



PRESENTATION

- Private biotech company in San Francisco developing first/best-in-class pharmaceutical assets.
- Founded and managed by proven industry executives. Track record of delivering multi-B \$ exits.
- Novartis, Astellas, Pfizer/Pharmacia, IVAX, Pharmacyclics

MISSION

- Accelerating Wound/Tissue Healing
- Preventing Scarring & Long COVID

PROPRIETARY TECHNOLOGY

CELLEXA™ platform: Encoded gene vector enabling endogenous (“in the human body”) production of a multipotent peptide (ensereptide or long half-life analogues thereof).

TARGET INDICATIONS

VIRLEXA™ - Gene vector inhaled once. + one intramuscular injection

Prevention of lung scarring safer

- Respiratory infections (COVID-19, RSV)
- Prevention of hospitalization, death and Long COVID after positive COVID test

SCARLEXA™ – Gene vector injection into or under the skin (intramuscular)

Prevention of scarring after:

- surgery
- Burns (skin cell suspension)

UNMET NEEDS

- Long COVID in more than 10-20 percent of COVID patients – no effective treatment
- There are no pharmaceutical drug products available on the market to prevent adhesions and scars
- Globally epidemic increase of burn injuries

DEVELOPMENT TIMELINE

Preclin./Manufacturing/IND: 12+ mos. Clinical Phase 1-2, and 3: 24-36+ mos.

FUNDING: Seeking Seed Funding \$ 5M to manufacture drug for government funded clinical studies in US and Sweden

Followed Later by

Series A +B+C (\$M)

- VIRLEXA: 9+9+9
Prevent Long COVID
- SCARLEXA: 18+18+18
Prevent scarring.
After surgery / burns

MARKET POTENTIAL

- Long Covid 500 M – 9 B year 5
- Post-operative scarring multibillion dollar market

CONTACT

201 Spear St, Suite 1100 San Francisco, CA94105 Phone 1-510-499-6376

www. Cellastra.com

Karl.Mettinger@cellastra.com

January 30, 2023: VIRLEXA™

GENE VECTOR FOR PREVENTION OF LONG COVID - Venture Opportunity – “The \$3.5 T Challenge”

RECENT NEWS

Cellastra announces update on Pipeline, Promotions and development Plans.

- Shareholders Meeting voted in favor of increasing maximum allowed shares from 10 million to 100 Million.
- Two industry veterans promoted to Executive Vice Presidents
- Announces the CELLEXA™ Platform with a library of encoded gene vectors including Virlexa™ and Scarlexa™

MARKET INTRODUCTION

- Globally: As of January 30 2023 there are 753 million cases of COVID-19 and 6.8 million have died (WHO). An est. 100-150 million have developed Long COVID
- US: There are 100 million cases of COVID-19 and 1.2 million have died. An est. 15-18 million have developed Long COVID.
- **Projections Globally 2023-2033: 25-50 million new cases of Long COVID annually**
An estimated 450 million new COVID cases annually (based on statistics for 2022)
It is projected that COVID will remain a continued public health concern enquiring annual vaccinations just like influenza. Omicron variants are reported to be less severe but more contagious and thus have a higher incidence than previous variants but a 50 percent lower incidence of Long COVID.

RATIONALE FOR VIRLEXA: There is cumulative evidence suggesting that Long COVID is caused by long term perturbations of the immune and blood coagulation systems caused by the initial viral assault and by subsequent tissue damage in micro vessels by micro thrombi. Antivirals are currently being tested although COVID tests are most often negative after the acute phase.

BENEFITS: VIRLEXA™: One inhalation combined with one intramuscular injection administered in newly diagnosed COVID patients may help by: **1. Reducing inflammation, 2. Increasing fibrinolysis counter acting fibrin deposition, 3. Antimicrobial effect preventing secondary infections, 4 Preventing scarring /fibrosis.**

Virlexa treatment may be relevant even for new variants as the effects a redirected to mechanisms of action rather than the virus. This novel treatment modality and may also be useful in coinciding viral infections such RSV and influenza and can likely be safely combined with standard treatment regimens.

