This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Epstein-Barr virus (EBV)	Inducible T cell kinase (ITK); IL-2	<p>Studies in patient samples and in cell culture identified an ITK mutation that could help diagnose fatal EBV-associated lymphoproliferation. Samples from two consanguineous sisters who died from EBV-associated lymphoproliferation contained <i>ITK</i> genes carrying a missense mutation, were ITK-deficient and lacked natural killer T cells. In human embryonic kidney cells expressing the mutated <i>ITK</i>, levels of the protein were almost undetectable compared with those seen in wild-type cells. Next steps include confirming the marker by screening additional patient samples for the mutated protein. Valomaciclovir, a varicella zoster DNA polymerase inhibitor from Medivir AB and Epiphany Biosciences Inc., is in Phase II testing to treat EBV infection.</p> <p>AstraZeneca plc and GlaxoSmithKline plc have an EBV vaccine using EBV surface antigen in Phase II testing.</p> <p>BioSante Pharmaceuticals Inc. has an EBV vaccine using a calcium phosphate (CAP) nanoparticle adjuvant in preclinical testing.</p> <p>SciBX 2(14); doi:10.1038/scibx.2009.580 Published online April 9, 2009</p>	Work unpatented; licensing status not applicable	<p>Huck, K. <i>et al. J. Clin. Invest.</i>; published online April 1, 2009; doi:10.1172/JCI37901</p> <p>Contact: Arndt Borkhardt, Heinrich Heine University, Dusseldorf, Germany e-mail: arndt.borkhardt@med.uni-duesseldorf.de</p>