

## **FOCAL POINT**

Cannabinoids and the Eye

September 2022

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## **INVESTMENT SUMMARY**

Bold innovation in ophthalmology to unlock the potential of proprietary cannabinoid derivatives



Regulatory approval to start Phase 1 for CB1R agonist program; enrollment starting Q4– 22; filing IND for Phase 2 by year-end



Transformative new class of therapeutics may play a role in multiple ocular indications



Solid clinical and preclinical foundation for glaucoma with upcoming meaningful clinical inflection points



Engaging in academic collaborations to expand pipeline of novel cannabinoid derivatives



Pursuing partnership opportunities for programs

## **TRANSFORMATIVE TRANSACTION**

Acquisition to fund operations into late 2023 and through Phase 2 glaucoma study



- Owns Health Canada licenses under Cannabis Act & Cannabis Regulations
- Transaction value based on cash & noncash assets calculated at FMV
  - 88,000 sqft facility in QC
  - 3,700 sqft licensed R&D facility in BC
- Emerald shareholders voted for merger with Skye
- Supreme Court of BC approved transaction



- Skye to acquire all outstanding shares of Emerald
- Emerald shareholders to receive equivalent of 1.95 Skye shares for each Emerald share held
- Skye Special Meeting to vote on the transaction Sept. 30
- Transaction expected to complete in early Q4–22

Complete asset acquisition and wind down of discontinued operations in an efficient manner

Strengthened balance sheet to support investment in growth and value creation

Clinical development to be funded through meaningful inflection points

Exclusive focus on cannabinoid derivatives and maximizing scientific development to create optimized product candidate portfolio

Ophthalmology pipeline-driven growth to more disease-product opportunities by 2023

Advance distinct new class of therapeutics to positively impact health of patients with ocular and other diseases

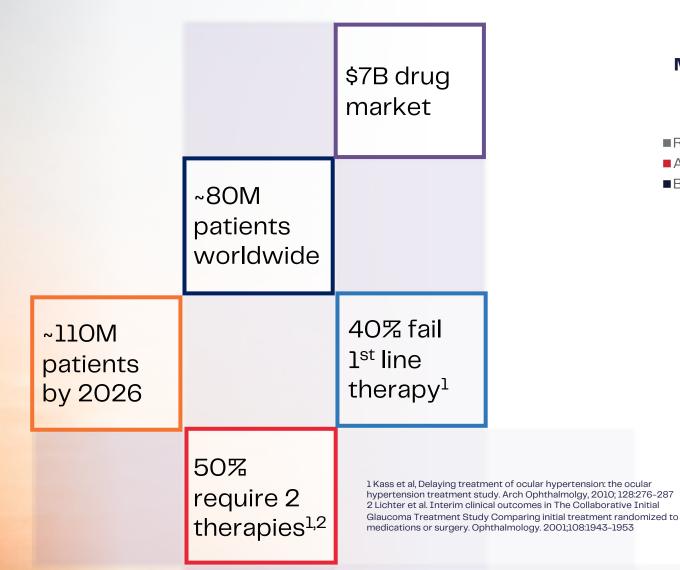
Operate sustainably to positively impact the health of patients

Clinical plan designed for relevant outcomes with optimized time and cost

**Planned strategic transaction will provide sufficient capital to fund operations through Phase 2** 

## **GLAUCOMA: SIGNIFICANT UNMET NEED**

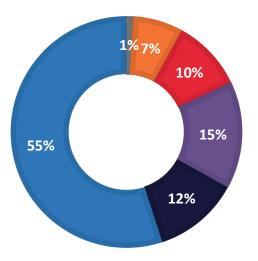
World's leading cause of irreversible blindness



#### MARKET PREDOMINATLY LEGACY CLASSES OF DRUGS AND GENERIC COMPOUNDS

ROCK InhibitorAlpha AgonistBeta Blockers

Carbonic Anhydrase InhibitorFixed ComboProstaglandin Analogs



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## **PATHOPHYSIOLOGY OF GLAUCOMA**

Intraocular pressure (IOP) is currently the main addressable risk factor

Normally, aqueous humor circulates in the eye G but. Þ When drainage canal is blocked, more aqueous humor stays in the eye...

