This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Pulmonary disease				
Pulmonary fibrosis	Toll-like receptor 9 (TLR9)	<p><i>In vitro</i> and mouse studies suggest that levels of TLR9 could help predict severity of idiopathic pulmonary fibrosis (IPF) and that antagonizing the receptor could help treat rapidly progressing forms of the disease. In cultured lung fibroblasts from patients with rapidly progressing IPF, levels of TLR9 were higher than those in fibroblasts from slowly progressing patients and healthy controls. In immunodeficient mice, injection of human lung fibroblasts from rapidly progressing patients led to greater fibrosis than injection of fibroblasts from slowly progressing patients or healthy controls. Next steps include identifying methods to measure TLR9 levels in patients.</p> <p>Idera Pharmaceuticals Inc.'s IMO-3100, a dual TLR7 and TLR9 antagonist, is in Phase I testing for autoimmune disease.</p> <p>Dynavax Technologies Corp. and GlaxoSmithKline plc are developing DV1179, a dual TLR7 and TLR9 inhibitor that is in preclinical testing to treat autoimmune disease and inflammation.</p> <p>SciBX 3(46); doi:10.1038/scibx.2010.1393 Published online Dec. 2, 2010</p>	Patent application filed by Novartis AG and the University of Michigan; licensing status undisclosed	<p>Trujillo, G. <i>et al. Sci. Transl. Med.</i>; published online Nov. 10, 2010; doi:10.1126/scitranslmed.3001510</p> <p>Contact: Glenda Trujillo, University of Michigan Medical School, Ann Arbor, Mich. e-mail: gtrujillo@notes.sunysb.edu</p>