This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Pulmonary disease				
Cystic fibrosis (CF)	CXC chemokine receptor 2 (CXCR2; IL8RB)	<p>Mouse and patient sample studies suggest that blocking neutrophil extracellular trap (NET) formation using CXCR2 antagonists could help treat CF. NETs consist of DNA fibers and antimicrobial proteins that are secreted by neutrophils during the immune response. In sputum samples from CF patients, increased levels of NETs correlated with decreased pulmonary function. In a mouse model of CF, an intranasally delivered CXCR2 antagonist decreased NET formation and increased pulmonary function compared with vehicle control. Next steps include testing CXCR2 antagonists in CF patients.</p> <p>SB-656933, a CXCR2 antagonist from GlaxoSmithKline plc, is in Phase II trials for CF.</p> <p>At least three other companies have CXCR2 antagonists in preclinical to Phase II testing to treat pulmonary diseases.</p> <p>SciBX 3(37); doi:10.1038/scibx.2010.1129 Published online Sept. 23, 2010</p>	Unpatented; licensing status undisclosed	<p>Marcos, V. <i>et al. Nat. Med.</i>; published online Sept. 5, 2010; doi:10.1038/nm.2209</p> <p>Contact: Dominik Hartl, University of Tuebingen, Tuebingen, Germany e-mail: dominik.hartl@med.uni-tuebingen.de</p>