This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Dermatology				
Dermatitis	IL-21 receptor (IL-21R)	<p>Studies in human skin lesions and in mice suggest that IL-21R antagonists could be useful for treating atopic dermatitis. Analysis of skin lesions from patients with atopic dermatitis and skin from mice sensitized with skin injury and ovalbumin showed higher expression of both IL-21 and IL-21R. Both <i>Il-21^{-/-}</i> mice and wild-type mice treated with an IL-21-blocking fusion protein failed to develop skin inflammation following skin sensitization. Those mice also showed impaired trafficking of skin dendritic cells to draining lymph nodes, where they can initiate an immune response that leads to allergic skin inflammation, compared with that seen in untreated wild-type mice. Next steps could include identifying small molecule antagonists of IL-21R.</p> <p>A recombinant IL-21 molecule from Novo Nordisk A/S and ZymoGenetics Inc. is in Phase I/II and Phase II testing to treat renal cell cancer (RCC) and metastatic melanoma, respectively.</p> <p>SciBX 2(2); doi:10.1038/scibx.2009.55 Published online Jan. 15, 2009</p>	Patent and licensing status unavailable	<p>Jin, H. <i>et al. J. Clin. Invest.</i>; published online Dec. 15, 2008; doi:10.1172/JCI32310</p> <p>Contact: Raif S. Geha, Children's Hospital Boston and Harvard Medical School, Boston, Mass. e-mail: raif.geha@childrens.harvard.edu</p>