This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Pulmonary disease				
Idiopathic pulmonary fibrosis (IPF)	NADPH oxidase 4 (NOX4); transforming growth factor- β 1 (TGFB1); actin- α 1 skeletal muscle (ACTA1)	<p>Studies in cell culture and in mice suggest that inhibiting NOX4 could help treat IPF. In human IPF lung tissue, compared with normal tissue, NOX4 was highly expressed. In mouse models of lung injury and lung fibrosis, Nox4 small interfering RNA or a NOX4 inhibitor reduced fibrosis compared with that in controls. Next steps include ongoing efforts to identify new NOX4 inhibitors.</p> <p>Actelion Ltd.'s dual endothelin receptor antagonist, Tracleer bosentan, is in Phase III testing to treat IPF. Gilead Sciences Inc.'s selective endothelin A receptor antagonist, Letairis ambrisentan, is in Phase III testing to treat IPF. Pfizer Inc.'s phosphodiesterase-5 (PDE-5) inhibitor, Revatio sildenafil, is in Phase III testing to treat IPF.</p> <p>SciBX 2(33); doi:10.1038/scibx.2009.1286 Published online Aug. 27, 2009</p>	Patented by the University of Michigan; available for licensing	<p>Hecker, L. <i>et al. Nat. Med.</i>; published online Aug. 23, 2009; doi:10.1038/nm.2005</p> <p>Contact: Victor Thannickal, University of Alabama at Birmingham, Birmingham, Ala. e-mail: vjthan@uab.edu</p>