

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Fibrillation; tachycardia	Paired-like homeodomain transcription factor 2 (PITX2); short stature homeobox 2 (SHOX2)	Studies in mice and <i>in vitro</i> suggest that PITX2 agonists or SHOX2 inhibitors could help treat or prevent atrial fibrillation (AF) and tachycardia. In mice, <i>Pitx2</i> -knockout animals were more susceptible to AF, tachycardia and atrial flutter than wild-type controls. <i>In vitro</i> studies indicated that Pitx2 directly bound Shox2 and regulated its expression, suggesting the interaction plays a role in regulating heart rate. Ongoing work includes genomewide association studies to identify additional PITX2-regulated genes that may be involved in AF and tachycardia.	Unpatented; available for licensing	Wang, J. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online May 10, 2010; doi:10.1073/pnas.0912585107 Contact: James F. Martin, Texas A&M Health Science Center, Houston, Texas e-mail: jmartin@ibt.tamhsc.edu
		SciBX 3(21); doi:10.1038/scibx.2010.644 Published online May 27, 2010		