This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Tuberculosis	Tryptophan synthesis	<p><i>In vitro</i> and mouse studies suggest inhibiting bacterial tryptophan synthesis could help treat tuberculosis. A screen in mice for bacterial genes required for <i>Mycobacterium tuberculosis</i> survival showed that tryptophan biosynthesis was necessary to counteract tryptophan starvation induced by CD4⁺ T cells. In cocultures of <i>M. tuberculosis</i> and macrophages, a small molecule inhibitor of tryptophan biosynthesis decreased bacterial growth compared with no treatment. This effect was counteracted by addition of exogenous tryptophan. In <i>M. tuberculosis</i>-infected mice, the inhibitor also decreased bacterial burden in the lungs and spleens. Next steps could include testing the approach in additional tuberculosis models.</p> <p>SciBX 7(2); doi:10.1038/scibx.2014.61 Published online Jan. 16, 2014</p>	Patent and licensing status unavailable	<p>Zhang, Y.J. <i>et al. Cell</i>; published online Dec. 5, 2013; doi:10.1016/j.cell.2013.10.045 Contact: Eric J. Rubin, Harvard School of Public Health, Boston, Mass. e-mail: erubin@hsph.harvard.edu</p>