This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Inflammation				
Inflammatory diseases	Microsomal prostaglandin E synthase-1 (mPGES-1)	A structural study of mPGES-1 could aid the design of mPGES-1 inhibitors to treat inflammation. Electron crystallography of 2D crystals in the presence of glutathione and phospholipid cofactors revealed the enzyme's conformation during the synthesis of proinflammatory prostaglandin E_2 (PGE_2). The structural model suggests that glutathione binds between the enzyme's three subunits and reduces the precursor molecule prostaglandin H_2 to PGE_2. Next steps include identifying compounds that stabilize the closed conformation of mPGES-1 to block catalysis. Orexo AB and Boehringer Ingelheim GmbH are jointly developing mPGES inhibitors to treat pain, inflammation and rheumatoid arthritis (RA).	Patent application filed for the structural conformation; structure tools are in use in-house and discussions are ongoing with potential partners; licensing status undisclosed	Jegerschold, C. *et al. Proc. Natl. Acad. Sci. USA*; published online Aug. 4, 2008; doi:10.1073/pnas.0802894105 **Contact:** Hans Hebert, Karolinska Institute, Stockholm, Sweden e-mail: hans.hebert@ki.se **Contact:** Per-Johan Jakobsson, same affiliation as above e-mail: per-johan.jakobsson@ki.se **Contact:** Caroline Jegerschöld, same afflilation as above e-mail: caroline.jegerschold@ki.se