



Edesa Biotech

Corporate Presentation

Edesa Biotech, Inc.

Nasdaq: EDSA

January 4, 2021



Forward Looking Statements



This presentation may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements may be identified by the use of words such as "anticipate," "believe," "plan," "estimate," "expect," "intend," "may," "will," "would," "could," "should," "might," "potential," or "continue" and variations or similar expressions. You should not place undue reliance on these forward-looking statements, which are not a guarantee of future performance. There can be no assurance that forward-looking statements will prove to be accurate, as all such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results or future events to differ materially from the forward-looking statements. Such risks include: the ability of Edesa to obtain regulatory approval for or successfully commercialize any of its product candidates, the risk that access to sufficient capital to fund Edesa's operations may not be available or may be available on terms that are not commercially favorable to Edesa, the risk that Edesa's product candidates may not be effective against the diseases tested in its clinical trials, the risk that Edesa fails to comply with the terms of license agreements with third parties and as a result loses the right to use key intellectual property in its business, Edesa's ability to protect its intellectual property and the timing and success of submission, acceptance and approval of regulatory filings. Many of these factors that will determine actual results are beyond the company's ability to control or predict. For a discussion of further risks and uncertainties related to Edesa's business, please refer to the Company's public company reports filed with the B.C. Securities Commission and the U.S. Securities and Exchange Commission. All forward-looking statements are made as of the date hereof and are subject to change. Except as required by law, the Company assumes no obligation to update such statements. This presentation does not constitute an offer or solicitation of an offer for sale of any securities in any jurisdiction, including the United States. Note: All financial and share price information is presented in U.S. dollars.

Advancing Clinical-Stage Drug Candidates

Focus on Immune Modulation Therapies and Inflammatory Diseases

Exploring new ways to treat diseases, including alternatives to topical steroids

- **Novel technologies**
Topical sPLA2 inhibitor and two phase 2-ready biologics
- **Phase 2/3 study initiated for anti-TLR4 mAb**
Hospitalized COVID-19 patients
- **Phase 2b study initiated for sPLA2 candidate**
Targeting allergic contact dermatitis
- **Other regulatory approvals**
Proof-of-concept study in hemorrhoids
- **Entrepreneurial leadership**
Multiple successful start-ups and exits

EDSA

Nasdaq
LISTED

Sector: Biotechnology

Headquarters: Toronto, Ontario

Established: 2015

Public: 2019

Edesa Development Pipeline

Advancing and Expanding Our Growth Opportunities



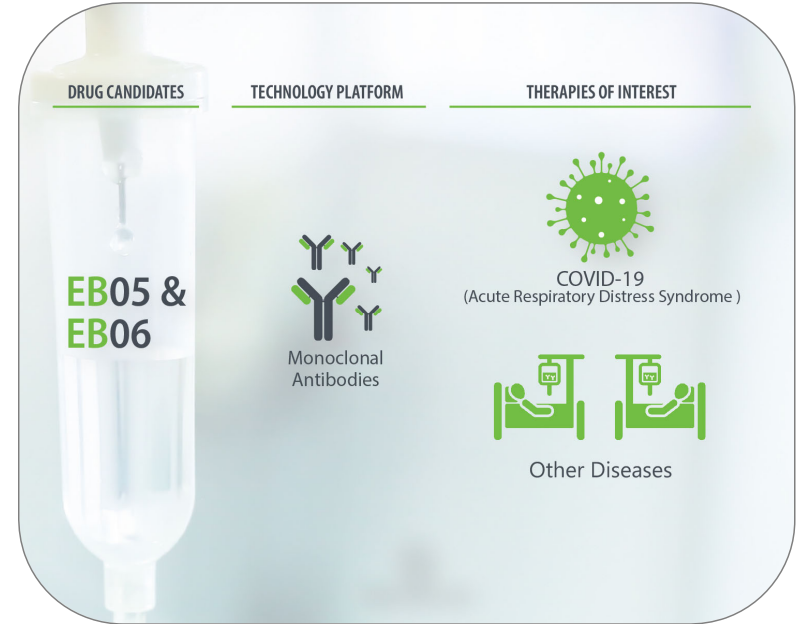
Drug Candidates		Indications	Pre-Clinical	Phase 1	Phase 2	Phase 3
EB01	sPLA2 Inhibitor	Allergic Contact Dermatitis				Enrollment Ongoing
EB05	Anti-TLR4 mAb	ARDS and Other Indications				Enrollment Ongoing in Hospitalized Covid-19 Patients
EB02	sPLA2 Inhibitor	Hemorrhoids				CTA Approved – PoC Study
EB06	Anti-CXCL10 mAb	ARDS and Other Indications				Growth Opportunities
Immunotherapy	Not Disclosed	Vitiligo				Producing mAbs for Novel Targets

