This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Arthritis	Matrix metalloproteinase 13 (MMP13)	<p>An SAR study identified a series of carboxylic acid inhibitors of MMP13 that could be useful for treating arthritis. MMP13 plays a role in degrading type II collagen in cartilage and bone. One compound inhibited MMP13 with an IC₅₀ value of 0.5 nM. The compound did not block collagenase-1 (MMP1; MMP-1) or tumor necrosis factor-α converting enzyme (TACE), the inhibition of which can lead to side effects. In a rat model of MMP13-induced cartilage degradation, oral dosing of the compound significantly lowered cartilage proteoglycan release, indicating less cartilage degradation, compared with that seen in vehicle-treated rats ($p < 0.05$). Next steps could include further optimization of the compounds and additional <i>in vivo</i> preclinical testing.</p> <p>SciBX 2(20); doi:10.1038/scibx.2009.818 Published online May 21, 2009</p>	Patent and licensing status unavailable	<p>Monovich, L. <i>et al. J. Med. Chem.</i>; published online May 7, 2009; doi:10.1021/jm801394m</p> <p>Contact: Leslie W. McQuire, Novartis Institutes for BioMedical Research, Cambridge, Mass. e-mail: leslie.mcquire@Novartis.com</p>