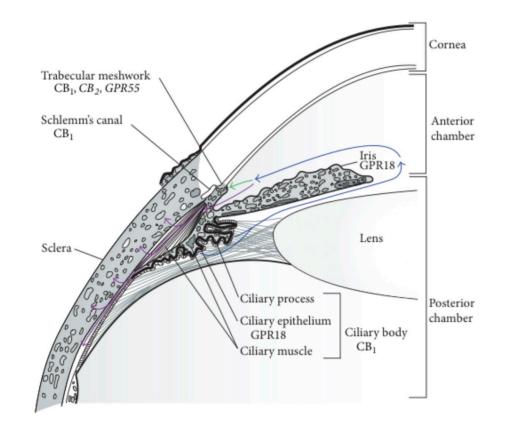
Generating progressive vision loss and blindness if not treated

Damaging blood vessels and optic nerve...

Increasing pressure inside the eye...

## WHY CANNABINOIDS FOR GLAUCOMA?

- CB1 receptors are in the tissues responsible for fluid production (ciliary body) and drainage (trabecular meshwork, Schlemm's canal)
- Activation of CB1 receptors by an agonist such as THC has been shown to be involved in IOP-lowering activity
- Multiple human studies dating to early 1970s demonstrated THC's ability to lower IOP
- Multiple preclinical studies demonstrated THC's ability to be neuroprotective to cells of the optic nerve
- However, systemic administration of THC poses PK/PD challenges and potential adverse effects



Circulating aqueous humor (blue), flowing from the ciliary body in the posterior chamber to the anterior chamber, is filtered out of the eye through two different outflow pathways: the trabecular meshwork pathway (green) and the uveoscleral pathway (purple).

1 Cairns et al, The Endocannabinoid System as a Therapeutic Target in Glaucoma. Neural Plasticity, 2016; Article ID 9364091

## CLINICAL STUDIES HAVE DEMONSTRATED CANNABINOIDS LOWER IOP

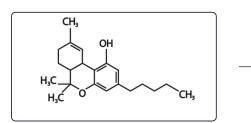
Subjects	Administration route	Observations	
15 Male, 18-30 years old	Smoking marijuana (12 mg $\Delta^9$ THC)	Significant IOP decrease after 80 min, more frequent users showered lower or no IOP drop	
10 healthy volunteers, 20-30 years old	0.022 or 0.044 mg/kg of $\Delta^9$ THC intravenously	IOP decrease in 9 patients with low dose and all subjects with high dose	
256 glaucomatous patients	Smoking marijuana (1-4% $\Delta^9$ THC) or 5-20 mg oral $\Delta^9$ THC	Most patients showed <b>IOP reduction</b> , additive effect was seen with conventional glaucoma drugs	
A 23-year-old male (suffers of HPPD), 4 young subjects (control), 23 -28 years old	Smoking marijuana	HPPD in patient, no change in the controls	
9 patients with end-stage open-angle glaucoma, 38-77 years old	Smoking marijuana or oral $\Delta^9$ THC capsules	<b>Lower IOP</b> , development of tolerance and significant systemic toxicity that limit the usefulness	
6 patients with ocular hypertension or early primary open-angle glaucoma	Single sublingual preparation (5 mg $\Delta^9$ THC or 20 and 40 mg CBD)	Significant <b>IOP decrease</b> by $\Delta^9$ – THC, 40 mg CBD produced a transient IOP increase, no significant side effect	
8 patients with glaucoma resistant to conventional treatments, 53-72 years old	Topical application of WIN55212-2	IOP decreased directly through CB1	
18 patients suffers of glaucoma	Single oral dose of nabilone (0.5 mg)	<b>IOP decreased</b> by 27.9%, 2-6h after administration, no visual side effect	
32 patients suffers of glaucoma	BW29Y (5 or 10 mg) or BWI46Y (4, 8, or 12 mg)	BW29Y: ineffective, BWI46Y: <b>IOP drop</b> , lightheaded, dizzy, disorientation, blood pressure drop	

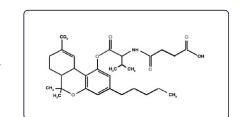
HPPD: Hallucinogen persisting perception disorder; IOP: intraocular pressure;  $\Delta^9$  THC:  $\Delta^9$  tetrahydrocannabinol; CBD: cannabidiol; WIN55212–2, Nabilone, BW29Y, BWI46Y: synthetic cannabinoids.

