



chromocell

Potential Breakthrough Drug for Erythromelalgia
and Other Pain Indications

CHROMOCELL THERAPEUTICS CORPORATION

This presentation of Chromocell Therapeutics Corporation ("we", "us", "our" or the "Company") contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act and other securities laws. Words 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 term are intended to identify forward-looking statements. Forward-looking statements reflect management's current expectations, are based on judgments and assumptions, are inherently uncertain and are subject to risks, uncertainties and other factors, which could cause the Company's actual results, performance or achievements to differ materially from expected future results, performance or achievements expressed or implied in those forward-looking statements. Examples of these forward-looking statements and the related risks, uncertainties and other factors include, but are not limited to, the following: the timing, progress and results of preclinical and clinical trials for CC8464, its estimates regarding the potential market opportunity for CC8464, its ability to develop CC8464 and future compounds, its ability to protect its intellectual property and enforce its intellectual property rights, and its ability to execute its development strategy and sustain its competitive position. Actual future results and trends may differ materially depending on a variety of factors, including, but not limited to, the Company's limited operating history, the Company's ability to develop CC8464, the Company's ability to establish its market development capabilities to commercialize its products and generate any revenue, and the Company's ability to obtain regulatory approval of CC8464.

Forward-looking statements are provided to allow potential investors the opportunity to understand management's beliefs and opinions in respect of the future so that they may use such beliefs and opinions as one factor in evaluating an investment. These statements are not guarantees of future performance and undue reliance should not be placed on them. For a more detailed description of the risks and uncertainties affecting the Company, please review the Company's Registration Statement on Form S-1, as amended (File No. 333- 269188) and other documents that may be filed from time to time with the SEC, including, but not limited to, the risks detailed in the Company's preliminary prospectus dated January 30, 2024, as a part of our Registration Statement. Any forward-looking statement in this presentation, in any related presentation supplement and in any related free writing presentation reflects our current view with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our business, results of operations, industry and future growth. You should read this presentation with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

The issuer has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. A copy of the preliminary prospectus can be found for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, the issuer, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by calling A.G.P./Alliance Global Partners at (212) 624-2060 or prospectus@alliancecg.com.

This presentation provides basic information about the Company and the offering. Because it is only a summary, this presentation does not cover all the information that should be considered before investing. You should read carefully the factors described in the "Risk Factors" section of the prospectus contained in the Company's Registration Statement to better understand the risks and uncertainties inherent in our business and any forward-looking statements.

Transaction Overview

Offering Size*: \$5,500,000
New IPO Shares**: 916,667
Expected Price Range: \$5.50 - \$6.50

► **Sole Bookrunner**
A.G.P./Alliance Global Partners

Use of Proceeds

Dose escalation study	\$2.0M
Eye pain toxicology / formulation	\$0.4M
Neuropathic pain study	\$0.25M
Phase 2a prep and launch	\$0.25M
Repayment under notes	\$0.2M
General & Administrative	\$1.5M

* Reflecting the offering of 916,667 new IPO shares, assuming an initial public offering price of \$6.00 per IPO share, the midpoint of the price range set forth above, but excluding 29,167 shares issuable pursuant to the Director Note and registered under the Registration Statement, 92,840 shares issuable pursuant to the Investor Note and registered under the Registration Statement, and 2,909,353 shares registered for resale under the Registration Statement.

Cap Table (As converted, assumes \$6.00 offering price and 9:1 reverse split)

<u>Common stock:</u>	3,987,415
<u>Automatic conversion of:</u>	
Series A	499,429
April Bridge	87,984
September Bridge	43,523
Director Note	29,167
Investor Note	93,823
<u>Series C:</u>	346,667
<u>Options:</u>	208,667
Fully Diluted Shares Outstanding	5,296,675

▸ Overview

Phase II life sciences company focused on developing patented non-opioid pain treatment compound (CC8464) through sodium channel blockade (NAV)

▸ Clinical

- Phase 1 completed; fast track designation granted
- 3 months toxicology completed; 3 Phase I studies completed with 165 patients
- Run clinical trials on a tax advantaged / cost basis

▸ Strategy

Advance CC8464 towards commercialization, initially focusing on orphan designated Erythromelalgia ("EM") and eye pain and plans to pursue neuropathic pain

▸ Catalysts

Use of proceeds for the offering to fund the dose escalation study, in vivo studies for treatment of eye pain and to ramp up a Phase II proof-of-concept study for CC8464.