Edesa Monoclonal Antibodies

Compelling Data for Use in COVID19 & Beyond

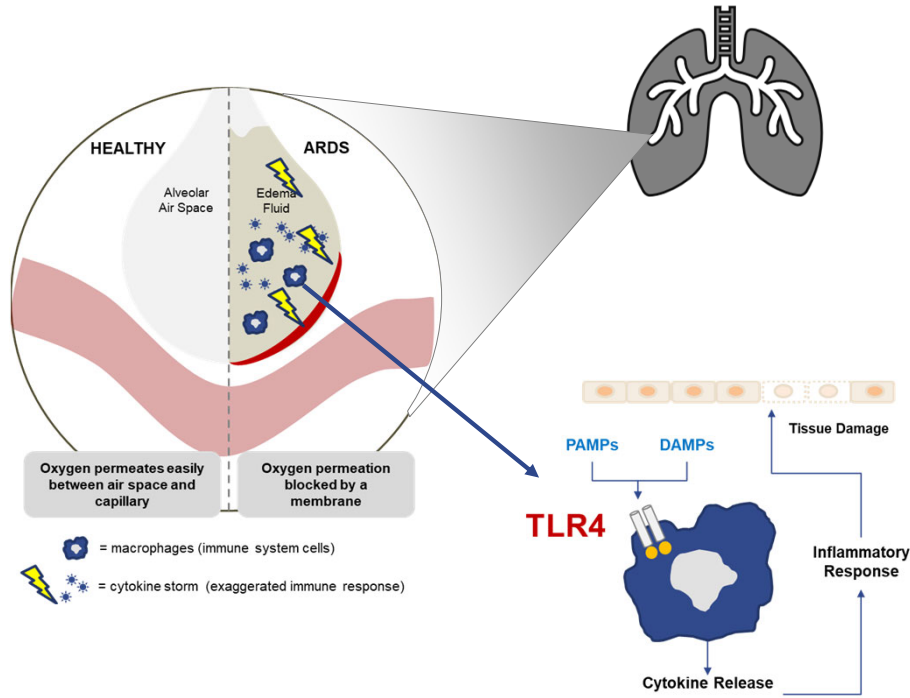


- **Potential to reduce the number of ICU patients, intubation procedures and death**
 - Compelling evidence of activity in acute lung injury
 - Favorable human safety data (>120 subjects)
- **Ability to move quickly**
 - Approved protocol from Health Canada and FDA
 - Drug product already manufactured
 - Enrollment ongoing for Phase 2/3 study of EB05
 - Seeking government grants to rapidly advance
- **Broad potential utility**
 - By targeting ARDS, could be effective against future strains of coronaviruses and other respiratory pathogens



Acute Respiratory Distress Syndrome (ARDS)

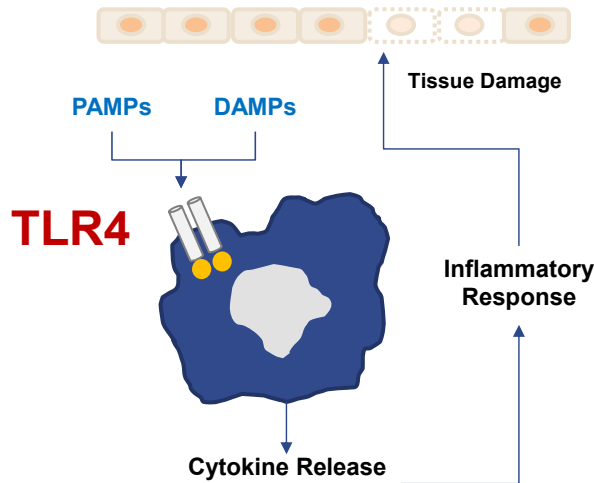
Leading Cause of Death in COVID-19 Patients



- **A life-threatening form of respiratory failure**
 - Exaggerated immune response
 - Inflammation and injury to the lungs
 - Edema that deprives the body of oxygen
- **Other causes**
 - Sepsis, bacterial and viral infection
 - Smoke/chemical inhalation and chest injury
- **Standard of care**
 - Few meaningful treatments, other than supplemental oxygen and mechanical ventilation
- **Disease incidence**
 - Prior to COVID-19: 10% of ICU admissions
 - 3 million patients globally/year, including 200K in US
 - 75,000 deaths annually in US
- **Substantial evidence that multiple causes of ARDS are mediated by the TLR4 pathway**

Toll-like Receptor 4 (TLR4)