## **DESIGNING AN EFFECTIVE THERAPY**

A cannabinoid prodrug allows local delivery into the eye, with increased efficacy and limiting systemic exposure

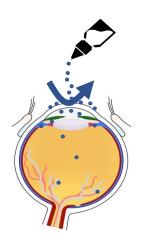
- THC is lipophilic and not easily delivered into the eye topically
- SBI-100 is a prodrug of THC that increases solubility and polarity of THC, allowing it to better penetrate ocular tissue
- Inside the eye, SBI–100 is converted back into THC
- SBI-100 OE proprietary nanoemulsion formulation containing SBI-100 that further enhances delivery of THC to ocular tissue, resulting in greater IOP-lowering effect and duration

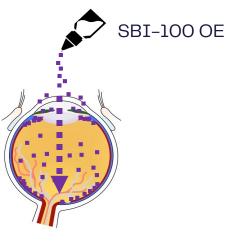




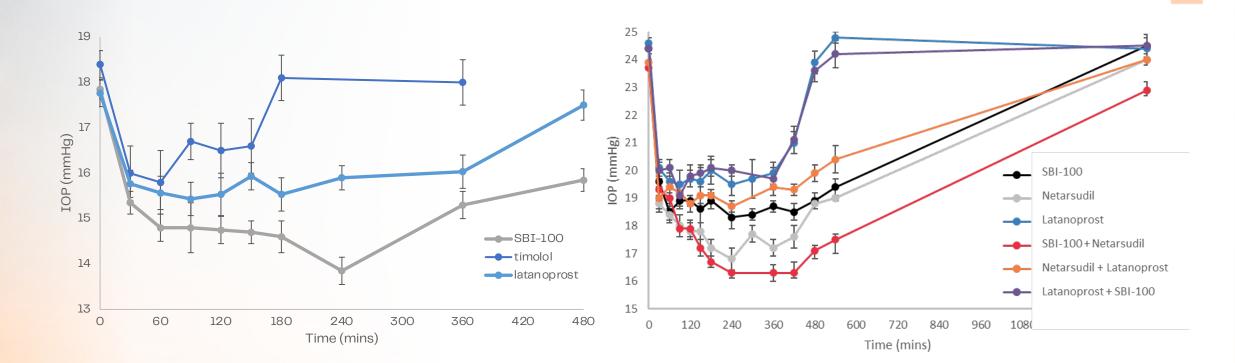
THC

SBI-100





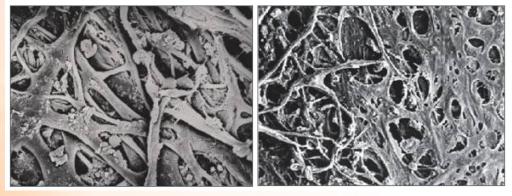
## **SBI-100 HAS DEMONSTRATED SUPERIOR IOP LOWERING COMPARED TO STANDARD OF CARE**



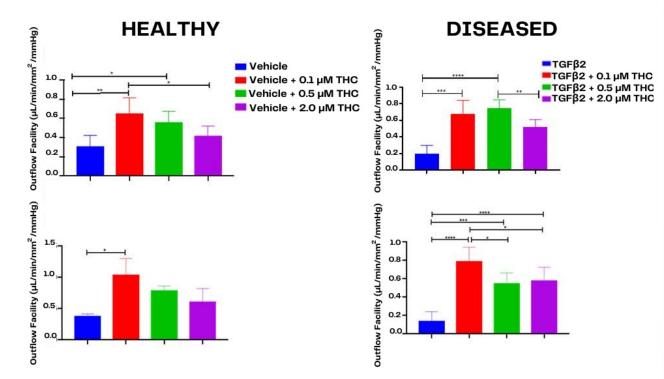
In multiple preclinical studies, SBI–100 demonstrated superior IOP lowering compared to leading therapies as a single agent In preclinical studies, SBI–100 demonstrated enhanced efficacy when combined with other approved therapies

