

### This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
<b>Autoimmune disease</b>				
Rheumatoid arthritis (RA)	Endoplasmic reticulum to nucleus signaling 1 (ERN1; IRE1)	<i>In vitro</i> and mouse studies suggest inhibiting IRE1 could help treat RA. Macrophages from the synovial fluid of patients with RA showed lower IRE1 activation than macrophages from patients with osteoarthritis (OA). In a mouse model of inflammatory arthritis, myeloid-specific <i>Ire1</i> knockout or an <i>Ire1</i> -specific inhibitor protected from the disease and decreased joint inflammation compared with no knockout or with vehicle. Next steps include testing IRE1 inhibitors in large animal models of RA. MannKind Corp.'s IRE1 inhibitor MKC204 is in preclinical testing to treat multiple myeloma (MM).	Findings unpatented; unavailable for licensing	Qiu, Q. <i>et al. EMBO J.</i> ; published online Aug. 13, 2013; doi:10.1038/emboj.2013.183 <b>Contact:</b> Deyu Fang, Northwestern University, Chicago, Ill. e-mail: <a href="mailto:fangd@northwestern.edu">fangd@northwestern.edu</a> <b>Contact:</b> Kezhong Zhang, Wayne State University School of Medicine, Detroit, Mich. e-mail: <a href="mailto:kzhang@med.wayne.edu">kzhang@med.wayne.edu</a>
		<b>SciBX 6(36); doi:10.1038/scibx.2013.987</b> <b>Published online Sept. 19, 2013</b>		