This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Hypertension; atherosclerosis	Nitric oxide (NO); endothelial cell nitric oxide synthase 3 (NOS3; eNOS)	<i>In vitro</i> studies suggest that analogs of the natural product xyloketal B could help treat hypertension and atherosclerosis. Several xyloketal B analogs induced vasorelaxation in <i>ex vivo</i> rat aortas at low micromolar concentrations and without cytotoxicity compared with the parent compound. In a human endothelial cell line, the analogs also activated NOS3 and stimulated production of the vasorelaxing agent NO. The molecules also protected the cells from oxidated low-density lipoprotein (LDL)-induced damage. Ongoing work includes lead optimization and testing the safety of the compounds <i>in vivo</i> . Northern Therapeutics Inc.'s autologous cell-based NOS3 gene-transfer therapy is in Phase I testing to treat pulmonary arterial hypertension (PAH).	Patent application filed by Sun Yat-Sen University; available for licensing	Xu, Z. <i>et al. J. Med. Chem.</i> ; published online May 19, 2010; doi:10.1021/jm1001502 Contact: Jiyan Pang, Sun Yat-Sen University, Guangzhou, China e-mail: cespiy@mail.sysu.edu.cn Contact: Yongcheng Lin, same affiliation as above e-mail: ceslyc@mail.sysu.edu.cn
		SciBX 3(22); doi:10.1038/scibx.2010.670 Published online June 3, 2010		