This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Inflammation				
Inflammatory disease; asthma	Bromodomain containing 4 (BRD4)	<p>Mouse and cell culture studies suggest inhibiting BRD4 can modulate the T cell response to help treat inflammatory diseases. In naïve T cells cultured under T helper type 1 (Th1) cell-promoting conditions, I-BET-762, an inhibitor of bromodomain and extra terminal domain (BET) bromodomains including BRD4, upregulated expression of anti-inflammatory cytokines and downregulated expression of proinflammatory cytokines. In a model of autoreactive Th1 cell-induced experimental autoimmune encephalomyelitis (EAE), pretreatment of Th1 cells with I-BET-762 decreased disease severity compared with pretreatment using an inactive control compound ($p < 0.0001$). Next steps include testing I-BET-762 in preclinical models of immune-mediated diseases such as asthma. I-BET-762 is a BET bromodomain inhibitor from GlaxoSmithKline plc, which had researchers involved in the study.</p> <p>Tensha Therapeutics Inc. has BET bromodomain inhibitors in preclinical development for cancer. Constellation Pharmaceuticals Inc. has BET bromodomain inhibitors in preclinical development for cancer and immunological indications.</p> <p>SciBX 5(37); doi:10.1038/scibx.2012.983 Published online Sept. 20, 2012</p>	Patent status undisclosed; unavailable for licensing	<p>Bandukwala, H.S. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Aug. 21, 2012; doi:10.1073/pnas.1212264109</p> <p>Contact: Anjana Rao, La Jolla Institute for Allergy & Immunology, La Jolla, Calif. e-mail: arao@liai.org</p> <p>Contact: Hozefa S. Bandukwala, same affiliation as above e-mail: hozefa@liai.org</p>