A Key Component of Innate Immune Response

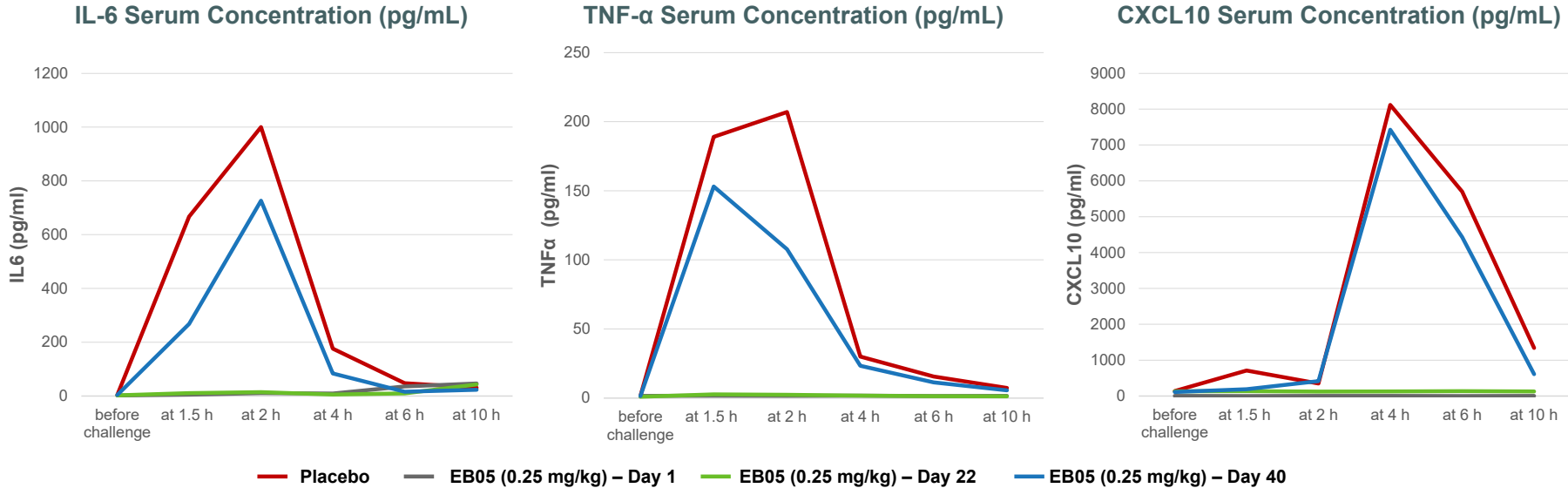


- Key receptor as part of the innate immune response, discovered in 1997. A Nobel prize was awarded in 2011
- TLR4 is activated both by pathogen-associated molecular patterns (PAMPs) such as LPS, and damage-associated molecular patterns (DAMPs)
- TLR4 is expressed on activated macrophages and neutrophils which are part of the innate immune system
- Activation leads to release of cytokines that trigger inflammation to help fight the infection, and chemokines that help activate and direct the adaptive immune response
- TLR4 plays a critical role in the first few days of infection, before the adaptive response is primed

TLR4 has been shown to be important in the pathogenesis of ARDS

Evidence of Activity in Humans

EB05 Inhibited “Cytokine Storm” after *In Vivo* LPS Challenge



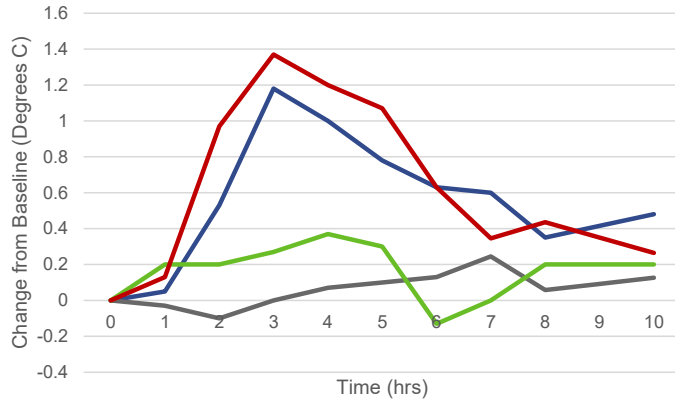
A single low dose provided a measurable protective response to the LPS challenge for more than 22 days. At Day 40, response returning to normal.

Evidence of Activity in Humans

EB05 Lowered Fever and Stabilized Vital Signs after *In Vivo* LPS Challenge

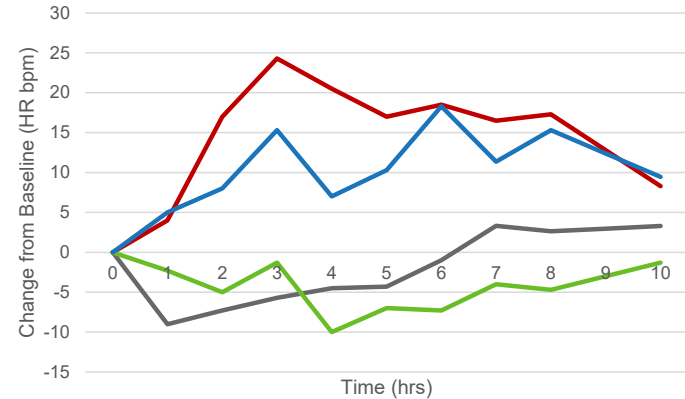


Mean Change from Baseline of Temperature



— Placebo — EB05 (0.25 mg/kg) – Day 1 — EB05 (0.25 mg/kg) – Day 22 — EB05 (0.25 mg/kg) – Day 40

Mean Change from Baseline of Heart Rate



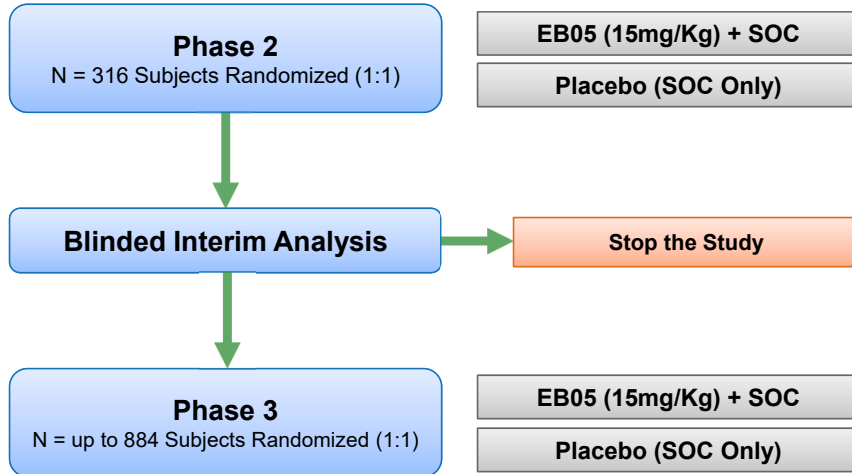
A single low dose blocked fever by more than 1 degree Celsius and maintained heart rate during LPS challenges for more than 22 days. At Day 40, response returning to normal.