▸ Unmet Needs

- EM is a rare / orphan disease population with no current effective clinical treatments
- Eye pain is larger market with significant unmet medical need

Three active clinical / pre-clinical programs

Asset	Indication	Preclinical	Phase 1	Phase 2	Phase 3
CC8464	Erythromelalgia				
NaV 1.7 Selective backups	Neuropathic Pain				
Selective Sodium channel Blocker	Eye Pain				
Sublingual Diclofenac Spray	Acute Pain / Migraine				



Frank Knuettel | CEO & Chief Financial Officer

Mr. Knuettel has 30 years of management experience in growing early-stage companies. He has raised more than \$300 million via venture, public equity and debt offerings and managed more than 15 mergers and acquisition transactions along with large-scale licensing transactions with fortune 50 companies. Mr. Knuettel holds numerous board positions, at both public and private companies, including ECOM Medical, Relativity Acquisition Corp. (RACY) and Capstone Technologies Group Inc (OTC: CATG). He holds an MBA from The Wharton School and a BA from Tufts University.



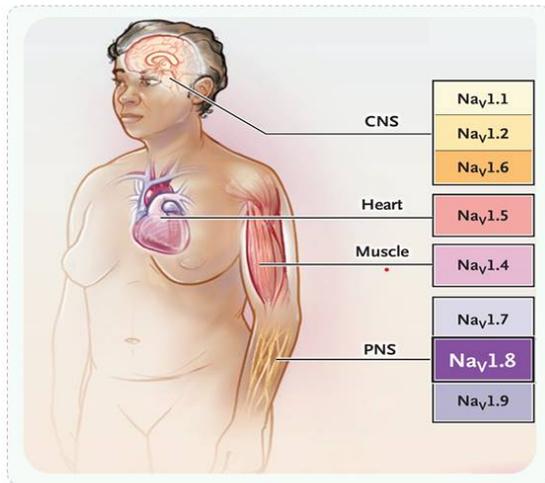
Dr. Eric Lang | Chief Medical Officer

Dr. Lang is an Anesthesiologist and Pain Management Specialist with over 25 years of experience in the pharmaceutical industry. During his pharmaceutical career, he has had both broad-based drug and device development expertise in a variety of therapeutic areas. Dr. Lang has experience in designing development programs from early translational stages through phase III including the successful filing of several recent INDs and NDAs. Dr. Lang began his career with J&J and later worked for Novartis, Javelin Pharmaceuticals, Grunenthal USA, Covance, EnteraBio and Nevakar Inc. Dr. Lang received his MD from Ben Gurion University, Israel and completed post graduate training at Emory University in Atlanta.

A green-tinted photograph of a laboratory microplate with a pipette tip positioned over one of the wells. The background is a solid green color.

Development Plan - Erythromelalgia

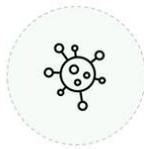
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► Non-selective

(e.g. carbamazepine) block all of the Na_v channel subtypes

Why is NaV1.7 a Good Target for Pain Treatment?



Congenital Insensitivity to Pain



Spectrum of NaV1.7 Activity



Severe Pain

Insensitivity to Pain

Lack of NaV 1.7 (Rare condition initially described in family from Pakistan)

Severe Pain

Excessive NaV 1.7 activity (e.g. Erythromelalgia)

Genetic validation suggests

that suppressing NaV 1.7 is an attractive pharmacological target for pain management

▶ Preclinical

- Potent (nM) inhibitor of human Nav1.7; Subtype selective
- Demonstrated in vivo efficacy in several rodent models of pain: Acute, chronic neuropathic, inflammatory, visceral and post-surgical
- No CNS and muscle/motor dysfunction effects

▶ CMC

- Drug Substance: scaled up, cGMP API available
- Drug Product: tablet (active, 3 strengths and placebo) available for Phase 2. Potency verification to be confirmed.

▶ Tox

- Did not exhibit genotoxicity
- Tox data supports up to 3-month dosing in human clinical trials

▶ Clinical

- Phase 1 completed
- Occurrence of rashes may be addressed with gradual dose-escalation protocols
- Clinical data supports a Proof of Concept ("POC") EM study
- Seek orphan drug designation and apply for breakthrough status
- Fast track status granted by FDA

Neurovascular condition affecting the feet, hands, face, or other parts of the body triggered by warmth, physical activity or stress

Intolerance to exercise, warm baths/showers and clothing

In severe cases, the disease may lead to depression, anxiety and suicidal tendencies.



