>Version Number</u>. This document is Version 1 of the Chromocell Therapeutics Corporation 2023 Equity Incentive Plan Stock Option Agreement.



Sullivan & Worcester LLP 1633 Broadway

New York, NY 10019

212 660 3000 sullivanlaw.com

April 12, 2024

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

Ladies and Gentlemen:

This opinion is furnished to you in connection with a Registration Statement on Form S-8, as supplemented or amended from time to time (the <u>Registration Statement</u>"), filed by Chromocell Therapeutics Corporation, a Delaware corporation (the <u>Company</u>"), with the U.S. Securities and Exchange Commission (the <u>Commission</u>") under the Securities Act of 1933, as amended (the <u>Securities Act</u>"), on April 12, 2024. The Registration Statement relates to the registration under the Securities Act of an aggregate of 444,444 shares (the <u>Shares</u>") of common stock, par value \$0.0001 per share, of the Company (<u>Common Stock</u>") issuable under the Company's 2023 Equity Incentive Plan, as amended (the <u>Plan</u>").

We have been requested by the Company to render this opinion letter with respect to the legality of the Shares being registered under the Registration Statement.

In connection with this opinion, we have examined and relied upon the originals or copies certified or otherwise identified to our satisfaction of (i) the Company's amended and restated certificate of incorporation, as amended, (ii) the Company's amended and restated bylaws, as amended, and (iii) the Registration Statement, including all exhibits filed therewith, and have also examined and relied upon minutes of meetings and/or resolutions of the board of directors of the Company as provided to us by the Company, and 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. In our examination of the foregoing documents, we have assumed the genuineness of all signatures, 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, the legal competence of all signatories to such documents and that each signatory to such document has or will have sufficient legal capacity to execute such document. Other than our examination of the documents indicated above, we have made no other examination in connection with this opinion.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

BOSTON LONDON NEW YORK TEL AVIV WASHINGTON, DC

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 by the Company, and when granted and delivered by the Company to the Plan participants pursuant to the terms of the Plan and the underlying award agreements executed pursuant to such plan in the manner contemplated by 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.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

SULLIVAN & WORCESTER

/s/ 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-8 of our report dated May 1, 2023, 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, 2022 and 2021 and for the years ended December 31, 2022 and 2021 appearing in the Prospectuses filed on February 20, 2024, relating to the Registration Statement of Chromocell Therapeutics Corporation on Form S-1 (No. 333-269188).

Our report on the financial statements includes an emphasis of matter paragraph as to the preparation of the financial statements on a carve-out basis.

/s/ Marcum llp

Marcum llp Houston, Texas April 12, 2024

Calculation of Filing Fee Tables

Form S-8

(Form Type)

Chromocell Therapeutics Corporation (Exact Name of Registrant as Specified in its Charter)

Table 1—Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation Rule	Amount Registered (1)	 Proposed Maximum Offering Price Per Unit (3)	Maximum Aggregate Offering Price (3)	Fee Rate	Re	mount of gistration Fee (3)
Fees to Be Paid	Equity	Common stock, par value \$0.0001 per share, issuable under Chromocell Therapeutics Corporation 2023 Equity Incentive Plan	Rule 457(c) and Rule 457(h)	533,333 (2)	\$ 1.875	\$ 999,999.375	0.0001476	\$	147.60
Fees Previously Paid	_			_	_	_	_	¢	147.00
		Total Offering Amou Total Fee Offsets						\$	147.60
		Net Fee Due						\$	147.60

(1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of common stock, par value \$0.0001 per share (the "Common Stock") of Chromocell Therapeutics Corporation (the "Company" or 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 the Common Stock.

- (2) Represents the number of shares of Common Stock reserved for issuance pursuant to the Company's 2023 Equity Incentive Plan, as amended (the "Plan"). Pursuant to Rule
- (2) Represents the number of shares of common Stock reserved for issuance parsuant to the Company's 2025 Equity incentive Fian, as an ended (the Fian'). Fursuant to refer 416(c) under the Securities Act, this Registration Statement shall cover an indeterminate number of shares of Common Stock to be offered or sold pursuant to the Plan.
 (3) Estimated in accordance with Rule 457(c) under the Securities Act, solely for the purpose of calculating the applicable registration fee. The proposed maximum offering price per share of Common Stock represents the average of the high and low prices of the Common Stock as reported on NYSE American on April 11, 2024.