This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Arterial thrombosis	S100 calcium binding protein A9 (S100A9; calgranulin B; MRP14)	Studies in mice and patients suggest S100A9 inhibitors could help prevent arterial thrombosis. Patients with acute myocardial infarction (MI) had higher S100A9 levels in arterial thrombi than patients with stable coronary artery disease (CAD). In mouse models of arterial thrombosis, *S100a9* deficiency decreased thrombin-induced platelet activation and platelet accumulation on arterial walls and increased time to thrombus formation compared with wild-type *S100a9* expression. In a thrombosis assay using human whole blood, an anti-S100A9 antibody decreased thrombus formation compared with an inactive control antibody. Next steps include investigating the role of S100A9 in venous thrombosis. Active Biotech AB and Teva Pharmaceutical Industries Ltd. have Nerventra laquinimod, an oral quinoline-3-carboxamide immunomodulator that targets S100A9, under EMA review to treat multiple sclerosis (MS). The compound also is in Phase II testing to treat Crohn's disease, lupus and Huntington's disease (HD). Active Biotech and Ipsen Group have tasquinimod (ABR-215050), an oral quinoline-3-carboxamide derivative that binds S100A9, in Phase III testing to treat prostate cancer and in Phase II trials to treat gastric, liver, ovarian and renal cancers. Active Biotech's paquinimod (ABR-215757), a small molecule quinoline-3-carboxamide immunomodulator that targets S100A9, is in Phase II testing to treat lupus.	Patented; unlicensed	Wang, Y. *et al. J. Clin. Invest.*; published online April 1, 2014; doi:10.1172/JCI70966 **Contact:** Daniel I. Simon, University Hospitals Case Medical Center, Cleveland, Ohio e-mail: daniel.simon@uhhospitals.org

SciBX 7(22); doi:10.1038/scibx.2014.643
Published online June 5, 2014