This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Herpes simplex virus (HSV); Varicella zoster virus (VZV)	Lysine-specific histone demethylase 1 (LSD1)	<p><i>In vitro</i> and <i>ex vivo</i> studies suggest that LSD1 inhibitors could help treat HSV and VZV infections. In VZV-infected human cells, blocking <i>LSD1</i> expression led to decreased amounts of viral mRNA and viral protein. In HSV-infected cells, a monoamine oxidase inhibitor (MAOI), which blocks the activity of LSD1, lowered viral yields compared with those in controls. In murine ganglion explants, an MAOI significantly reduced reactivation of HSV compared with that in controls ($p < 0.005$). Next steps include studying topical and systemic MAOIs in a mouse model of HSV infection.</p> <p>Three companies market MAOIs to treat Parkinson's disease (PD).</p> <p>At least 15 MAOIs are marketed as antidepressants.</p> <p>SciBX 2(44); doi:10.1038/scibx.2009.1634 Published online Nov. 12, 2009</p>	Patent applications filed; patents are property of the NIH; available for licensing from the National Institute of Allergy and Infectious Diseases Office of Technology Development	<p>Liang, Yu. <i>et al. Nat. Med.</i>; published online Oct. 25, 2009; doi:10.1038/nm.2051</p> <p>Contact: Thomas M. Kristie, National Institutes of Health, Bethesda, Md. e-mail: thomas_kristie@nih.gov</p>