## **INCREASED OUTFLOW VIA TRABECULAR MESHWORK**

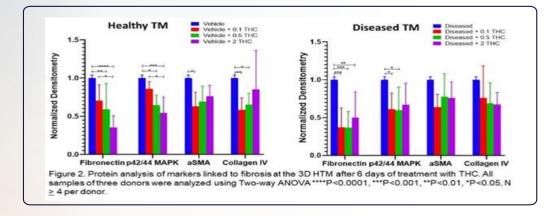
- The trabecular meshwork (TM) accounts for 90% of aqueous humor outflow (drainage)
- Restricted outflow through TM and fibrosis in tissue may be key to underlying pathophysiology of glaucoma
- The TM is avascular and depends on outflow for nutrients and health; restricted outflow leads to further structural deterioration
- In a 3D model of human TM cells, SBI-100's active pharmaceutical ingredient significantly increased outflow in both healthy and diseasesimulated tissue

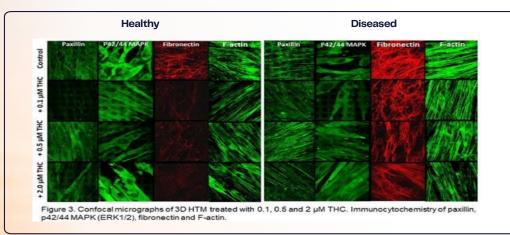


Normal TM (left), Primary open-angle glaucoma (POAG) TM (right)



## **REDUCED MARKERS OF INFLAMMATION & FIBROSIS**





- THC treatment significantly reduced markers associated with fibrosis and inflammation, which are associated with glaucoma
- Potentially disease-modifying through extracellular matrix remodeling of the trabecular meshwork
- Multi-factorial mechanism of action, including antiinflammatory and anti-fibrotic responses
- Potentially a new class of treatment with therapeutic attributes distinct from existing IOP– lowering drugs

## **SBI-100 OE: ADDRESSES MULTIPLE ISSUES WITH CURRENT TREATMENT OPTIONS**

#### ✓ Targets area of disease

- Most drugs do not target the main site of disease-causing increased IOP -- the trabecular meshwork (TM)
- THC directly targets the TM and increases flow through the eye as well as uveoscleral pathways
- THC decreases fibrosis in the TM, the main cause of blockage to flow

#### Potential combination and add-on to current therapies

- Other drugs cause local and systemic side effects
- Most drugs do not combine well with each other

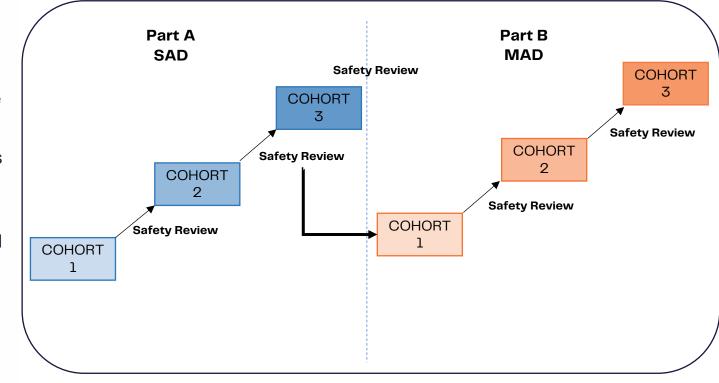
#### Neuroprotective capabilities

 Cannabinoids and THC, specifically, have shown potential benefits to promote health and survival of optic nerve cells – sparing of retinal ganglion cells (RGCs) – in glaucoma models