Overview of Clinical Trial Design

A Phase 2/3 Adaptive Design to Treat Hospitalized COVID-19 Patients



Efficacy of EB05 mAb in Subjects Hospitalized with COVID-19 Infection



SOC = Standard of care

- **Sequential adaptive design with interim analysis at end of Phase 2**
 - Targeting hospitalized COVID-19 patients
- **Primary Endpoint**
 - Proportion of patients alive and free of supplemental oxygen at 28 days
- **Multiple Secondary Endpoints, including:**
 - Improvement of WHO COVID-19 scale
 - Ventilator free days
 - Time to clinical improvement
 - Change in the Berlin ARDS severity scale
- **Randomization**
 - EB05+SOC to placebo (SOC alone)
- **Up to 40 sites**

Allergic Contact Dermatitis

Disease State and current Treatments



Allergic Contact Dermatitis (ACD) is a Type IV hypersensitivity reaction

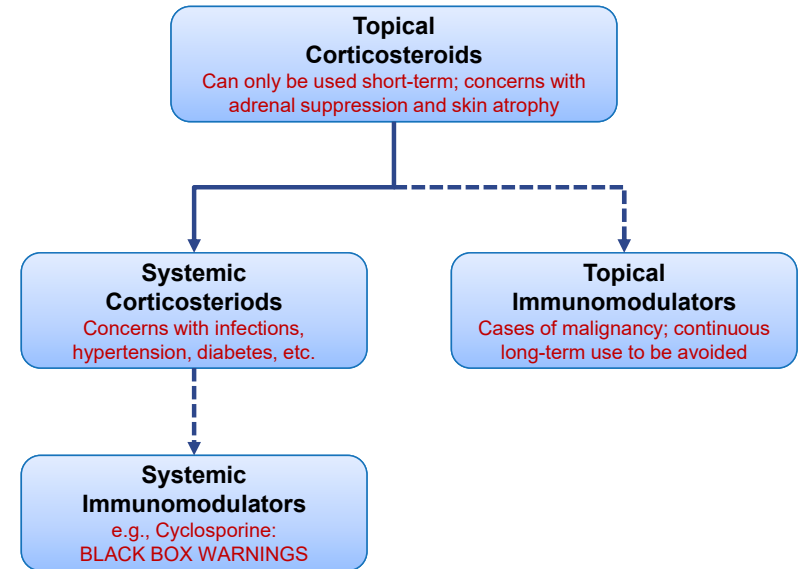
- Immune system sensitized with initial contact with allergen
- Subsequent contact results in cell-mediated allergic response at the point of contact
- Often highly visible on face & hands



Shortcomings of current therapies*

- Low efficacy and high remission rates
- Steroids have significant side effects
- Physicians unable to identify the cause of ACD in about half of patients
- 71% of patients unable to fully avoid allergen (e.g., present at work)

Current Limited Treatment Approaches for ACD
Safety Issues Often Result in Discontinuation of Treatment

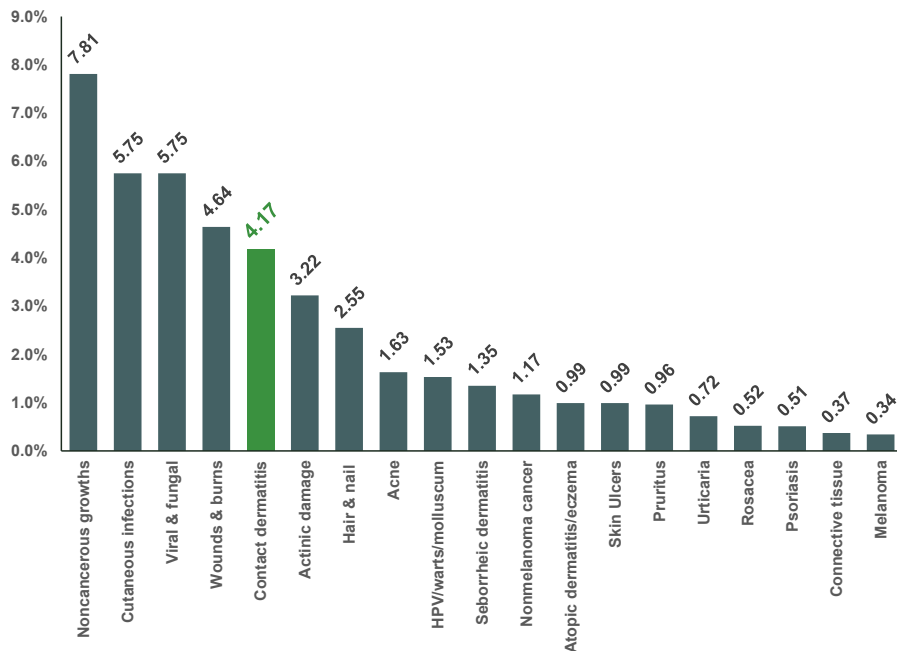


Contact Dermatitis

One of the most prevalent skin conditions in U.S.



Claims-Based Prevalence of Skin Disease in the US



- Contact dermatitis is a leading occupational illness affecting 13.2 million people in U.S. at a cost of up to ~\$2 billion annually
- ACD represents a submarket of contact dermatitis
 - 2.5+ million with ACD in the U.S.
 - 1.0+ million of those patients with chronic ACD.
 - Literature points to potentially larger undiagnosed population

Occupational Contact Dermatitis

Adversely Impacts Both Employers and Employees



- **Loss of Productivity**
 - Physical and emotional distress
 - Multiple physician visits
 - Prolonged sick leaves
- **Complexity of Mitigation**
 - Time to identify allergen
 - Allergen avoidance measures
 - Change in work responsibilities
 - Substitution of materials
 - Changes not always feasible
- **Increased Legal Risk**
 - Lost income
 - Disability claims

