

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Cardiac hypertrophy; heart failure	Calcium calmodulin-dependent kinase II δ (CAMK2D); ryanodine receptor 2 (RyR2)	<p>Studies in mice suggest that targeting CAMK2D could help prevent heart failure resulting from cardiac hypertrophy. In CAMK2D knockout and wild-type mice with cardiac hypertrophy, 12% of the knockout mice died of heart failure compared with 34% of the normal mice. Levels of activated RyR2, a phosphorylation substrate of CAMK2D linked to heart failure, were lower in myocytes from hypertrophic CAMK2D knockout mice than they were in myocytes from wild-type controls. Ongoing work is seeking to elucidate the role of CAMK2D in heart failure and examine its role in ischemic injury.</p> <p>Arca biopharma Inc.'s nonselective β-blocker Gencaro bucindolol is in registration to treat heart failure. Cytokinetics Inc.'s cardiac myosin activator CK-1827452 has completed Phase IIa testing to treat heart failure.</p> <p>NitroMed Inc.'s BiDil XR, an extended-release formulation of hydralazine and isosorbide, is in a pivotal trial to treat heart failure in African-American patients.</p> <p>SciBX 2(17); doi:10.1038/scibx.2009.704 Published online April 30, 2009</p>	Patent and licensing status undisclosed	<p>Ling, H. <i>et al. J. Clin. Invest.</i>; published online April 20, 2009; doi:10.1172/JCI38022</p> <p>Contact: Joan Heller Brown, University of California, San Diego, La Jolla, Calif. e-mail: jhbrown@ucsd.edu</p>