This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Osteoarthritis	Matrix metalloproteinase 13 (MMP13)	<i>In vitro</i> and rat studies identified selective MMP13 inhibitors that could be useful for treating osteoarthritis. An <i>in vitro</i> high throughput screen and SAR studies identified a carboxylic acid compound that selectively inhibited the osteoarthritis-associated enzyme MMP13 at an IC_{50} value of 3.9 picomolar. In a rat model of osteoarthritis, an orally available monosodium salt of the lead inhibitor decreased markers of cartilage damage compared with vehicle without causing overt toxicity. Next steps could include evaluating the salt of the lead inhibitor in additional preclinical osteoarthritis models.	Patent and licensing status unavailable	Nara, H. <i>et al. J. Med. Chem.</i> ; published online Sept. 29, 2014; doi:10.1021/jm500981k Contact: Hiroshi Nara, Takeda Pharmaceutical Co. Ltd., Kanagawa, Japan e-mail: hiroshi.nara@takeda.com
SciBX 7(41); doi:10.1038/scibx.2014.1199 Published online Oct. 23, 2014				