



UNIVERSITY of NORTH TEXAS HEALTH SCIENCE CENTER

Technology Transfer & Commercialization

Target for Cardiovascular Drug Discovery

Learn more!

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Publications

Pending

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Discovery

- Ryanodine receptors can be controlled by steroid hormone receptors and this mechanism represents a novel target for drug discovery.

Features

- Uses direct modulation of intracellular ryanodine receptor channel's ability of passing ionic currents through the endoplasmic reticulum
- Can be targeted on a cell-specific basis

Benefits

- Indicated in conditions where natural estrogen production by the organism is reduced, or alternatively, when systemic administration of chronic estrogen doses might produce harmful side effects
- New approach reduces feminizing effects of high doses of estrogen, making treatment preferable for both men and women
- Useful for protecting heart or vascular ischemic tissue against necrosis
- Prevents hypertrophic transformation of the myocardium or vascular smooth muscle tissue produced by unfavorable conditions such as hypertension, adrenergic hyperstimulation, etc.

Opportunities

- Cardiovascular disease is one of the leading causes of death in the U.S and worldwide. Drug development efforts in this area of research are underway at almost every pharmaceutical company.
- Provides rationale and testable molecular mechanism for the development of small molecule drugs.
- Enables development of gene therapy approaches to cardiovascular disease.

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