▶ Symptoms

Erythema (heat), Pain (Usually severe burning pain but may include pins and needles or itching), Swelling, Change in perspiration and discoloration

▶ Types of EM

Primary EM (Inherited or Sporadic SCN9A mutations + non genetic or uncharacterized) or Secondary EM (Related to an underlying disease, toxin or drug induced)

▶ Treatment

No known currently approved treatments and off-label treatments often ineffective

▶ Prevalence

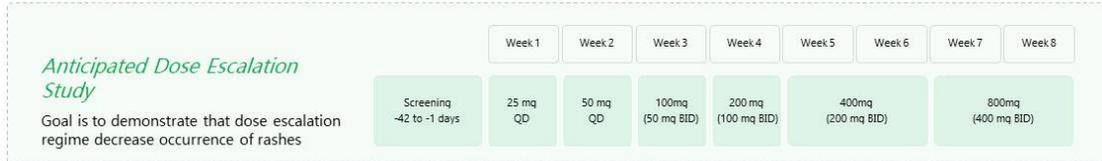
Estimated between 4,000 – 50,000 EM patients in the US with patents covering approximately 4.2 billion people worldwide

► Phase 1 Results

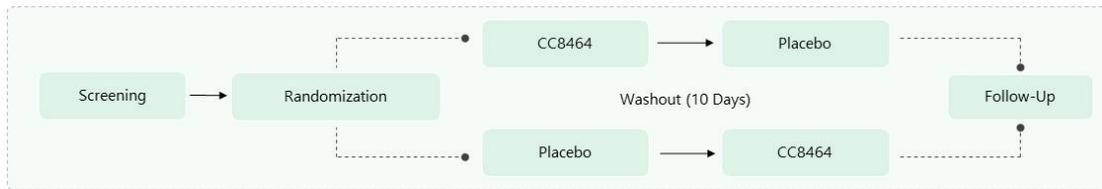
- No significant dose related trends or apparent differences compared to placebo in laboratory assessments, vital signs or ECG and no dose escalation stopping criteria were met
- A moderate drug-induced rash in 6 of 159 subjects (4%), was the only clinically significant dose limiting safety finding
- Following detailed review and discussions with dermatology experts and with concurrence of FDA, we concluded that CC8464 can be further developed utilizing a gradual dose escalation regime

- Occurrence of rashes is a common side effect in this class of drugs
- Marketed drugs with rash Adverse Event have reduced the incidence rate by up to 75% by administering with dose escalation (e.g Lamotrigine (GSK); Oxcarbazepine/Oxtellar XR, an FDA approved treatment for epilepsy patients)

► We Expect the Occurrence of Rashes to be Addressed with a Gradual Dose Escalation Regime



- ▶ A Randomized, Double-blind, crossover study of CC8464 and placebo in the treatment of Primary Inherited SCN9A mutated Erythromelalgia



- N = approximately 20 (current plan, may be adjusted)
- Flare induction after each dose
- Primary endpoint is reduction of pain during flare
- Secondary endpoints include additional pain endpoints, neuropathy scores, and time to flare

*The Company is planning to conduct a Phase 2a study and the concept presented herein remains subject to change.

► Strategy and Endpoints

Our strategy sets two key goals for the Phase 2a POC study with CC8464:

- Obtain results validating CC8464 as a viable therapeutic for genetically-validated EM patients
- Validate CC8464 and its blockage of NaV1.7 as a therapeutic for larger indications (patients with secondary EM and potentially other types of neuropathic pain)