## **SBI-100 OE: PHASE 1 SAFETY SAD/MAD DESIGN IN HEALTHY VOLUNTEERS**

- Objectives: Evaluate safety, tolerability, PK of SBI-100
   OE/THC/metabolite, and effect on intraocular pressure (IOP) in healthy subjects in single and multiple ascending dose arms
- The study will be conducted in 2 arms consisting of 3 cohorts of 8 subjects
- Safety review committee meetings held prior to each dose escalation and between SAD/MAD
- As a new chemical entity and regulated controlled substance, demonstrating safety in a controlled healthy volunteer study is important for development of SBI-100 OE

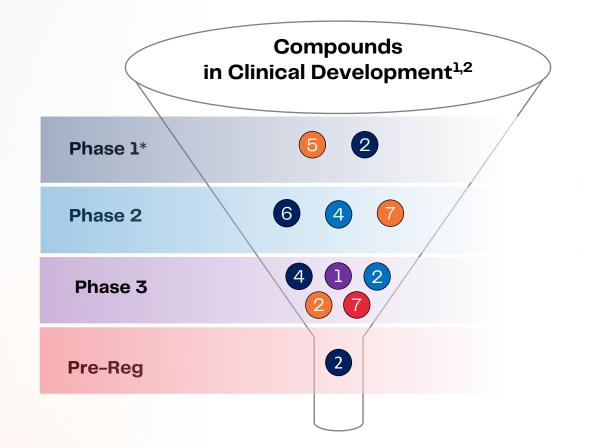


## **SBI-100 OE – CLINICAL DEVELOPMENT PLAN**

Preclinical Proof–of– Concept	Phase 1 Safety & Tolerability	Phase 2 Clinical Proof–of– Concept	Phase 2/3 Efficacy & Safety
Nonclinical and CMC			
<ul> <li>Nonclinical MOA POC</li> <li>Nonclinical efficacy POC</li> <li>Formulation development</li> </ul>	<ul> <li>Nonclinical safety and toxicology work completed</li> <li>Manufacture drug product for Phase 1</li> </ul>	<ul> <li>Long-term chronic toxicology</li> <li>Safety pharmacology</li> <li>Manufacturing process development and optimization</li> </ul>	<ul> <li>Reproductive toxicology</li> <li>Carcinogenicity toxicology</li> <li>Biodistribution</li> <li>Manufacturing optimization</li> </ul>
Clinical			
<ul> <li>Target product profile</li> <li>Protocol design and development</li> </ul>	<ul> <li>Begin enrolling SAD/MAD first- in-human safety study</li> <li>Preliminary topline analysis</li> <li>Final Phase 1 data analysis</li> </ul>	<ul> <li>Begin enrolling Phase 2 proof- of-concept study</li> </ul>	<ul> <li>Phase 2b efficacy &amp; safety</li> <li>Phase 3 efficacy &amp; safety</li> </ul>
Regulatory			
<ul> <li>Regulatory strategy</li> <li>Pre-IND Meeting</li> </ul>	<ul> <li>Australian Human Research Ethics Committee approval to start Phase 1</li> </ul>	<ul> <li>FDA IND clearance</li> </ul>	<ul> <li>FDA end-of-Phase 2 meeting</li> <li>FDA NDA submission</li> </ul>

