This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Transforming growth factor- β (TGFB; TGF β); TGF β receptor II (TGF β -RII; TGFB β R2)	<p>Mouse studies suggest inhibiting TGFβ signaling could help improve chemotherapy efficacy in breast cancer. In two orthotopic mammary carcinoma mouse models, inhibition of TGFβ signaling with a TGFβ-neutralizing mAb or overexpression of soluble TGFBβR2 decreased tumor growth and metastasis compared with no inhibition or normal TGFBβR2 expression. In these mouse models, compared with wild-type mice, the TGFβ-neutralizing mAb and soluble TGFBβR2 overexpression both increased the intratumoral distribution and effects of Doxil doxorubicin. Next steps could include testing TGFβ-neutralizing mAbs in combination with chemotherapy in additional types of cancer.</p> <p>Johnson & Johnson markets Doxil liposomal doxorubicin to treat various cancers.</p> <p>At least four companies have compounds that inhibit TGFβ signaling in Phase II testing or earlier to treat various cancers.</p> <p>SciBX 5(39); doi:10.1038/scibx.2012.1025 Published online Oct. 4, 2012</p>	Patent and licensing status unavailable	<p>Liu, J. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Sept. 20, 2012; doi:10.1073/pnas.1117610109</p> <p>Contact: Lei Xu, Massachusetts General Hospital and Harvard Medical School, Boston, Mass. e-mail: lei@steele.mgh.harvard.edu</p> <p>Contact: Rakesh K. Jain, same affiliation as above e-mail: jain@steele.mgh.harvard.edu</p>