This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Musculoskeletal disease				
Osteoporosis	ATPase, H ⁺ transporting, lysosomal 56/58kDa, V1 subunit B2 (ATP6V1B2)	<i>In vitro</i> studies suggest that inhibiting interactions between ATP6V1B2 and microfilaments could help treat osteoporosis. <i>In vitro</i> , the fluoroquinolone antibiotic enoxacin blocked interactions between ATP6V1B2 and microfilaments that help mediate osteoclast resorption associated with osteoporosis. In mouse bone marrow cultures, enoxacin decreased the number of differentiating osteoclasts and reduced resorption compared with placebo. Next steps include testing enoxacin, optimized derivatives of the antibiotic or other small molecule inhibitors in animal models of osteoporosis. SciBX 2(30); doi:10.1038/scibx.2009.1186 Published online Aug. 6, 2009	Patent application filed; available for licensing worldwide	Ostrov, D. <i>et al. J. Med. Chem.</i> ; published online July 24, 2009; doi:10.1021/jm900277z Contact: L. Shannon Holliday, University of Florida College of Dentistry, Gainesville, Fla. e-mail: sholliday@dental.ufl.edu