This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Musculoskeletal disease				
Muscular atrophy	Histone deacetylase 4 (HDAC4); HDAC5	<p>Studies in mice suggest that inhibiting HDAC4 or HDAC5 could help treat neurogenic muscular atrophy. In a mouse model of skeletal muscle denervation, knockout of Hdac4 in skeletal muscle or global Hdac5 knockout lowered muscle loss compared with that in wild-type controls. In the same mouse model, combined knockout of Hdac4 and Hdac5 decreased muscle loss compared with single knockout. Next steps include testing the effect of HDAC4 knockout in mouse models of amyotrophic lateral sclerosis (ALS), a neurodegenerative disease that can lead to muscle atrophy.</p> <p>SciBX 3(41); doi:10.1038/scibx.2010.1238 Published online Oct. 21, 2010</p>	Patent and licensing status undisclosed	<p>Moresi, V. <i>et al. Cell</i>; published online Oct. 1, 2010; doi:10.1016/j.cell.2010.09.004 Contact: Eric N. Olson, The University of Texas Southwestern Medical Center at Dallas, Dallas, Texas e-mail: eric.olson@utsouthwestern.edu</p>