This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	IL-33 (NF-HEV)	Mouse studies suggest IL-33 could be used as an adjuvant for cancer immunotherapy. In mice, intramuscular injection of an E6 transforming protein (human papillomavirus-16; HpV16gp1) and E7 transforming protein (human papillomavirus-16; HpV16gp2) DNA vaccine with plasmids encoding full-length or truncated IL-33 increased the number of antigen-specific interferon-γ (IFNG; IFN-γ)-producing T cells compared with injection of the DNA vaccine alone. Both IL-33 adjuvants stimulated $CD4^+$ and $CD8^+$ antigen-specific T cells, and the full-length IL-33 stimulated an antigen-specific IgG response. In mice with tumors expressing the HPV antigens, vaccine plus either adjuvant rapidly induced complete tumor regression, whereas vaccine alone rarely led to complete regression. Next steps could include testing the adjuvant potential of IL-33 with additional DNA vaccines. Inovio Pharmaceuticals Inc., a collaborator on the study, has *IL-33*-encoding DNA in preclinical testing as a cancer vaccine adjuvant. *SciBX* 7(11); doi:10.1038/scibx.2014.311 Published online March 20, 2014	Patent and licensing status unavailable	Villarreal, D.O. *et al. Cancer Res.*; published online Jan. 21, 2014; doi:10.1158/0008-5472.CAN-13-2729 **Contact:** David B. Weiner, University of Pennsylvania, Philadelphia, Pa. e-mail: dbweiner@mail.med.upenn.edu