## **INDUSTRY GLAUCOMA PIPELINE LACKS INNOVATION**

Late-stage assets dominated by legacy MOAs or combinations

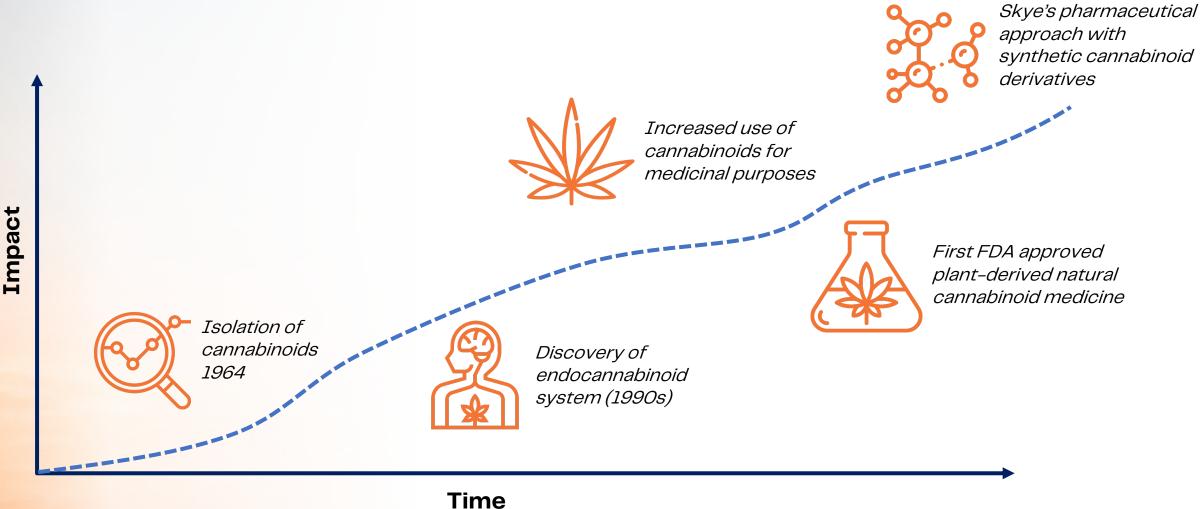




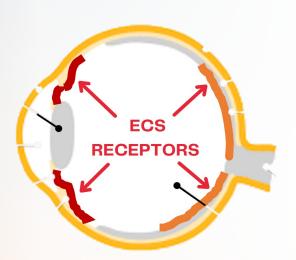
**\*\***Carbonic Anhydrase 2 Inhibitor, Receptor Type Tyrosine Protein Phosphatase Beta Inhibitor, Cholinergic Muscarinic Receptor Agonist, Sulfonamide Protein Kinase Inhibitor, C1q Inhibitor, Potent Corticosteroid Agent, Ciliary Neurotrophic Factor (CNTF), KATP Channel Vessel Relaxer

