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

POST-EFFECTIVE AMENDMENT NO. 2 FORM S-1 REGISTRATION STATEMENT **UNDER THE SECURITIES ACT OF 1933**

CHROMOCELL THERAPEUTICS CORPORATION

	(Exact	name of registrant as specified in its charter)		
Delaware		2836	86-3335449		
(State or other jurisdiction of incorporation or organization)		(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)		
		4400 Route 9 South, Suite 1000 Freehold, NJ 07728 (877) 265-8266			
(Address, in	acluding zip code, and tele	ephone number, including area code, of registrar	nt's principal executive offices)		
(Nan		Francis Knuettel II Chief Executive Officer and Financial Officer, Treasurer and Secretary 4400 Route 9 South, Suite 1000 Freehold, NJ 07728 (877) 265-8266 code, and telephone number, including area code	de, of agent for service)		
		Copies to:			
Aaron M. S Charles E. Ch Sullivan & V 1633 F New Yor	Janovitch, Esq. Schleicher, Esq. Hambers, Jr., Esq. Worcester LLP Broadway k, NY 10019 660-3060	•	Thomas J. Poletti, Esq. Veronica Lah, Esq. Manatt, Phelps & Phillips, LLP 695 Town Center Drive, 14th Floor Costa Mesa, CA 92626 (714) 371-2500		
Approximate date of commencement of effective upon filing.	proposed sale to the pul	blie: This post-effective amendment is being file	d pursuant to 462(d) under the Securities Act and will be		
If any of the securities being registered on following box: $\ oxtimes$	this Form are to be offered	ed on a delayed or continuous basis pursuant to l	Rule 415 under the Securities Act of 1933, check the		
If this Form is filed to register additional s registration statement number of the earlie			of 1933, check the following box and list the Securities Act		
If this Form is a post-effective amendment number of the earlier effective registration			ng box and list the Securities Act registration statement		
If this Form is a post-effective amendment number of the earlier effective registration			ng box and list the Securities Act registration statement		
			smaller reporting company, or an emerging growth erging growth company" in Rule 12b-2 of the Exchange Act.		
Large accelerated filer $\hfill\Box$			Accelerated filer		
Non-accelerated filer 区			Smaller reporting company		
			Emerging growth company		
If an emerging growth company, indicate taccounting standards provided pursuant to			on period for complying with any new or revised financial		

EXPLANATORY NOTE

This Post-Effective Amendment No. 2 (this "Post-Effective Amendment No. 2") to the Registration Statement on Form S-1 (Registration No. 333-269188) (the "Registration Statement") of Chromocell Therapeutics Corporation (the "Company") is being filed as an exhibit-only filing solely to include as an exhibit Marcum LLP's consent (the "Consent") to the use of its report dated April 16, 2024, with respect to the consolidated financial statements of the Company included in the Prospectus Supplement No. 1 dated April 16, 2024 filed pursuant to Rule 424(b)(3) (relating to the offer and sale by us of (i) 1,100,000 shares of our common stock, par value \$0.0001 ("Common Stock") issued in connection with the Company's initial public offering (the "IPO") and (ii) up to 55,000 shares of Common Stock underlying the warrants issued to A.G.P./Alliance Global Partners, as representative of the underwriters of the IPO or its designees, at the closing of the IPO) and the Prospectus Supplement No. 1 dated April 16, 2024 filed pursuant to Rule 424(b)(3) (relating to the offer and sale by the selling stockholders identified in the Prospectus). This Post-Effective Amendment No. 2 does not modify any provision of Part II or Part II of the Registration Statement other than supplementing Item 16 of Part II as set forth below. The Registration Statement shall become effective upon filing with the U.S. Securities and Exchange Commission in accordance with Rule 462(d) under the Securities Act of 1933, as amended.

PART II – INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 16 Financial Statements and Exhibits

Exhibit No.	Des	scription
23.1	Consent of Marcum LLP	

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Post-Effective Amendment No. 2 to be signed on its behalf by the undersigned, thereunto duly authorized, in North Brunswick, State of New Jersey, on April 16, 2024.

CHROMOCELL THERAPEUTICS CORPORATION

Date: April 16, 2024

By: /s/ Francis Knuettel II

Name: Francis Knuettel II

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

Pursuant to the requirements of the Securities Act of 1933, the following persons in the capacities and on the dates indicated have signed this Post-Effective Amendment No. 2 below.

Signature		Title	Date
/s/ Francis K Francis Kn		Chief Executive Officer and Chief Financial Officer, Treasurer and Secretary (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)	April 16, 2024
*	n.	- District	A ::: 11 1 C 2024
Ezra Frie	dberg	Director	April 16, 2024
*		<u> </u>	
Todd D	avis	Director	April 16, 2024
*		_	
Richard M	alamut	Director	April 16, 2024
*			
Chia-Lin S	immons	Director	April 16, 2024
* By: /s/ Francis Knuettel Name: Francis Knuettel II Attorney-in-fact	II		

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 (Post-Effective Amendment No. 2) (File No. 333-269188) 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 Registration Statement.

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 16, 2024