This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
HIV-1; cancer	IL-15	A study in mice suggests that IL-15 might be a useful adjuvant in vaccines that target HIV and other diseases characterized by T cell deficiencies, including cancer. One consequence of $CD4^+$ T cell deficiency is reduced induction and maintenance of cytotoxic $CD8^+$ T cells, which contribute to protective immunity against viral infections and cancer. In $CD4^+$-depleted mice, delivery of IL-15 in combination with an HIV vaccine resulted in induction and maintenance of efficacious $CD8^+$ T cells. These T cells were also able to prevent tumor growth in the mice following the injection of fibrosarcoma tumor cells. The researchers are conducting studies of IL-15 in nonhuman primates. There are at least seven HIV vaccines in Phase I and Phase II testing.	U.S. and international patent applications filed covering recombinant vaccine viruses expressing IL-15 and methods of use; available for licensing	Oh, S.K. *et al. Proc. Natl. Acad. Sci. USA*; published online March 24, 2008; doi:10.1073/pnas.0801003105 **Contact:** Thomas A. Waldmann, Vaccine Branch and Metabolism Branch, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, Md. e-mail: tawald@helix.nih.gov