This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Multiple myeloma (MM)	Insulin-like growth factor-1 receptor (IGF1R; CD221); insulin-like growth factor-1 (IGF-1)	<p><i>In vitro</i> and mouse studies suggest antagonizing IGF1R could help prevent resistance to Velcade bortezomib in patients with MM. In bortezomib-resistant MM cells, secretion of IGF-1 and activation of IGF1R were greater than those in bortezomib-sensitive cells. In MM cells, small hairpin RNA against IGF1R increased sensitivity to bortezomib compared with scrambled shRNA. In MM cells and in mouse xenograft models of bortezomib-resistant MM, an IGF1R and insulin receptor inhibitor increased the antiproliferative and tumor-suppressive effects of bortezomib compared with bortezomib alone. Next steps could include testing the combination in additional models of MM.</p> <p>At least 14 companies have IGF1R antagonists or antibodies in development stages ranging from preclinical to marketed to treat various indications. Takeda Pharmaceutical Co. Ltd. and Johnson & Johnson market Velcade, a small molecule dipeptide boronic acid proteasome inhibitor, to treat MM and mantle cell lymphoma (MCL).</p> <p>SciBX 5(38); doi:10.1038/scibx.2012.1001 Published online Sept. 27, 2012</p>	Patent and licensing status unavailable	<p>Kuhn, D.J. <i>et al. Blood</i>; published online Aug. 29, 2012; doi:10.1182/blood-2011-10-386789 Contact: Robert Z. Orlowski, The University of Texas MD Anderson Cancer Center, Houston, Texas e-mail: rorlowsk@mdanderson.org</p>