This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Dengue fever	Dengue virus envelope protein E (DENV_gp1)	<p><i>In vitro</i> studies have identified residues of the dengue virus envelope protein that could be targeted to treat dengue fever. In cultured human cells, infection with dengue virus clones containing point mutations in each of 390 DENV_gp1 ectodomain residues identified 18 residues required for viral infectivity that did not structurally impair the protein. Mapping the residues to seven known conformational folding structures of the protein showed that the critical residues were located near the protein fusion loop, a conserved region at the interface of envelope protein domain interactions. Next steps include evaluating how mAbs targeting envelope protein interact with the critical residue regions. Altravax Inc. has a vaccine against DENV_gp1 in preclinical testing for dengue fever.</p> <p>SciBX 6(46); doi:10.1038/scibx.2013.1323 Published online Dec. 5, 2013</p>	Patents filed by Integral Molecular Inc. covering the mutagenesis method to create the mutations and the envelope protein-targeted mAbs; licensing status undisclosed	<p>Christian, E.A. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Oct. 24, 2013; doi:10.1073/pnas.1310962110</p> <p>Contact: Benjamin J. Doranz, Integral Molecular Inc., Philadelphia, Pa. e-mail: bdoranz@integralmolecular.com</p>