This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Heart failure	<i>S100 calcium binding protein A1 (S100A1)</i>	<p>Pig studies suggest <i>S100A1</i> gene therapy could help treat heart failure. In a pig model of myocardial infarction (MI)-induced heart failure, cardiac injection of an adeno-associated virus serotype 9 (AAV9) vector expressing <i>S100A1</i> normalized heart rate, and increased left ventricular performance and decreased ventricular hypertrophy compared with injection of an inactive control vector. Ongoing work includes IND-enabling studies of the AAV9-<i>S100A1</i> gene therapy.</p> <p>Mydicar (AAV1/SERCA2A), a recombinant AAV vector bearing the <i>ATPase Ca⁺⁺ transporting cardiac muscle slow twitch 2 (ATP2A2; SERCA2A)</i> gene from Celladon Corp., is in Phase I/II testing to treat heart failure and congestive heart failure (CHF).</p> <p>SciBX 4(29); doi:10.1038/scibx.2011.827 Published online July 28, 2011</p>	Patented by Patrick Most, Hugo Katus, and Andrew Remppis; unavailable for licensing	<p>Pleger, S.T. <i>et al. Sci. Transl. Med.</i>; published online July 20, 2011; doi:10.1126/scitranslmed.3002097</p> <p>Contact: Patrick Most, University of Heidelberg, Heidelberg, Germany e-mail: patrick.most@med.uni-heidelberg.de</p> <p>Contact: Oliver J. Müller, same affiliation as above e-mail: oliver.mueller@med.uni-heidelberg.de</p>