Industry	Substances
Agriculture	Daffodils, tulips, carrots, parsnips, parsley, celery
Chemical	Adhesives, paints, acrylates, acids/bases, solvents
Cleaning	Anti-bacterial wash/gels, disinfectants, bleaches
Construction	Cement, plaster, concrete
Cosmetics and Hair	Dyes, perming solutions, shampoos, lotions, bleaches
Engineering	Soluble metal-working fluids
Healthcare	Biocides, latex, glutaraldehyde, formaldehyde
Restaurant & Food	Orange/lemon peel, shellfish, meat, sugar, flour
Printing	Inks, solvents, cleaners
Rubber	Thiurams and related chemicals

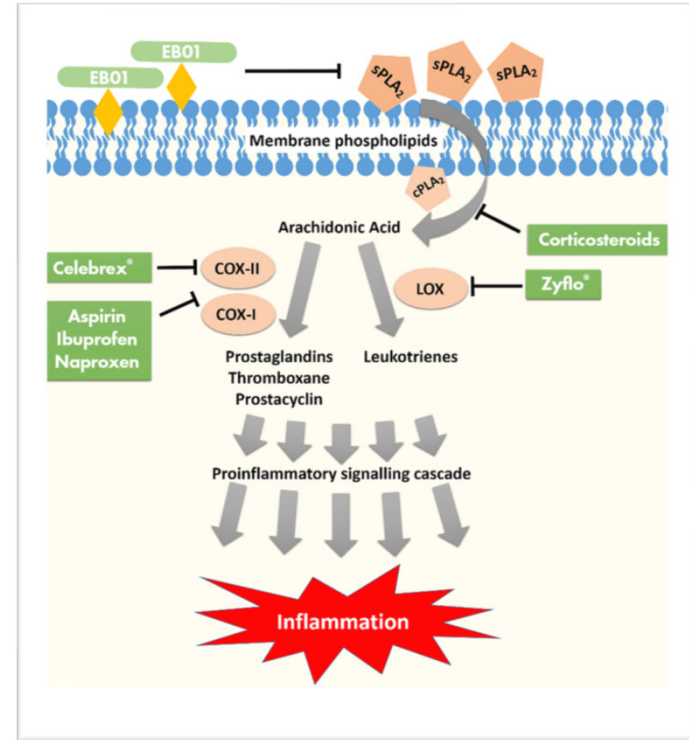
Novel Approaches to Chronic Conditions

Treating Inflammation without the Safety Concerns of Current Therapies



● Inhibiting the Inflammation Cascade

- **sPLA2 inhibitors** are designed to inhibit the inflammatory process at its inception
- Exerts its anti-inflammatory activity upstream of currently approved NSAIDs
- Positive data from two clinical studies
- Positioning as alternative to topical corticosteroids



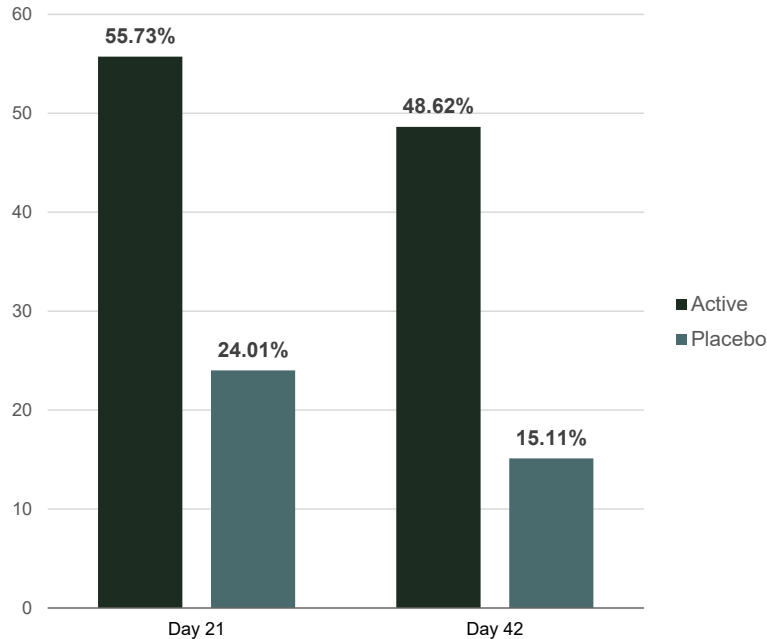
Inflammation inhibitors were developed to inhibit sPLA₂ from degrading phospholipids to produce arachidonic acid. Arachidonic acid is processed via the LOX-COX pathway to produce several pro-inflammatory signaling molecules

EB01 Efficacy in Humans Established

Phase 2 Study Demonstrated Efficacy & Safety in ACD Patients



Mean Percent Improvement from Baseline in Total CDSI Score



Phase 2 Efficacy Study of EB01

For the treatment of allergic contact dermatitis
— 30 Patients Bilateral Design —

