This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Viral infection	Dipeptidyl peptidase-4 (DPP-4; CD26)	<p>Cell culture studies identified DDP-4 as the receptor of human coronavirus-Erasmus Medical Center (hCoV-EMC) and suggest that blocking the protein could help treat infection. In cell culture, hCoV-EMC bound and infected cells that expressed DDP-4 but not cells that lacked the protein. In cells expressing DDP-4, polyclonal DPP-4 antiserum blocked hCoV-EMC infection. However, in cell culture, hCoV-EMC infection could not be blocked with the DPP-4 inhibitors Glactiv sitagliptin, Equa vildagliptin or Onglyza saxagliptin, suggesting binding takes place outside of the enzyme's catalytic region. Next steps include generating humanized mAbs that block the interaction between hCoV-EMC and DPP-4.</p> <p>Merck & Co. Inc. and Ono Pharmaceutical Co. Ltd. market Glactiv sitagliptin to treat diabetes. Novartis AG markets Equa vildagliptin to treat diabetes.</p> <p>Bristol-Myers Squibb Co., AstraZeneca plc and Otsuka Pharmaceutical Co. Ltd. market Onglyza saxagliptin to treat diabetes.</p> <p>SciBX 6(13); doi:10.1038/scibx.2013.314 Published online April 4, 2013</p>	Patent application filed; unlicensed	<p>Raj, V.S. <i>et al. Nature</i>; published online March 13, 2013; doi:10.1038/nature12005</p> <p>Contact: Bart L. Haagmans, Erasmus Medical Center, Rotterdam, the Netherlands</p> <p>e-mail: b.haagmans@erasmusmc.nl</p>