This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Heart failure	ATPase Ca^{++} transporting cardiac muscle slow twitch 2 (ATP2A2; SERCA2A); SMT3 suppressor of mif two 3 homolog 1 (SUMO1)	Studies in mice and in patient samples suggest upregulating cardiac SUMO1 could help treat heart failure. In heart failure patient samples, levels of SUMO1 and SUMOylation levels of SERCA2A, a transporter implicated in heart failure, were lower in failing hearts than normal hearts. In a mouse model of heart failure, animals overexpressing SUMO1 had greater heart function and longer survival than wild-type mice. Next steps include testing the effects of *SUMO1* gene therapy in pig models of heart failure and screening for compounds that increase SUMOylation of SERCA2A. *SciBX* 4(37); doi:10.1038/scibx.2011.1040 Published online Sept. 22, 2011	Patent application filed; available for licensing from Mount Sinai School of Medicine **Contact:** William Chiang, Mount Sinai School of Medicine, New York, N.Y. e-mail: william.chiang@exchange.mssm.edu	Kho, C. *et al. Nature*; published online Sept. 7, 2011; doi:10.1038/nature10407 **Contact:** Roger J. Hajjar, Mount Sinai School of Medicine, New York, N.Y. e-mail: roger.hajjar@mssm.edu