

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Pulmonary disease</b>				
Emphysema	Sirtuin 1 (SIRT1)	<p>Mouse studies suggest activating SIRT1 could help treat emphysema. In mice, <i>Sirt1</i> knockout in airway epithelium decreased lung function and tolerance to exercise compared with normal <i>Sirt1</i> expression. In mice exposed to cigarette smoke or elastase, <i>Sirt1</i> overexpression or treatment with the SIRT1 activator SRT1720 decreased emphysema symptoms compared with normal <i>Sirt1</i> expression or vehicle, respectively. Next steps include IND-enabling preclinical studies. GlaxoSmithKline plc's Sirtris Pharmaceuticals Inc. subsidiary has SIRT1 activators, including SRT1720, in clinical and preclinical testing for various conditions.</p> <p>Elixir Pharmaceuticals Inc. has a SIRT1 activator in preclinical testing to treat obesity and diabetes.</p> <p><b>SciBX 5(20); doi:10.1038/scibx.2012.531</b>  <b>Published online May 17, 2012</b></p>	Patent applications filed; available for licensing	<p>Yao, H. <i>et al. J. Clin. Invest.</i>; published online May 1, 2012;            doi:10.1172/JCI60132  <b>Contact:</b> Irfan Rahman, University of Rochester Medical Center, Rochester, N.Y.            e-mail:  <a href="mailto:irfan_rahman@urmc.rochester.edu">irfan_rahman@urmc.rochester.edu</a></p>