

INVENTORS

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Molecular and
Cellular Biology



Publications
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In-vivo experiments in
the mouse model after
heart attack



Seeking commercial
partner through product
development and to
clinic



2 pending US patents
and several filings in
progress



SCAN ME

Novel small molecule activator promotes cardiac protection and repair

Potent, selective, small molecule activator of steroid receptor co-activators (SRC) as potential therapeutics for preservation, healing, and restoration of cardiac tissue after a heart attack

INDICATIONS: Heart failure

COMPETITIVE ADVANTAGES

Our **proprietary MCB-613** compound is **simpler** to manufacture and shown improved outcomes post heart attack in mouse models

- **Low toxicity** in mouse cells and whole animal
- Compound **ideally suited** for oral administration
- **Encourages tissue regeneration** through microvasculature growth

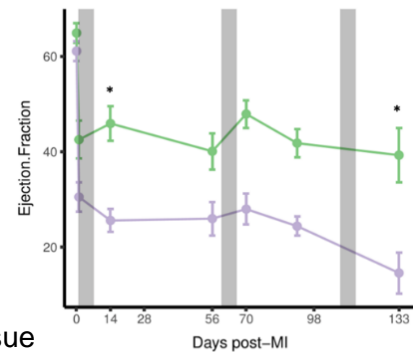


Size reduction in heart enlargement for mice treated with MCB-613 versus the control group

VALUE PROPOSITIONS

Protects and promotes healing in damaged cardiac tissue post heart attack

- **Improved heart function** in mice after heart attack and treatment with MCB-613
- **Increases** cardioprotective metabolites
- **Increases** white blood cell production
- **Decreases** enlarged heart weight and size
- **Stimulates** regenerative activities in heart tissue
- **Prevents** enlarged heart, tissue damage, thickening of the heart muscle, and collagen deposition in heart tissue **up to 10 weeks after heart attack**



INDUSTRY APPETITE

There is a smaller investment appetite with a bigger payload for pharma companies in heart failure therapies with two major acquisition from 2019 to 2020 **totaling to \$22 billion.**

- SRC offers novel **pathway for co-activators** like MCB-613
- Heart failure market has value of \$4.2 billion
- **10 possible** treatment options for prescribers to choose in chronic and acute heart failure with several being small molecule technologies
- Players in the space Novartis, AstraZeneca, Bayer, Servier, Merck, Jardiance
- Current drugs in development in **similar but not overlapping** pathway regulation
- October 2020: Bristol-Myers Squibb Acquires MyoKardia for **\$13.1 billion** for cardiovascular drug portfolio under Phase III

MARKET ANALYSIS

Current treatment options for heart failure are surgery, vasodilators, water pills, heart transplant, or implantable devices. There is a **scarcity of assets** in the market and large unmet need.

\$22.1 Billion

Market estimates for **heart disease market** by 2028

\$219 Billion

Heart disease **cost the US** from healthcare services, medicines, and loss of productivity

655,000

People die from **heart disease** in United States per year and is the number one killer