This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Musculoskeletal disease				
Musculoskeletal disease	Fibroblast growth factor receptor 3 (FGFR3; CD333)	<p>Mouse studies suggest a recombinant, soluble form of FGFR3 could help treat achondroplasia, a disorder in bone growth caused by a point mutation in <i>FGFR3</i> that increases the receptor's activity. In a genetic mouse model of achondroplasia, soluble FGFR3 given twice weekly for three weeks increased bone growth and survival compared with vehicle without observable toxicity. In the mouse model, soluble FGFR3 induced chondrocyte maturation to promote bone growth and competed with endogenous mutant FGFR3. Next steps include assessing toxicity of FGFR3 in other animals. BioMarin Pharmaceutical Inc.'s BMN-111, a C-type natriuretic peptide (CNP; NPPC) analog that indirectly inhibits FGFR3 signaling, is in Phase I testing to treat achondroplasia.</p> <p>SciBX 6(40); doi:10.1038/scibx.2013.1134 Published online Oct. 17, 2013</p>	Patent application filed; available for licensing	<p>Garcia, S. <i>et al. Sci. Transl. Med.</i>; published online Sept. 13, 2013; doi:10.1126/scitranslmed.3006247 Contact: Elvire Gouze, Institut National de la Santé et de la Recherche Médicale (INSERM), Nice, France e-mail: elvire.gouze@inserm.fr</p>