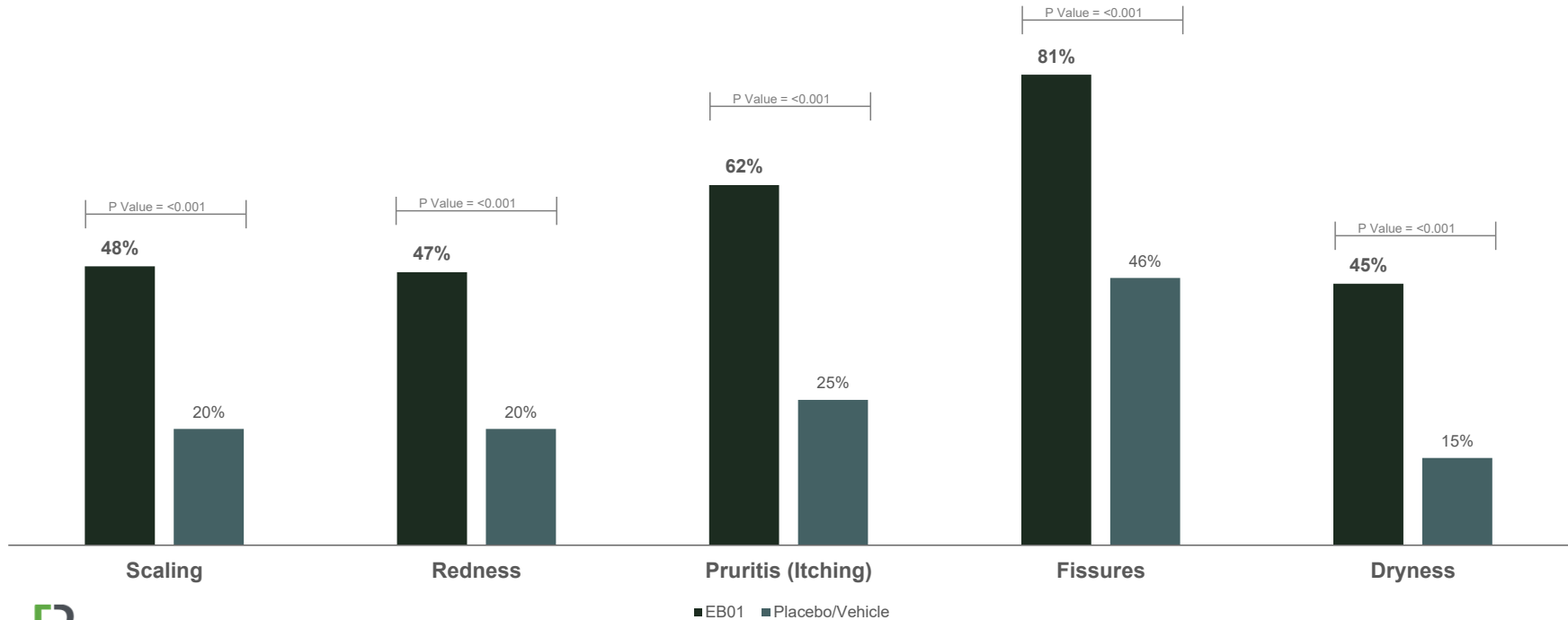
- **Efficacy:** At Day 21, EB01 Cream 2% treated hands had a significantly lower Contact Dermatitis Severity Index (CDSI) score compared to Vehicle ($p < 0.001$)
- **Durability:** At Day 42, EB01 Cream 2% treated hands maintained a significantly lower total CDSI score compared to Vehicle ($p = 0.003$)
- **Safety:** no serious adverse events or discontinuations due to adverse events

