This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Viral infection	Dihydroorotate dehydrogenase (DHODH)	<p><i>In vitro</i> studies suggest that DHODH inhibitors could help treat a variety of viral infections. In infected human cell lines, screens and assays identified a lead compound that inhibited replication of influenza viruses A and B, HIV, HCV, Dengue virus, West Nile virus and several other viruses at low micromolar or submicromolar IC₅₀ values. Ongoing work includes <i>in vitro</i> assays to confirm the DHODH inhibitory activity of the lead compound.</p> <p>sanofi-aventis Group markets the DHODH inhibitor Arava leflunomide to treat rheumatoid arthritis (RA) and has the DHODH inhibitor teriflunomide in Phase III testing to treat multiple sclerosis (MS).</p> <p>Vidofludimus, a small molecule inhibitor of DHODH and IL-17 (IL-17A) from 4SC AG, is in Phase II testing to treat inflammatory bowel disease (IBD) and RA and in preclinical testing to treat lupus.</p> <p>LAS186323, an oral DHODH inhibitor from Almirall S.A., is in Phase I testing to treat RA and MS.</p> <p>SciBX 4(13); doi:10.1038/scibx.2011.375 Published online March 31, 2011</p>	Patented by the Mount Sinai School of Medicine; available for licensing or partnering	<p>Hoffmann, H.-H. <i>et al.</i> <i>Proc. Natl. Acad. Sci. USA</i>; published online March 21, 2011; doi:10.1073/pnas.1101143108 Contact: Megan L. Shaw, Mount Sinai School of Medicine, New York, N.Y. e-mail: megan.shaw@mssm.edu Contact: Peter Palese, same affiliation as above e-mail: peter.palese@mssm.edu</p>