This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Tumor necrosis factor receptor superfamily member 11a (TNFRSF11A; RANK; CD265); receptor activator of NF-κB ligand (RANKL; TNFSF11)	Mouse studies suggest that inhibiting RANKL or RANK could help treat breast cancer. In mouse models of hormone- and chemical-induced breast cancer, *Rank* deficiency delayed tumorigenesis and invasive tumors compared with those in wild-type controls. In two mouse models of breast cancer, Rankl inhibition delayed mammary tumorigenesis and decreased tumor number and lung metastases compared with those seen using vehicle controls. Ongoing work includes investigating RANK or RANKL expression as a marker of breast cancer risk. Prolia denosumab, a humanized mAb targeting RANKL from Amgen Inc., is in Phase III testing to treat breast cancer and prevent recurrence and bone metastases of breast cancer. Prolia is approved to treat osteoporosis and is in registration to treat bone cancer. Ablynx N.V.'s ALX-0141, a nanobody against RANKL, is in Phase I testing to treat osteoporosis and help repair bone. Cephalon Inc.'s CEP-37251, a decoy receptor targeting RANKL, is in preclinical testing to treat bone cancer.	Patents filed for therapeutic and diagnostic applications in first study; available for licensing Patent and licensing status undisclosed for findings in second study	Schramek, D. *et al. Nature*; published online Sept. 29, 2010; doi:10.1038/nature09387 **Contact:** Josef M. Penninger, Institute of Molecular Biotechnology of the Austrian Academy of Sciences, Vienna, Austria e-mail: josef.penninger@imba.oeaw.ac.at Gonzalez-Suarez, E. *et al. Nature*; published online Sept. 29, 2010; doi:10.1038/nature09495 **Contact:** William C. Dougall, Amgen Inc., Seattle, Wash. e-mail: dougallw@amgen.com

SciBX 3(40); doi:10.1038/scibx.2010.1202
Published online Oct. 14, 2010