

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Infectious disease</b>				
Infectious disease	ST3 $\beta$ -galactoside $\alpha$ -2,3-sialyltransferase 4 (ST3GAL4)	<p>Cell culture and mouse studies suggest inhibiting ST3GAL4 could help prevent hemorrhagic fever associated with Lassa virus infection. In a human cell-based screen, mutations in <i>lysosomal-associated membrane protein 1 (LAMP1)</i> or <i>ST3GAL4</i> rendered cells resistant to Lassa virus infection. In <i>ST3GAL4</i><sup>-/-</sup> cells, LAMP1 lost the ability to bind Lassa glycoproteins. In a mouse model of Lassa infection, <i>Lamp1</i> knockout mice cleared injected virus, whereas <i>Lamp1</i>-expressing mice manifested infection. Next steps could include testing whether small molecule inhibitors of ST3GAL4 can prevent Lassa infection.</p> <p><b>SciBX 7(30); doi:10.1038/scibx.2014.896</b>  <b>Published online Aug. 7, 2014</b></p>	Patent and licensing status unknown	<p>Jae, L.T. <i>et al. Science</i>; published online June 27, 2014; doi:10.1126/science.1252480  <b>Contact:</b> Thijn R. Brummelkamp, The Netherlands Cancer Institute, Amsterdam, the Netherlands                      e-mail: <a href="mailto:t.brummelkamp@nki.nl">t.brummelkamp@nki.nl</a>  <b>Contact:</b> John M. Dye, U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, Md.                      e-mail: <a href="mailto:john.m.dye1.civ@mail.mil">john.m.dye1.civ@mail.mil</a>  <b>Contact:</b> Sean P. Whelan, Harvard Medical School, Boston, Mass.                      e-mail: <a href="mailto:sean_whelan@hms.harvard.edu">sean_whelan@hms.harvard.edu</a></p>