This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily c member 1 (SMARCC1; BAF155); coactivator-associated arginine methyltransferase 1 (CARM1)	<i>In vitro</i> and mouse studies suggest inhibiting BAF155 methylation by CARM1 could help treat metastatic breast cancer. In breast cancer cells, BAF155 was identified as a substrate of the CARM1 methyltransferase. In the cells, <i>BAF155</i> knockout decreased cell growth and migration, which was restored by expression of wild-type <i>BAF155</i> but not of a variant with a mutated methylation site. In tissue samples from breast cancer patients, lack of BAF155 methylation increased recurrence-free survival compared with the presence of BAF155 methylation. In mouse xenograft models of metastatic breast cancer, expression of a methylation-resistant <i>BAF155</i> mutant prevented tumor growth in the lungs. Next steps include identifying inhibitors of CARM1-mediated BAF155 methylation.	Unpatented; licensing status not applicable	Wang, L. <i>et al. Cancer Cell</i> ; published online Jan. 13, 2014; doi:10.1016/j.ccr.2013.12.007 Contact: Wei Xu, University of Wisconsin–Madison, Madison, Wis. e-mail: wxu@oncology.wisc.edu
<i>SciBX</i> 7(5); doi:10.1038/scibx.2014.138 Published online Feb. 6, 2014				