

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Viral infection	VEEVgp1 non-structural polyprotein precursor P1234 (VEEVgp1)	<p><i>In vitro</i> and mouse studies have identified quinazolinone derivatives that could help treat infections with Venezuelan equine encephalitis virus (VEEV) and related alphaviruses. A chemical screen for compounds that inhibit VEEV-induced cellular pathology identified an optimized amidine quinazolinone derivative that inhibited the nonstructural polyproteins 2 and 4 encoded by <i>VEEVgp1</i>. In nonhuman primate cells, the compound decreased replication of several VEEV strains with nanomolar potency and without detectable cytotoxicity. In a mouse model of lethal VEEV infection, the compound increased survival compared with no treatment. Next steps include further optimizing the compound to improve its <i>in vivo</i> pharmacokinetic profile, assessing its efficacy across a spectrum of alphaviruses and other viruses and elucidating its mechanism of action.</p> <p>SciBX 7(40); doi:10.1038/scibx.2014.1183 Published online Oct. 16, 2014</p>	Patented; available for licensing	<p>Schroeder, C.E. <i>et al. J. Med. Chem.</i>; published online Sept. 22, 2014; doi:10.1021/jm501203v Contact: Jennifer E. Golden, The University of Kansas Specialized Chemistry Center, Lawrence, Kan. e-mail: jengolden@ku.edu</p>