

## This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
<b>Musculoskeletal disease</b>				
Osteoporosis	Oxytocin (OXT); OXT receptor (OXTR)	<p>Studies in mice and in cell culture suggest that OXT agonists could help treat osteoporosis. Oxt- and Oxt<sup>r</sup>-deficient mice developed early-onset osteoporosis compared with what was seen in wild-type controls. In cell culture, OXT-deficient bone marrow cells showed lower rates of osteogenesis than wild-type controls, a defect corrected by adding OXT to the culture. Also in cell culture, OXT inhibited bone resorption by osteoclasts compared with that seen in untreated controls. Next steps include testing the effect of increased OXT activity in an ovariectomized mouse model of osteoporosis.</p> <p><b>SciBX 2(17); doi:10.1038/scibx.2009.714</b>  <b>Published online April 30, 2009</b></p>	Unpatented; licensing status not applicable	<p>Tamma, R. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online April 15, 2009;  doi:10.1073/pnas.0901890106  <b>Contact:</b> Alberta Zallone,  University of Bari, Bari, Italy  e-mail:  <a href="mailto:a.zallone@anatomia.uniba.it">a.zallone@anatomia.uniba.it</a>  <b>Contact:</b> Mone Zaidi, Mount Sinai  School of Medicine, New York, N.Y.  e-mail:  <a href="mailto:mone.zaidi@mssm.edu">mone.zaidi@mssm.edu</a></p>