THE NEED

Platelet derived growth factor receptor alpha

TRAUMATIC BRAIN INJURY

TRIGGERS PDGFα SIGNAL SYSTEM

FLUID RETENTION & BRAIN SWELLING

INCREASED ICP

INCREASED ICP

BRAIN DAMAGE OR DEATH

THE TECHNOLOGY

FDA approved drug: inflammatory therapy

IMATINIB

BLOCKS PDGFα SIGNAL

REDUCES BRAIN SWELLING

Imatinib drug therapy preserves the blood-brain barrier to reduce fluid retention and brain swelling in TBI patients

COMPETITIVE ADVANTAGE

FAST TRACK
Utilizing FDA approved drugs with well-established safety profiles that block PDGFα signals could rapidly transition into a clinical trial.

PROVEN DATA
The team’s preliminary data has shown that Imatinib treatment reduces brain fluid retention and improves outcomes after TBI in animal models.

NOVEL TBI THERAPY
There are currently no effective therapies for TBI patients. Imatinib could be a new therapy for TBI.

MINIMALLY INVASIVE ICP TREATMENT
Imatinib is administered orally, making it a minimally invasive method of reducing intracranial pressure.

COMMERCIALIZATION ROADMAP

INVESTIGATIONAL NEW DRUG (IND)
regulatory pathway

LICENSE TECHNOLOGY/ THERAPY

POTENTIAL PARTNERS
Drug Companies

PROJECT MILESTONES

Test Imatinib in animal model

Determine Imatinib dosage

Publish Imatinib data

Test PDGFα inhibitors Nilotinib & Dasatinib

Compare Imatinib results to Nilotinib & Dasatinib results

File IND application with FDA