► Primary Endpoint for POC Study

- Show pain reduction in genetically-validated EM patients

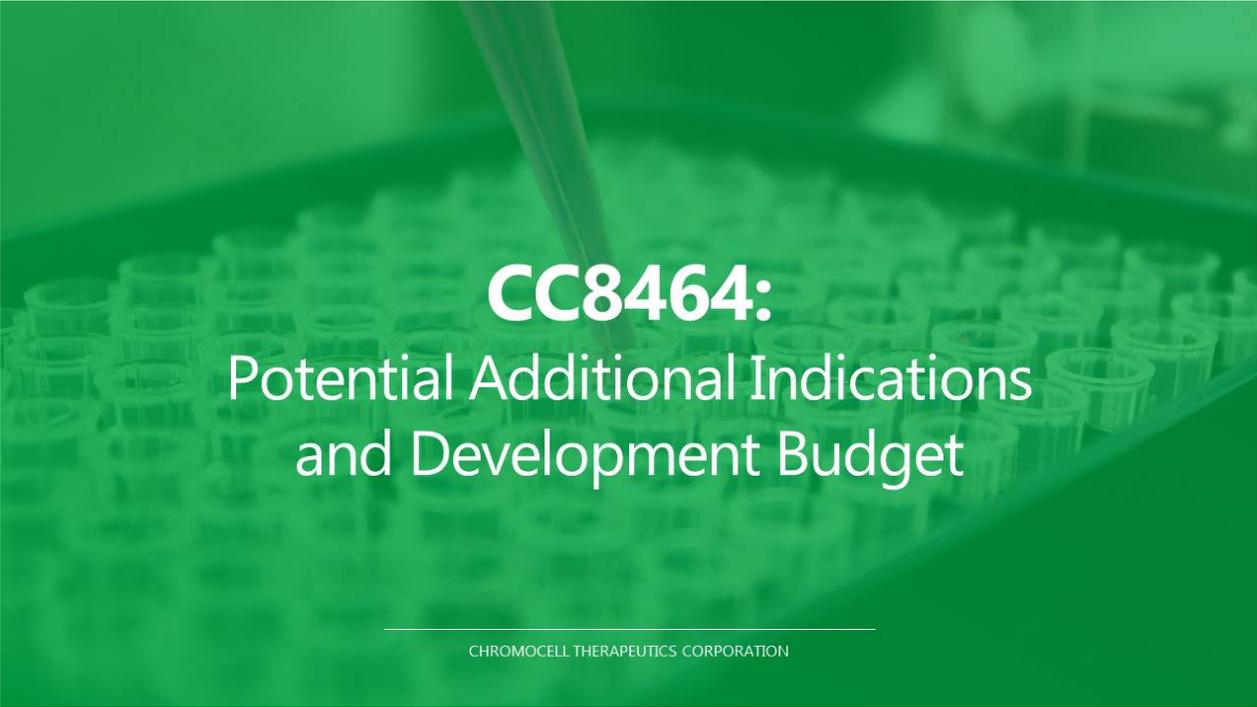
► Secondary Endpoints for POC Study

- Show pain reduction in larger population, including patients with secondary EM (not genetically-validated)
- The secondary endpoint will provide support that CC8464 may be developed for additional pain indications

*The Company is planning to conduct a Phase 2a study and the concept presented herein remains subject to change.

Company	Phase of Development	Mechanism of Action	Note
chromocell	Phase II a	NaV 1.7 Inhibition	Small molecule / oral tablet
Navega Therapeutics	Pre-Clinical	Zinc finger / CRISPR	New technology & more challenging
AlgotX	Phase II (Germany)	Topical Amitriptyline Hydrochloride 15%	Topical agent

⁽¹⁾ The list of companies above is not exhaustive and may not capture other relevant market participants

A green-tinted photograph of a laboratory microplate with a pipette tip positioned over one of the wells. The background is a solid green color.

CC8464:

Potential Additional Indications and Development Budget

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▸ Evidence suggests that NaV1.7 is present on the Cornea

▸ Potential Advantages:

- Negates the risk of systemic hypersensitivity
- Friendly Regulatory environment
- High unmet medical need

Formulate

Commence development of an ophthalmic formulation (eye drops) of CC-8464 in Q1 2024

Tox

Ophthalmic Toxicology in Q2 2024 to allow for human trial

Animal Model

Consider performing a study in an animal model of eye pain

Proof of Concept

Consider a POC trial in humans with severe painful dry eye or post photorefractive keratectomy (PRK)

▶ **NaV1.7 has good potential for the treatment of Neuropathic Pain**

Animal Models

Animal models of neuropathic pain conducted by Chromocell suggest that CC-8464 is likely to be effective in several types of Neuropathic Pain

Tox

Existing toxicology studies conducted by Chromocell support initiation of POC trial in Neuropathic Pain

Proof of Concept

Developing a proof-of-concept trial in humans with neuropathic pain

Sublingual Diclofenac Spray

- ▶ Sublingually delivered NSAID for faster relief with no need for swallowing
- ▶ Preliminary human PK data suggest that it may have a faster onset of action than oral diclofenac which will be important for the treatment of acute pain/migraine



Toxicology

Diclofenac is a well characterized NSAID with well understood safety and efficacy

Indications

Potential options for clinical use include: post-operative pain, severe migraine, pain associated with trauma, etc.