Phase 2 Efficacy Study – Breakdown by Component

EB01 Addressed All Aspects of CDSI Composite Score



Percent Reduction in Symptoms from Baseline to Day 21*

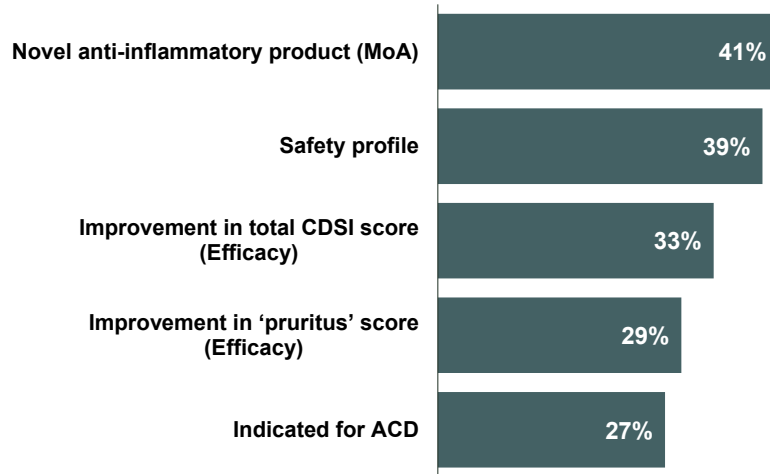


EB01 Market Survey

Physicians Most Impressed with Non-Steroidal Method of Action



Physician-Perceived Strengths of EB01

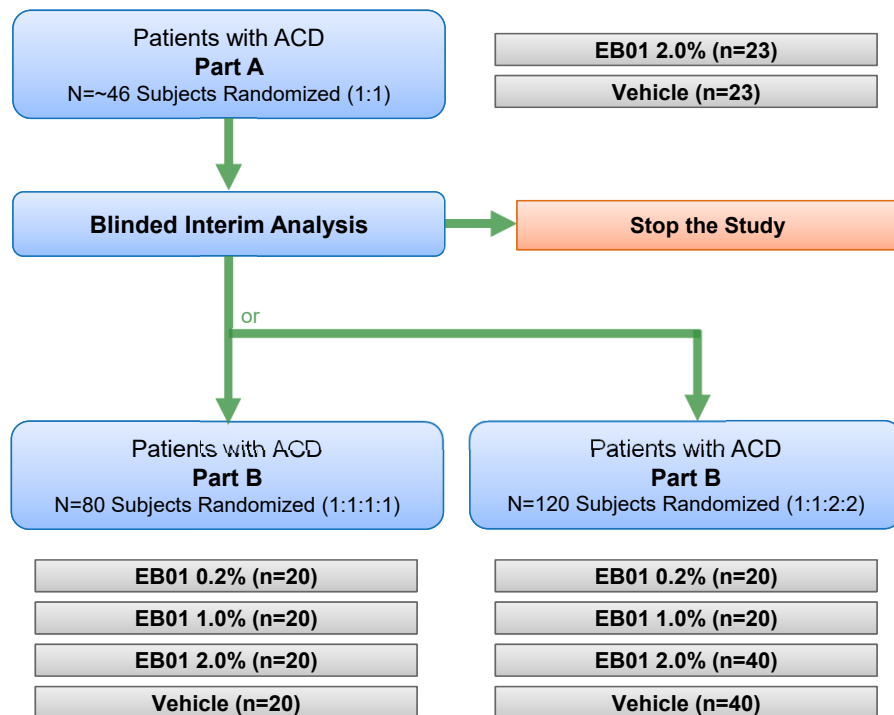


% of Physicians Indicating Attribute as "Top 3" Strength

- **Key opinion leaders expressed a high desire for additional treatment options for ACD**
 - Especially for lesions are located on face and hands
- **Saw benefit to the level of efficacy achieved without the side-effects of current options**
 - Many patients are not adequately controlled with existing therapies
- **Respondents indicated non-steroidal approach would positively impact their expected peak patient share**

EB01 Phase 2b Study Plan

Adaptive Design up to 166 Patients



Primary Efficacy Endpoint

Mean Percent Change from Baseline in Contact Dermatitis Severity Index (CDSI) at Day 29

Protocol

- EB01 evaluated a randomized, double-blind, vehicle-controlled, sample size adaptive design.
- ACD patients in this study will be treated for 28 days with various strengths of EB01 cream.
- Interim analysis following the enrollment of the first cohort

Primary Endpoints

- Primary outcome measures will evaluate efficacy and safety

Secondary Endpoints

- Symptom reduction and quality of life
- Dose-relationships among various strengths of EB01 cream
- Number of TEAEs

Hemorrhoids Disease (HD)

Extension of sPLA2 Anti-Inflammatory Tech



- **12.5 million adults affected in U.S.**¹
 - By 50 years old, ~50% have experienced symptomatic hemorrhoids
- **Risk factors**
 - Aging, obesity, pregnancy & lifestyle
- **Drug treatments for HD entered market pre-1962**
 - 4 million physician visits
 - 20+ million over-the-counter units – limited empirical evidence of efficacy
 - General mechanisms of action: steroids & analgesics

Treatments of Internal Hemorrhoids²
Based on their Severity and Degree of Prolapse

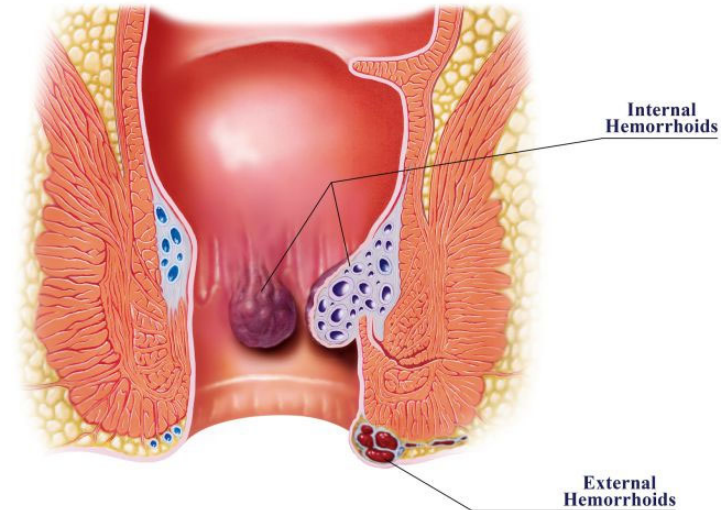
Grade 1	Grade 2	Grade 3	Grade 4	Complicated
Dietary and Lifestyle Modification e.g., High-Fiber Diet, Hydration, Exercise				
Medication e.g., Steroids, Analgesics, Venotonics				
Office-Based Procedures e.g., Banding, Sclerotherapy				
Surgery e.g., Hemorrhoidectomy, Stapled Hemorrhoidopexy				

EB02 Program

Targeting clinical relief of itching, pain and thrombosis of HD



- **Multifactorial etiology of HD**
 - Inflammation involving the vascular wall and surrounding connective tissue
 - Hyper-perfusion of hemorrhoid plexus
 - Prolapse
- **Hemorrhoidal tissue contains**
 - Inflammatory cells and
 - Newly formed microvessels
- **Inflammatory reaction is associated with key symptoms**
 - Mucosal ulceration
 - Ischemia
 - Thrombosis

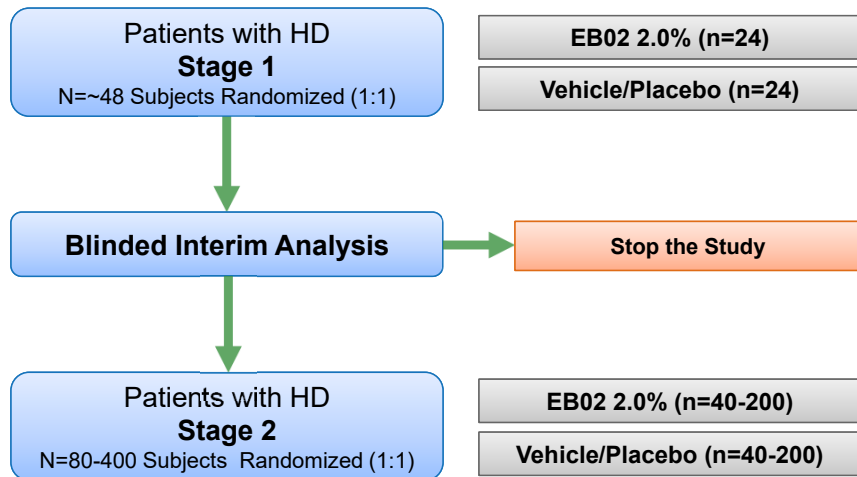


sPLA2 has been demonstrated to mediate processes that characterize hemorrhoidal pathophysiology, including inflammation and micro-vascularization

EB02 Proof of Concept Phase 2a Study Plan



Efficacy of EB02 Cream in Subjects with Grade I, II or III Internal Hemorrhoids



Protocol

- EB02 will be evaluated in a randomized, double-blind, vehicle-controlled, two stage design.
- Patients will be treated for 14 days and a 7-day follow-up exam.
- Patients will be assessed at baseline, 2, 7, 14 and 21 days after initiation of treatment.

