

KROUZON PHARMACEUTICALS, INC.

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Industry: Pharma, Orphan, Ultra-rare

Management:

Jacob Eswarakumar, Ph.D.
Founder & President

Vijay Shastri
Business & Operations

Board:

Jacob Eswarakumar, Ph.D.
Amanda Hayward, Ph.D. [TBA]*
Ingmar Hoerr, Ph.D [TBA]*

Scientific Advisory Board:

Derek Steinbacher, MD, DMD
Chair of Clinical Advisory Board [TBA]*

Current Investors:

Connecticut Innovations and Angel
Investors >\$1M

Seeking:

\$3M for IND Enabling Studies for the
lead **KRZ102** small molecule inhibitor

Legal:

Founded in August 2016 as a
Connecticut Limited Liability Company.
Converted in December 2017 as a
Delaware C-Corporation

IP:

OCTAHYDROCYCLOPENTA[C]PYRROLE
ALLOSTERIC INHIBITORS OF SHP2

Applicant: Krouzon Pharmaceuticals

Priority Date: September 11, 2017

US Application # 16/127,772

PCT Application # US2018/050397

Taiwan Application # 107131932

**To Be Appointed*

Executive Summary:

The goal of Krouzon Pharmaceuticals is to develop targeted therapy for craniosynostosis syndromes caused by activating dominant FGFR germline mutations. These are orphan and ultra-rare pediatric skull disorders. Craniosynostosis syndromes including Crouzon, Pfeiffer, and Apert syndromes cause premature fusion of skull bones before the completion of brain growth resulting in abnormal skull and face, protruding eyeballs, visual impairment, deafness, respiratory distress, increased intracranial pressure, and mental retardation. If left untreated, craniosynostosis can cause chronic headaches, developmental delay, and neurological disorders including blindness. Current treatment requires complex invasive multiple surgeries throughout childhood until the age of 14 to remodel the skull and allow the brain to grow. The current cost for surgeries and post-operative care is about \$1M per patient.

Market Opportunity / Unmet Need:

FGFR related craniosynostosis syndrome occurs to 1 in 15000 newborns. Treatment is also focused on administering the drug to existing patients to limit the surgeries still required. Providing treatment to new and existing patients will result in about 2000 patients per year.

Products/Services – Launched & Pipeline:

KRZ102: A lead small molecule inhibitor selected for Preclinical Trials

KRZ105: Backup to the lead molecule

KRZ119: Auxiliary to the backup molecule

Commercial / Technical Milestones:

- 2003:** Created the 1st Animal Model for Crouzon and Pfeiffer Syndromes.
International Patent Publication Number # **WO 03/076467 A1**
- 2005:** Discovered novel therapeutic targets to treat Craniosynostosis.
International Patent Publication Number # **WO 2005/115363 A2**
- 2019:** Designed and Synthesized small molecule inhibitors for the target.
International Patent Publication Number # **WO 2019/051469 A1**

Competition:

Currently, there is no pharmacological treatment available for treating these diseases.

Market Size (Unaudited):

Global market size is ~\$400 million (~2000 patients/year*\$200k treatment cost/per patient).