This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Dermatology				
Dermatitis	Killer cell lectin-like receptor subfamily K member 1 (KLRK1; CD314; NKG2D); T cell receptor (TCR); RNA export 1 homolog (RAE1); CD3d molecule- δ CD3-TCR complex (CD3D)	<p>Mouse studies suggest inhibiting signaling between NKG2D ligands such as RAE1 and $\gamma\delta$TCR on T cells could help treat atopic dermatitis. In two mouse models of allergic dermatitis, compared with wild-type controls, a deficiency in the Cd3d component of $\gamma\delta$TCR decreased epidermal levels of proinflammatory IL-13 and serum levels of antigen-specific and nonspecific IgEs. Also in the two models, transgenic expression of human RAE1 in keratinocytes increased epidermal levels of IL-13 and serum IgE levels. Ongoing work includes investigating whether NKG2D ligand- $\gamma\delta$TCR signaling plays a role in allergic responses to food antigens in gut mucosa.</p> <p>SciBX 4(47); doi:10.1038/scibx.2011.1327 Published online Dec. 8, 2011</p>	Unpatented; unlicensed	<p>Strid, J. <i>et al. Science</i>; published online Dec. 2, 2011; doi:10.1126/science.1211250 Contact: Adrian Hayday, King's College London School of Medicine at Guy's Hospital, London, U.K. e-mail: adrian.hayday@kcl.ac.uk Contact: Jessica Strid, same affiliation as above e-mail: jessica.strid@kcl.ac.uk</p>