



THE UNIVERSITY of TEXAS

HEALTH SCIENCE CENTER AT HOUSTON

Office of Technology Management

**A SMALL MOLECULE USEFUL IN PROTECTING CARDIAC MYOCYTE
PROGENITORS FROM CYTOTOXICITY**

Market: About one million Americans die of heart disease each year, and it was estimated that over 13 million US citizens have cardiovascular disease. Regenerative medicine is used to repair or replace damaged tissues and organs, such as the heart. The broad indications place a tremendous demand, and therefore a tremendous market on regenerative medicine. Worldwide stem cell therapies, cytokine therapies, and growth factor therapies will likely reach nearly \$21 billion by 2010. The current world market for replacement organs alone is in excess of \$350 billion, with the worldwide market for all regenerative medicine expected to reach \$500 billion by 2010.

Competitors and Current Problems: Surgeries and drug interventions used to address heart muscle damaged by heart disease is not only expensive, but often not curative. In critical situations where heart transplant is needed, the wait list is long with donors in short supply. The best of all possibilities is for the damaged heart to actually heal. However, transplanted stemcells are often met with a hostile environment fraught with the chemical products of damage and inflammation that reduce integration efficiencies of the transplanted cells.

The Technology: Scientists at the University of Texas Health Science Center at Houston discovered a small molecule that is capable of reducing the byproducts of inflammation, protecting transplanted stemcells from cytotoxicity in infarcted or ischemic hearts.

NON-CONFIDENTIAL TECHNOLOGY DESCRIPTION

The preceding is intended to be a non-confidential summary of a novel technology created at the University of Texas Health Science center at Houston (UTHSCH), for which the University has obtained patent protection.

UTHSCH Ref. No. 2004-0027

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Patent Status: Pending

License Available: world-wide; exclusive or non-exclusive

To obtain further information about this technology, please contact:
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