

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Influenza virus	Endoplasmic reticulum to nucleus signaling 1 (ERN1; IRE1)	<p><i>In vitro</i> studies suggest inhibiting IRE1 signaling could help treat influenza infection. In human lung epithelial cells, influenza A infection activated the IRE1 endoplasmic reticulum (ER) stress response. Cells pretreated with an IRE1 inhibitor or tauroursodeoxycholic acid (TUDCA), a naturally occurring bile salt that decreases ER stress, had lower viral replication and viral titers than untreated cells. Next steps include testing TUDCA in mouse models of influenza infection.</p> <p>MannKind Corp.'s MKC204, an IRE1 inhibitor, is in preclinical testing to treat multiple myeloma (MM).</p> <p>Urso ursodiol (ursodeoxycholic acid) from Aptalis Pharma Inc. is marketed to treat primary biliary cirrhosis.</p> <p>SciBX 5(2); doi:10.1038/scibx.2012.47 Published online Jan. 12, 2012</p>	Unpatented; unavailable for licensing	<p>Hassan, I.H. <i>et al. J. Biol. Chem.</i>; published online Dec. 22, 2011; doi:10.1074/jbc.M111.284695</p> <p>Contact: Ihab H. Hassan, The University of Iowa, Iowa City, Iowa e-mail: ihab-hassan@uiowa.edu</p>