This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Pulmonary disease				
Acute lung injury	Toll-like receptor 4 (TLR4); TIR domain containing adapter inducing interferon-β (TRIF)	A study in mice suggests that antagonizing TLR4-TRIF signaling could help prevent acute lung injury in patients infected with influenza and other lung pathogens. Compared with what was seen in wild-type mice, TLR4 knockout mice had significantly better lung elastance ($p<0.01$), less lung edema ($p<0.01$) and lower cytokine production ($p<0.05$) after inactivated H5N1 virus challenge. Similar trends were seen in TRIF-deficient mice when compared with those in wild-type mice. Next steps include additional studies in long-term lung injury models.	Not patented; unlicensed	Imai, Y. *et al. Cell*; published online April 17, 2008; doi:10.1016/j.cell.2008.02.043 **Contact:** Josef M. Penninger, Institute of Molecular Biotechnology of the Austrian Academy of Sciences, Vienna, Austria e-mail: josef.penninger@imba.oeaw.ac.at **Contact:** Yumiko Imai, same affiliation as above e-mail: yumiko.imai@imba.oeaw.ac.at