This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Influenza virus; pneumonia	Tumor necrosis factor-related apoptosis-inducing ligand (TNFSF10; TRAIL)	<p>Studies in mice suggest that inhibiting TRAIL could potentially prevent lethality associated with influenza virus-induced pneumonia. In a mouse model of influenza-induced acute lung injury, macrophages recruited into the alveolar air spaces had higher levels of TRAIL than peripheral blood monocytes. An anti-TRAIL mAb or transplantation of TRAIL-deficient bone marrow decreased alveolar epithelial cell apoptosis and lung leakage and increased survival compared with what was seen in wild-type infected mice. Next steps include designing anti-TRAIL treatment protocols and determining the long-term effects of TRAIL inhibition.</p> <p>Mapatumumab (HGS-ETR1), a mAb agonist of TRAIL receptor 1 from Human Genome Sciences Inc. and AstraZeneca plc, is in Phase II testing to treat relapsed or refractory multiple myeloma (MM).</p> <p>Lexatumumab (HGS-ETR2), a mAb agonist of TRAIL receptor 2 from Human Genome Sciences and AstraZeneca, is in Phase I testing to treat advanced solid tumors.</p> <p>AMG 655, a mAb that binds TRAIL receptor 2 from Amgen Inc., is in preclinical testing to treat pancreatic cancer.</p> <p>SciBX 2(1); doi:10.1038/scibx.2009.19 Published online Jan. 8, 2009</p>	Findings unpatented; anti- TRAIL antibodies licensed and patented for various diseases but not directly for acute lung injury	<p>Herold, S. <i>et al. J. Exp. Med.</i>; published online Dec. 8, 2008; doi:10.1084/jem.20080201</p> <p>Contact: Susanne Herold, University of Giessen Lung Center, Giessen, Germany e-mail: Susanne.Herold@innere.med.uni-giessen.de</p>