Primary Endpoints

- Primary outcome measures will evaluate efficacy, symptom reduction

Secondary Endpoints

- Safety and tolerability

Stage 2

- Total sample size based on interim analysis

Cash Position

Historical Overview and Future Outlook



● Balance sheet

- Working capital focused on clinical programs
- No long-term debt

● Flexibility

- Use of CROs and CMOs
- Adaptive study design
- Timing of clinical opex aligned with study advancements

Selected Financials	
As of September 30, 2020	
Cash & Cash Equiv.*	\$ 7.2 M
Total Assets	\$ 10.8 M
Working Capital	\$ 6.6 M
Debt	\$ 0.0 M

* Does not include cash proceeds of ~\$2 million from warrant exercises and equity issuances as of December 2, 2020

Capitalization Table

As of December 2, 2020



Description	Weighted Average Exercise Price	Common Shares and Common Share Equivalents
Common Shares		10,523,087
A-1 Convertible Preferred Shares	\$2.26	619,469
Options Outstanding ¹	\$4.76	1,105,199
Warrants	\$5.19	749,352
Fully Diluted Shares		12,997,107

¹ 2019 Equity Incentive Compensation Plan

Current Holders of Common Shares

Simplified Beneficial Ownership Table as of December 2020



Holders	Shares	Percent Shares Outstanding	Share Options	Warrant Shares	Percent Fully Diluted
Directors and Officers					
Par Nijhawan	3,261,785	31.0%	109,110	6,942	26.9%
Lorin Johnson	12,786	0.1%	31,389	6,393	0.4%
Sean MacDonald	14,369	0.1%	31,389		0.4%
Frank Oakes	7,992	0.1%	32,341	914	0.3%
Paul Pay	3,654	-	63,788	1,827	0.6%
Carlo Sistilli	3,654	-	31,389	1,827	0.3%
Peter van der Velden	2,072,882*	19.7%	31,389	105,470	17.6%
Michael Brooks	5,241	-	281,323	1,371	2.3%
Kathi Niffenegger	1,827	-	140,674	914	1.1%
All directors and officers	5,384,190	51.2%	752,792	125,658	49.8%

Early Series Financing
from Life Science
Specialists



Experienced Leadership Team

Pharmaceutical Pipelines, Corporate Development & Strategic Transactions



Senior Management Team

Par Nijhawan, MD, FRCPC, AGAF CEO and Board Director	<ul style="list-style-type: none">• Board-certified gastroenterologist and hepatologist• Successful track record of building life science businesses, including Medical Futures (sold to Tribute Pharma)
Michael Brooks, PhD, MBA President	<ul style="list-style-type: none">• Experienced pharma corporate development• Led multiple engagements and technology acquisitions• Previously at Cipher Pharma.• Science to Business Scholar at Univ. of Toronto
Kathi Niffenegger, CPA Chief Financial Officer	<ul style="list-style-type: none">• 30+ years in acct. & finance, including pharma• Previously partner at Glenn Burdette CPAs and CFO at Stellar Biotechnologies and Martin Aviation.
Blair Gordon, PhD VP, Research & Development	<ul style="list-style-type: none">• Leads mgmt. of Edesa clinical studies• Previously med affairs and bus. dev. at Cipher Pharma and ArcticDX.• Univ. of Toronto Alexander Graham Bell Fellow
Gary Koppenjan VP, Investor Relations & Comm	<ul style="list-style-type: none">• 25 years of experience in marketing and business development in the life sciences• Multiple private & public financings and merger transactions

Edesa Board of Directors

Sean MacDonald

Chief Executive, Corbin Therapeutics Inc.

Lorin Johnson, PhD

CSO, Glycyx; co-founded Salix Pharma

Peter van der Velden

Managing General Partner, Lumira Ventures

Paul William Pay

Chief Business Development Officer, Norgine

Frank Oakes

Former CEO, Stellar Biotechnologies

Carlo Sistilli

CFO, Arista Homes

Upcoming Milestones and Strategic Objectives



- Strategic transaction and capitalization**
 - Reverse acquisition**
 - Nasdaq listing**
 - Capital raise Jan 2020**
- Advance dermatitis study**
 - IND approval of EB01**
 - FDA “Safe to Proceed” letter**
 - Complete manufacturing of API**
 - Initiate patient enrollment**
 - Interim results**
 - Top-line results from Phase 2b study**
- Phase 2/3 COVID-19 study**
 - CTA approval**
 - IND approval of EB05**
 - Drug product manufactured**
 - Initiate patient enrollment of EB05**
 - Phase 2 readout of EB05**
- Expand indications for lead asset**
 - EB02 study approval – CTA**
 - EB02 proof of concept study initiation**
- Develop new markets**
 - Vitiligo project initiation**
 - In-licensing new assets and technology**
 - Strategic partnerships**



Company Contacts

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Investor Relations

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