## This week in therapeutics

| Indication | Target/marker/pathway | Summary | Licensing status | Publication and contact information |
|---|---|---|---|---|
| **Infectious disease** | | | | |
| HIV/AIDS | Caspase-1 (CASP1) | Human tissue culture studies suggest CASP1 inhibitors could help treat HIV infection. In cultures of normal human lymphoid tissue, HIV predominantly infected quiescent $CD4^+$ T cells, upregulated CASP1 and led to CASP1-activated pyroptosis, which was not observed in HIV-infected, activated $CD4^+$ T cells. Also in the HIV-infected tissue cultures, *CASP1*-targeting shRNA or the small molecule CASP1 inhibitor VX-765 decreased CASP1 levels and the number of pyroptotic $CD4^+$ T cells compared with scrambled shRNA or no treatment. Ongoing work in collaboration with Vertex Pharmaceuticals Inc. may include a Phase II trial of the company's VX-765 in combination with antiretroviral therapies in patients with HIV infection.<br>VX-765 is in Phase II testing to treat epilepsy.<br><br>*SciBX* 7(3); doi:10.1038/scibx.2014.90<br>Published online Jan. 23, 2014 | Patent application filed by the Gladstone Institutes; licensing status undisclosed | Doitsh, G. *et al. Nature*; published online Dec. 19, 2013; doi:10.1038/nature12940<br>**Contact:** Warner C. Greene, Gladstone Institute of Virology and Immunology, San Francisco, Calif.<br>e-mail: wgreene@gladstone.ucsf.edu |