Exclusive Worldwide License

Chromocell has an exclusive license from Benuvia Operations, LLC to a patented formulation of sublingual diclofenac

Regulatory

505B2 development pathway provides for a lower development risk

Sublingual Rizatriptan (Maxalt) and Ondansetron (Zofran)

chromocell



- ▶ **Sublingually delivered for potentially faster onset with no need for swallowing**

Rizatriptan (Maxalt)

Treatment of acute migraine. Negates the need to swallow which is difficult during a migraine and may offer a more rapid onset.

Ondansetron (Zofran)

Treatment of nausea caused by many factors. Negates the need to swallow which is difficult while nauseated and may offer a more rapid onset.

Exclusive Worldwide License

Chromocell has an exclusive license from Benuvia Operations, LLC

Regulatory

505B2 development pathway provides for a lower development risk



Board of Directors & Scientific Advisory Board

CHROMOCELL THERAPEUTICS CORPORATION



Todd Davis | Chairman

Mr. Davis is Chief Executive Officer and a member of the Board of Directors of Ligand Pharmaceuticals and has nearly 30 years of experience in biopharmaceutical and life sciences operations and investing. He has been involved in over \$3 billion of healthcare financings including growth equity, public equity turnarounds, structured debt and royalty acquisitions. He has led, structured and closed more than 40 intellectual property licenses, as well as royalty and hybrid royalty-debt transactions. Mr. Davis is a navy veteran and holds a B.S. from the U.S. Naval Academy and an M.B.A. from Harvard University.



Ezra Friedberg

Mr. Friedberg has served as a member of our Board since May 2021. Ezra is a seasoned investor with more than twenty years of investing experience in both public and private companies. He invests actively in the biotech space and has served on the board of directors of Humanigen (HGEN), a clinical-stage biopharmaceutical company which develops monoclonal antibodies. Mr. Friedberg is a graduate of Johns Hopkins University.



Dr. Richard Malamut

Dr. Malamut is currently CMO at MedinCell Inc. He has extensive experience focusing on early clinical development in Neurology, Psychiatry and Analgesia at Collegium Pharmaceuticals, Braeburn Pharmaceuticals, Teva, Bristol-Myers Squibb and AstraZeneca. Dr. Malamut earned his medical degree from Hahnemann University and completed both a residency in Neurology and a fellowship in Neuromuscular disease. He worked as a board-certified neurologist and has more than 50 publications in the fields of pain medicine, neuromuscular disease, autonomic disease, and neurodegenerative disease.



Chia-Lin Simmons

Ms. Simmons is the CEO of LogicMark, Inc. (Nasdaq: LGMK), the former CEO at LookyLoo and a former executive at Google, Harman International and Amazon. She is a current Board Member of New Energy Nexus, an international NGO that support clean energy entrepreneurs. Ms. Simmons graduated Magna cum Laude and Phi Beta Kappa from U.C. San Diego. She received her MBA from Cornell University, where she was a Park Leadership Fellow and her JD from George Mason University School of Law.

Stephen G. Waxman | MD, PhD, Yale School of Medicine, Chairman

- Bridget Marie Flaherty Professor of Neurology, Neuroscience, and Pharmacology
- Chair, Department of Neurology (1986-2009), Yale University School of Medicine
- Director, Center for Neuroscience & Regeneration Research, Yale

Robert H. Dworkin | PhD, University of Rochester Medical Center

- Adjunct Senior Scientist, Department of Anesthesiology, Critical Care & Pain Management, Hospital for Special Surgery Research Institute, New York, NY
- Director, Analgesic, Anesthetic, and Addiction Clinical Trial Translations, Innovations, Opportunities, and Networks, and Pediatric Anesthesia Safety Initiative public-private partnership with the FDA
- Editorial Boards: Canadian Journal of Pain, Journal of Pain