This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Respiratory syncytial virus (RSV)	Not applicable	Mouse studies suggest that a vaccine derived from bacillus Calmette-Guérin (BCG) could help prevent RSV infection in at-risk infants. Mice vaccinated with a BCG vector expressing RSV nucleoprotein or matrix 2 protein and challenged with RSV showed less weight loss, airway cell infiltration and lung viral loads than mice vaccinated with control vectors or inactivated RSV. T cells isolated from immunized mice secreted IL-2 and interferon-γ (IFN-γ) in response to RSV antigens, indicating that the vaccine had induced a protective T helper type 1 cell (T_H1)-type immune response instead of the T_H2-type response typically associated with RSV infection. Future work could include testing the vaccine in nonhuman primates. AstraZeneca plc's MedImmune Inc. markets Synagis palivizumab to prevent RSV. MedImmune also has Numax motavizumab in registration to prevent RSV infection and two RSV vaccines in Phase I/II and Phase I testing. At least three other companies—Alnylam Pharmaceuticals Inc., ADMA Biologics Inc. and Symphogen A/S—have therapies to prevent or treat RSV infection in preclinical and clinical development. At least two companies—Bacilligen Inc. and Vaccinogen Inc.—are developing BCG-based vaccines to treat cancer. SciBX 2(2); doi:10.1038/scibx.2009.62 Published online Jan. 15, 2009	Use of recombinant BCG or related <i>Mycobacterium</i> vectors expressing RSV antigens is patented; available for licensing from the Office for Research Transfer, Chile Contact: Catalina Bay-Schmith, Office for Research Transfer, Chile Phone: +56 2 634-3027 e-mail: cbay-schmith@otrichile.cl	Bueno, S. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Dec. 15, 2008; doi:10.1073/pnas.0806244105 Contact: Alexis M. Kalergis, Pontifical Catholic University of Chile, Santiago, Chile e-mail: akalergis@bio.puc.cl or kalergis@vtr.net