

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Musculoskeletal disease				
Osteoporosis	Hypoxia-inducible factor 1 α (HIF1A; HIF1 α)	<p>Mouse studies suggest HIF1A inhibitors could help prevent postmenopausal osteoporosis. In the ovariectomized mouse model of osteoporosis, compared with sham-operated animals, estrogen deficiency increased Hif1a levels in osteoclasts. In the same model, a HIF1A inhibitor decreased osteoclast activation and increased bone mineral density compared with vehicle. Next steps could include determining mechanisms of estrogen-mediated HIF1A regulation.</p> <p>At least seven companies have HIF1A inhibitors in Phase II or earlier testing to treat various cancers.</p> <p>SciBX 6(39); doi:10.1038/scibx.2013.1101 Published online Oct. 10, 2013</p>	Patent application filed; licensing details available from Keio University	<p>Miyauchi, Y. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Sept. 10, 2013; doi:10.1073/pnas.1308755110</p> <p>Contact: Takeshi Miyamoto, Keio University, Tokyo, Japan e-mail: miyamoto@z5.keio.jp</p>