

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
HCV	HCV NS3/4A protease complex	<p><i>In vitro</i> studies identified a macrocyclic acyl sulfonamide-based inhibitor of HCV NS3/4A protease that could help treat drug-resistant HCV infection. In a panel of enzyme inhibition assays, the compound inhibited the NS3/4A protease from 13 HCV strains, including 6 with known resistance mutations, at nanomolar and subnanomolar concentrations. The inhibitor also showed no activity in a panel of seven off-target proteases and had low cytotoxicity in a human hepatocyte cell line. Next steps could include testing the lead inhibitor in models of HCV infection.</p> <p>Vertex Pharmaceuticals Inc. markets Incivek telaprevir, a small molecule HCV NS3/4A protease inhibitor, to treat HCV infection.</p> <p>Merck & Co. Inc. markets Victrelis boceprevir, a small molecule HCV NS3/4A protease inhibitor, for the indication.</p> <p>Boehringer Ingelheim GmbH's faldaprevir, an oral HCV NS3/4A protease inhibitor, is in Phase III testing to treat HCV infection.</p> <p>At least six other companies have inhibitors of the HCV NS3/4A protease in Phase III testing or earlier to treat HCV infection.</p> <p>SciBX 6(5); doi:10.1038/scibx.2013.119 Published online Feb. 7, 2013</p>	Patent and licensing status unavailable	<p>O'Meara, J.A. <i>et al.</i> <i>J. Biol. Chem.</i>; published online Dec. 27, 2012; doi:10.1074/jbc.M112.439455</p> <p>Contact: Jeff A. O'Meara, Boehringer Ingelheim Ltd. R&D, Laval, Quebec, Canada</p> <p>e-mail: jeff.omeara@boehringer-ingelheim.com</p>