## **UNLOCKING PHARMACEUTICAL POTENTIAL OF CANNABINOIDS**

Decades of research merging with modern biotechnology techniques

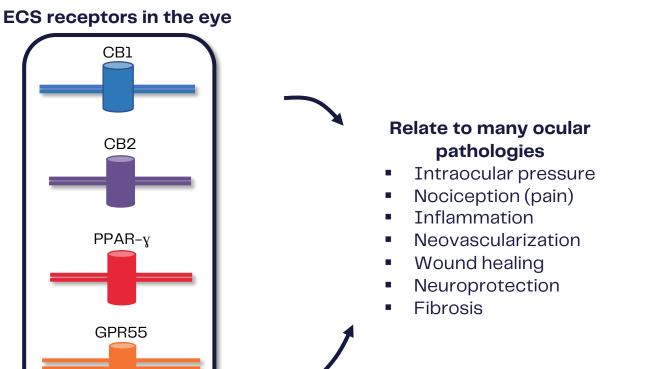


## **BUILDING CANNABINOID PLATFORM FOR OPHTHALMOLOGY**



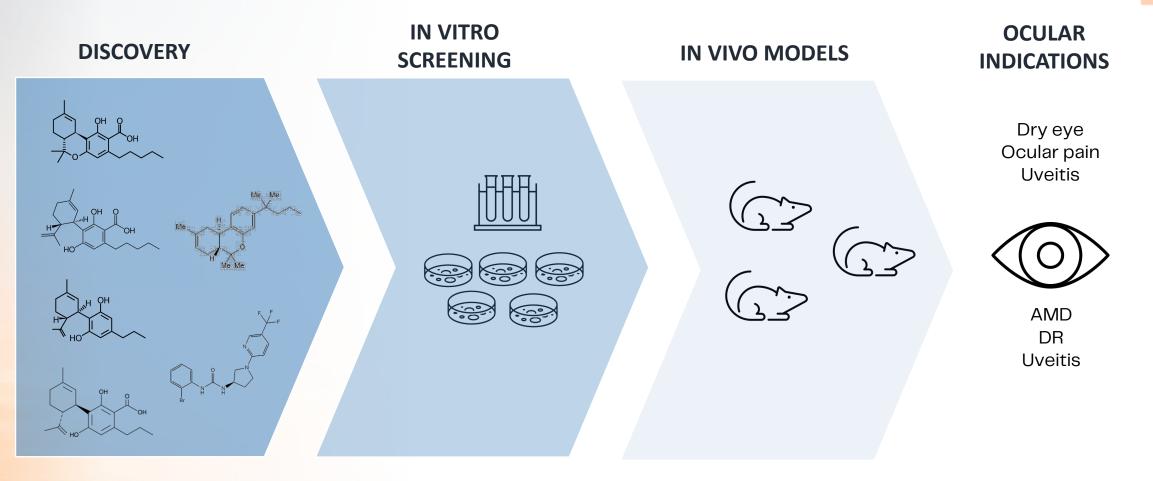
- Endocannabinoid system (ECS) plays vital role in controlling an array of functions in the body
- Affecting the ECS may provide therapeutic benefit for multiple diseases, including in the eye
- ECS receptors found throughout the eye shown to be involved in a broad set of ocular functions and pathologies





## **DEVELOPING IN VITRO SCREENING PLATFORM FOR OCULAR DISEASES**

Cannabinoid Pharmaceutical Innovation Program (CPIP)



# **CANNABINOID PHARMACEUTICALS: A CLASS OF NEW THERAPIES**

FDA approval of a natural cannabinoid

**G**AV pharmaceuticals



\*Epidiolex® (cannabidiol) 1<sup>st</sup> FDA approval of natural cannabinoid product



\$269M in 2019 \$510M in 2020 \$658M in 2021



Neurological disorder pipeline



Acquired for \$7.2B in 2021

New chapter: synthetic novel cannabinoid derivative





#### Synthetic Cannabinoid Derivatives

- Patented new chemical entities
- Reliable manufacturing
- Improved delivery
  - Better targeting



Skye is developing drugs to treat diseases of the eye

### **CATALYSTS TO ADVANCE OUR GROWTH**

Bold innovation in ocular applications to unlock full potential of novel class of cannabinoid derivatives

#### SBI-100 OE: PHASE 1

- ✓ Q1-22: Completion of GLP toxicology studies
- ✓ Q2-22: AUS Human Research Ethics Committee (HREC) approval to start Phase 1 study

Q4–22: Begin Phase 1 enrollment

Q2-23: Phase 1 data

#### SBI-100 OE: PHASE 2

- ✓ Q4-21: Pre-IND meeting with the FDA
- Q4–22: Submit Investigational New Drug application to FDA
- □ O1-23: IND clearance
- □ H1-23: Phase 2 efficacy study initiation
- H2-23: Phase 2 data

#### **STRATEGIC MILESTONES**

- ✓ Q4-21: Neuroprotection study to assess SBI-100 potential to spare vision loss
- □ H2-22: Close acquisition of Emerald Health Therapeutics
- Early-stage research & pipeline expansion (including in Canada)
- H1-23: Phase 2 efficacy study initiation New product-driven intellectual property



## MANAGEMENT TEAM

## SENIOR MANAGEMENT

#### **Punit Dhillon**

#### Chief Executive Officer & Chair

Co-founded and led OncoSec (NASDAQ: ONCS), a cancer immunotherapy company, through early development and partnership with Merck to launch Phase 2/3 multicenter trial. Previously VP, Finance & Operations for Inovio Pharmaceuticals (NASDAQ: INO).

#### Kaitlyn Arsenault, CPA

#### Chief Financial Officer

Over 14 years of experience in accounting, auditing, financial reporting, mergers and acquisitions, as well as business operations in the life science and technology sectors

#### Tu Diep, MSc

#### Chief Development Officer

 Over 15 years' experience in research, clinical and strategic operations, business process, CMC, regulatory affairs, and business development

#### Karam Takhar

#### VP, Corporate Development

 Over 15 years of life sciences experience in research, sales, project management, strategic operations, finance, investor relations and business development

#### Tom Kim, Esq

#### General Counsel & Director of IP

 Over 20 years' experience counseling biotech companies. Previously SVP and Corporate Secretary for Inovio Pharmaceuticals. Built global patent portfolio, led M&A transactions, closed license and partnering deals with large pharma.

