

### This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
<b>Cardiovascular disease</b>				
Coronary artery bypass graft (CABG) surgery	Transforming growth factor- $\beta$ 1 (TGFB1)	<p>Mouse studies suggest local inhibition of TGFB1 signaling could help prevent stenosis of grafted veins after CABG surgery. In mice receiving jugular vein grafts, pretreatment of recipient mice and prepared donor veins with a neutralizing pan-TGF<math>\beta</math> (TGFB) antibody decreased the endothelial-to-mesenchymal transition of occluding cells and neointima formation up to 35 days after surgery compared with IgG control pretreatment. In human vein grafts analyzed postmortem, markers indicating ongoing endothelial-to-mesenchymal transition in neointimas were elevated, suggesting conservation of a TGF<math>\beta</math>-dependent pathological mechanism. Next steps include further investigating contributions of TGF<math>\beta</math> signaling elements and testing TGF<math>\beta</math> inhibition in larger animal models. At least 10 companies have TGFB1 inhibitors in Phase II or earlier development to treat inflammatory and fibrotic indications as well as different cancers.</p> <p><b>SciBX 7(13); doi:10.1038/scibx.2014.373</b> Published online April 3, 2014</p>	Unpatented; licensing status not applicable	<p>Cooley, B.C. <i>et al. Sci. Transl. Med.</i>; published online March 12, 2014; doi:10.1126/scitranslmed.3006927 <b>Contact:</b> Manfred Boehm, National Heart, Lung, and Blood Institute, Bethesda, Md. e-mail: <a href="mailto:boehmm@nhlbi.nih.gov">boehmm@nhlbi.nih.gov</a></p>