This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Rheumatoid arthritis (RA)	Adenosine A _{2A} receptor (ADORA _{2A}); ecto-5'-nucleotidase (NT5E; NT; CD73)	<p>Mouse studies suggest activation of ADORA_{2A} receptors by CD73-dependent prodrugs could help treat RA while avoiding the vasodilatory effects associated with marketed ADORA_{2A} agonists. In mouse models of collagen-induced arthritis, a phosphorylated ADORA_{2A} agonist that is activated by CD73 on immune cells decreased joint inflammation but did not lower blood pressure compared with no treatment. Next steps include evaluating the CD73-activated ADORA_{2A} agonists in additional inflammatory indications, such as ischemia/reperfusion injury and sepsis.</p> <p>Lexiscan, a short-acting ADORA_{2A} agonist from Gilead Sciences Inc. and Astellas Pharma Inc., is marketed as a cardiovascular imaging agent. CorVue binodenoson for injection, a selective ADORA_{2A} agonist from Pfizer Inc., is under review as a cardiovascular imaging agent. At least seven other companies have ADORA_{2A} agonists in Phase III testing or earlier to treat various indications.</p> <p>SciBX 5(33); doi:10.1038/scibx.2012.861 Published online Aug. 23, 2012</p>	Patent application filed; available for licensing	<p>Flögel, U. <i>et al. Sci. Transl. Med.</i>; published online Aug. 8, 2012; doi:10.1126/scitranslmed.3003717</p> <p>Contact: Jürgen Schrader, Heinrich Heine University Duesseldorf, Duesseldorf, Germany e-mail: schrader@uni-duesseldorf.de</p>