#### **Rhea Williams, MPH**

*Head of Regulatory Affairs & Quality Assurance* 

 Over 25 years in drug development, regulatory affairs and quality assurance. Supported development of small and large molecules in the areas of neurology, hematology, oncology, women's health, cardiology, and ophthalmology

## **BOARD OF DIRECTORS**

#### **Punit Dhillon**

#### Chair

 Co-founded and led OncoSec (NASDAQ: ONCS), a cancer immunotherapy company, through early development and a partnership with Merck to launch a Phase 2/3 multi-center registration clinical trial. Previously VP, Finance & Operations for Inovio Pharmaceuticals (NASDAQ: INO).

#### Margaret Dalesandro, PhD

#### Director

 Over 25 years of drug development experience in pharmaceutical, biotechnology, and diagnostics industries.
 Currently President of Brecon Pharma Consulting.

#### Praveen Tyle, PhD

#### Director

 Over 37 years of broad pharmaceutical executive leadership. Currently President, CEO, and Director of Invectys, Inc. Experienced in ocular disorders with a wealth of academic insight. Previous senior leadership positions at Novartis and Bausch & Lomb.

#### Keith Ward, PhD

#### Director

 Over 25 years of experience in the biotech and pharmaceutical industry. Currently President and CEO of InterveXion Therapeutics. Previously served as Global Vice President of Pharmaceutical R&D at Bausch & Lomb.

#### **Bobby Rai\***

#### Director

 Over 20 years' experience operating The Medicine Shoppe Pharmacies in Vancouver, Canada. Introduced HIV point-of-care testing as well as lab testing (including chronic kidney disease screening using HealthTab technology) into community pharmacies.

## **ADVISORS**

#### CLINICAL

#### **Robert Ritch, MD**

Prof. of Ophthalmology, Mt. Sinai

Shelley and Steven Einhorn
 Distinguished Professor of
 Ophthalmology; Surgeon Director
 Emeritus and Chief, Glaucoma
 Services, The New York Eye & Ear
 Infirmary; Professor of
 Ophthalmology, The New York
 Medical College

#### Louis Pasquale, MD

Prof. of Ophthalmology, Mt. Sinai

Professor Ophthalmology, Icahn
School of Medicine, Chair,
Department of Ophthalmology, Vice
Chair of Translational Ophthalmology
Research, Mount Sinai Healthcare
System

#### SCIENTIFIC

#### Eduardo Muñoz, MD, PhD

Prof. of Immunology, U. Córdoba

 Over 30 years of experience in biomedical research, focused on cannabinoids, pharmacology, and inflammation, providing deep expertise in the mechanism of actions of cannabinoids and the development of novel cannabinoid–derived molecules

#### Jeffery Goldberg, MD, PhD

Prof. of Ophthalmology, Stanford

 Professor and Chair of Ophthalmology and Director of Spencer Center for Vision Research at Byers Eye Institute, Stanford University

#### Miguel González-Andrades, MD, PhD

Clinician–Scientist of Ophthalmology

 Clinician-scientist, ophthalmologist at Reina Sofia University Hospital, Assistant Professor and Research Scientist at Maimonides Biomedical Research Institute of Córdoba – University of Córdoba

#### Giovanni Appendino, PhD

Prof. of Organic Chemistry, U. Piedmont

 Over 40 years of research in natural products, leading to the discovery and isolation of over 200 novel compounds, including novel cannabinoids and chemistry for cannabinoid–derived molecules

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Solid clinical and preclinical foundation for glaucoma with upcoming meaningful clinical inflection points



Engaging in academic collaborations to expand pipeline of novel cannabinoid derivatives

 Ticker

 \$2.9M

SKYE

cash June 30, 2022

496M common shares OS (679M FD)



Pursuing partnership opportunities for programs

## **THANK YOU**

#### To learn more, please contact:

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