DEVELOPMENT TO DATE / COLLABORATORS

- Gene vector covered by patent licensed from Guelph University and Cellastra patent filing covering broad range of vectors and proprietary peptides
- A complete “turn-key” development package including exclusive rights to patents, development rights and marketing in North America or Worldwide OR Joint Venture with option for buy-out

EXECUTIVE TEAM

- **Karl Mettinger, MD, PhD, President & CEO**, 35+ yrs., incl. Karolinska Institute, Kabi/Pharmacia, IVAX, Supergen, Oncolytics, Pharmacyclics, Three Multi \$B Exits. Founding President Swedish Stroke Society with 10,000 members
- **Vinod Kumar, MD, CMO, EVP**, 30 years exp from U. Illinois, U Miami, Lilly, and Novartis (section Head/Global Program Medical Director)
- **Henrik (Hank) Kulmala, PhD, EVP Product Development /Regulatory**, 35+ years prev. exp incl Marion Merrell Dow, Fujisawa, Genix, 75 drugs (INDs,NDAs, BLAs)
- **Brad Thompson, PhD, Chair, CTO**, 35+ years, incl BIOTECanada, CEO Oncolytics, Avomed, Kickshaw Ventures, Inventor of several gene therapy patents
- **Sven Andreasson, Vice-Chair**, 35+ yrs, Kabi, Pharmacia (Acquired by Pfizer for \$60B), NovaVax
- **Daniel Quintero, Esq, General Counsel, Secretary**, 20+ years, incl Founding Partner Prometheus Partners LLP, Sony Optiarch / Electronics
- **Bruce Phillips, CPA, CFO**, 30+years exp incl Arthur Young, HPC, Xero, Aprio
- **Kent Persson, PhD, Cofounder**, 20+ years, incl UCSF, Bio-Rad, Octapharma

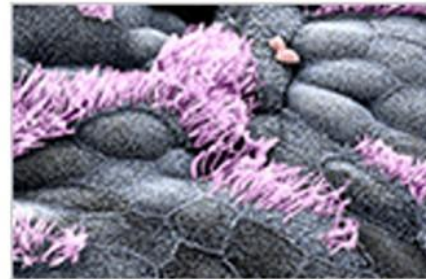
SCIENTIFIC ADVISORY BOARD

- **Christopher H Evans, PhD, Professor, Mayo Clinic**, Director Rehabilitation Medicine Research Center, Prev prof. Harvard, > 300 publications, recent review of new treatment modalities for tendon injuries.
- **Folke Sjoberg, MD, PhD**, Professor, Director of the Burns Intensive Care Unit (National). Linköping University Hospital, Sweden, President Elect of the International Society of Burn Injuries
- **Magda Forsberg, PhD**, Karolinska Institute, CEO Device company DVL-Op

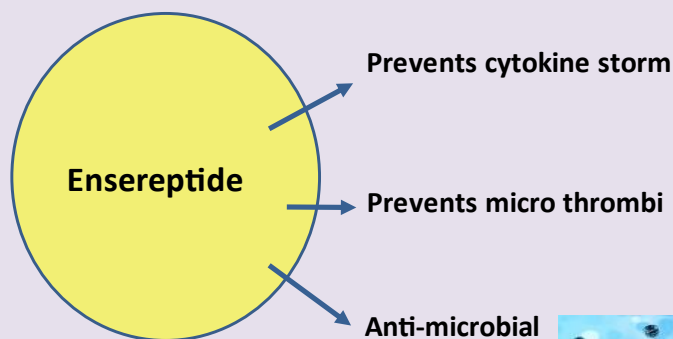
Turning the Lungs Into Temporary Bioreactors

- Total lung epithelial surface area
- = 100 sqm (as a small raquet ball court)
- One inhalation enables expression of peptides for the 30 day life cycle of the lung epithelial cells
- Vector may bind to the ACE-2 receptors for COVID and block further infection

+One intramuscular Injection may express systemic levels of peptide for many months



Enseptide Anti-COVID-19 Mechanisms



Enseptide = PXL01

Nilsson E et al, Ann Surg . 2009,250(6):1021-8.

