This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Various				
Autoimmune disease; transplantation	Histone deacetylase 6 (HDAC6)	<p>Mouse studies suggest inhibition of HDAC6 could help treat autoimmune diseases and prevent transplant rejection. In mouse models of colitis, the HDAC6 inhibitor tubacin or adoptive transfer of $Hdac6^{-/-}$ T_{reg} cells decreased weight loss and diarrhea compared with an inactive control compound or transfer of wild-type T_{reg} cells. In a mouse cardiac allograft transplant model, <i>Hdac6</i> knockout or tubacin increased long-term allograft survival compared with wild-type <i>Hdac6</i> expression or vehicle. Next steps include further medicinal chemistry optimization of the HDAC6 inhibitors.</p> <p>Acetylon Pharmaceuticals Inc.'s ACY-1215 HDAC6 inhibitor is in preclinical testing to treat multiple myeloma.</p> <p>SciBX 4(21); doi:10.1038/scibx.2011.606 Published online May 26, 2011</p>	Patent and licensing status undisclosed	<p>De Zoeten, E.F. <i>et al. Mol. Cell Biol.</i>; published online March 28, 2011; doi:10.1128/MCB.05155-11</p> <p>Contact: Wayne W. Hancock, The Children's Hospital of Philadelphia, Philadelphia, Pa. e-mail: whancock@mail.med.upenn.edu</p>