This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Rheumatoid arthritis (RA)	Heat shock 70 kDa protein 5 (glucose-regulated protein, 78 kDa; HspA5; GRP78)	Patient sample and mouse studies suggest inhibiting GRP78 could help treat RA. In synovial cells from patients with RA, endoplasmic reticulum stress genes including <i>GRP78</i> were upregulated, whereas those in healthy cells were not. In a mouse model of antibody-induced arthritis, partial knockout of Grp78 decreased angiogenesis, joint destruction and synovial hyperplasia compared with expression of wild-type Grp78. Next steps include developing a GRP78 inhibitor and determining the role of GRP78 in the immune system. Niiki Pharma Inc.'s NKP-1339, a transferrin-targeted, ruthenium-based small molecule that downregulates GRP78, is in Phase I/II testing for cancer.	Unpatented; licensing status not applicable	Yoo, S.-A. <i>et al. J. Exp. Med.</i> ; published online March 19, 2012; doi:10.1084/jem.20111783 Contact: Wan-Uk Kim, The Catholic University of Korea, Seoul, South Korea e-mail: wan725@catholic.ac.kr
SciBX 5(15); doi:10.1038/scibx.2012.383				
Published online April 12, 2012				