This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Inflammation				
Inflammation	Neural precursor cell expressed developmentally downregulated 8 (NEDD8); NEDD8 activating enzyme (NAE); ubiquitin-conjugating enzyme E2M (UBE2M; UBC12)	<p>Mouse and cell culture studies suggest inhibiting the NEDD8 signaling pathway could help prevent inflammation. In cell culture, the NAE inhibitor MLN4924 or small hairpin RNA against Ubc12, a component of the NEDD8 pathway, decreased CD4⁺ T cell activation and proliferation compared with no treatment or control shRNA. In a mouse model of airway inflammation, transfer of T cells with Ubc12 knockdown caused less T cell-mediated lung inflammation than transfer of T cells with no knockdown. Next steps could include evaluating clinical-stage NEDD8 pathway inhibitors in additional inflammation models. Takeda Pharmaceutical Co. Ltd.'s Millennium Pharmaceuticals Inc. unit has MLN4924 in Phase I testing to treat various cancers.</p> <p>SciBX 6(3); doi:10.1038/scibx.2013.60 Published online Jan. 24, 2013</p>	Patent and licensing status unavailable	<p>Jin, H.-s. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Dec. 24, 2012; doi:10.1073/pnas.1213819110 Contact: Yun-Cai Liu, La Jolla Institute for Allergy & Immunology, La Jolla, Calif. e-mail: yuncail@liai.org</p>