This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Herpes simplex virus (HSV)	Granzyme B (granzyme 2, cytotoxic T lymphocyte-associated serine esterase 1) (GZMB)	<p>Studies <i>in vitro</i> and in mice suggest that GZMB therapy could help prevent HSV type 1 (HSV-1) reactivation. GZMB is a component of the lytic granules secreted by cytotoxic T lymphocytes (CTLs) to degrade proteins in virally infected host cells. Knockout mice unable to make functional lytic granules showed greater reactivation of latent HSV-1 than wild-type controls. In HSV-1-infected fibroblast lysates, adding recombinant GZMB led to degradation of the viral transcriptional regulator ICP4 compared with what was seen in mock-treated controls. CTLs from GZMB knockout mice were less effective than wild-type CTLs at lowering ICP4 transcriptional activity in HSV-1-infected fibroblasts. Next steps could include developing strategies to selectively agonize GZMB activity of HSV-1-specific CTLs.</p> <p>SciBX 1(38); doi:10.1038/scibx.2008.926 Published online Oct. 23, 2008</p>	Patenting and licensing information unavailable	<p>Knickelbein, J. <i>et al. Science</i>; published online Oct. 9, 2008; doi:10.1126/science.1164164</p> <p>Contact: Robert L. Hendricks, University of Pittsburgh School of Medicine, Pittsburgh, Pa. e-mail: hendricksrr@upmc.edu</p>