

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Hematology				
Neutropenia	E selectin (SELE; CD62E)	<p>Mouse studies suggest blocking SELE could help prevent neutropenia during chemotherapy or radiation therapy. In mice receiving chemotherapy or radiotherapy, <i>Sele</i> knockout increased hematopoietic stem cell (HSC) survival and leukocyte numbers compared with <i>Sele</i> expression. In wild-type mice receiving chemotherapy, pretreatment with the pan-selectin antagonist GMI-1070 promoted HSC quiescence and self-renewal and neutrophil recovery, and it led to increased survival compared with saline pretreatment. Ongoing work includes designing SELE-specific antagonists and optimizing for bioavailability.</p> <p>GMI-1070, a pan-selectin inhibitor from GlycoMimetics Inc. and partner Pfizer Inc., is in Phase II testing to treat sickle cell disease.</p> <p>SciBX 5(44); doi:10.1038/scibx.2012.1160 Published online Nov. 8, 2012</p>	Multiple issued and pending patents covering GMI-1070 and related pan-selectin antagonists; licensed to Pfizer	<p>Winkler, I.G. <i>et al. Nat. Med.</i>; published online Oct. 21, 2012; doi:10.1038/nm.2969</p> <p>Contact: Jean-Pierre Lévesque, Mater Medical Research Institute, South Brisbane, Queensland, Australia e-mail: jplevesque@mmri.mater.org.au</p> <p>Contact: Ingrid G. Winkler, same affiliation as above e-mail: iwinkler@mmri.mater.org.au</p>