This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
HIV/AIDS	HIV gp120; HIV gp41	<i>In vitro</i> studies suggest a small molecule inhibiting the HIV envelope glycoprotein could be useful for developing broadly acting HIV drugs. In cells expressing the HIV receptors CD4 and CC chemokine receptor 5 (CCR5; CD195), a compound with an acyl hydrazone core and an adjacent aromatic ring prevented infection by a series of HIV-1 strains containing diverse HIV envelope proteins. Structural studies showed that the compound blocks CD4-induced conformational changes in HIV env by inhibiting rearrangements in the gp120 V1/V2 region and prevents exposure of the gp41 HR1 region required for viral fusion with target cells. Ongoing work includes developing analogs of the identified compound with higher potency and lower toxicity.	Patent application filed; available for licensing	Herschhorn, A. <i>et al. Nat. Chem. Biol.</i> ; published online Aug. 31, 2014; doi:10.1038/nchembio.1623 Contact: Joseph G. Sodroski, Dana-Farber Cancer Institute, Boston, Mass. e-mail: joseph_sodroski@dfci.harvard.edu
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