This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Infectious disease	Mucin 5B oligomeric mucus/ gel-forming (MUC5B)	<p>Mouse studies suggest maintaining baseline MUC5B expression is necessary to promote the clearance of pathogens from respiratory surfaces. Excessive mucus is associated with multiple respiratory diseases, but the consequences of inhibiting mucous production are unknown. In mice, deletion of <i>Muc5b</i>, which encodes a glycoprotein component of airway mucus, decreased mucociliary clearance, mucous transport, growth and survival compared with no alteration. In the mutant mice, antibiotics reversed lethality, indicating that death resulted from infection rather than airway obstruction. Next steps include developing therapeutics that target the cysteine-rich regions that link MUC5B molecules into chains and understanding how mucins interact with immune cells.</p> <p>SciBX 7(2); doi:10.1038/scibx.2014.58 Published online Jan. 16, 2014</p>	Unpatented; licensing status not applicable	<p>Roy, M.G. <i>et al. Nature</i>; published online Dec. 8, 2013; doi:10.1038/nature12807 Contact: Christopher M. Evans, University of Colorado Denver School of Medicine, Aurora, Colo. e-mail: christopher.evans@ucdenver.edu</p>