This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Leukemia	Histone methyltransferase DOT1L (DOT1L); myeloid-lymphoid or mixed-lineage leukemia (MLL; HRX)	An <i>in vitro</i> and mouse study identified inhibitors of DOT1L that could help treat mixed lineage leukemia (MLL). <i>In vitro</i> , the small molecule EPZ004777 inhibited DOT1L with an IC ₅₀ of 400 pM and greater than 1,000-fold selectivity over other histone methyltransferases. In a mouse model of MLL, EPZ004777 decreased histone 3 lysine 79 (H3K79) methylation and increased survival compared with vehicle. Epizyme Inc. has DOT1L inhibitors in preclinical development for MLL, and the company's next steps include selecting a clinical candidate.	Patent application filed; unavailable for licensing	Daigle, S.R. <i>et al. Cancer Cell</i> ; published online July 12, 2011; doi:10.1016/j.ccr.2011.06.009 Contact: Roy M. Pollock, Epizyme Inc., Cambridge, Mass. e-mail: rpollock@epizyme.com
SciBX 4(29); doi:10.1038/scibx.2011.824 Published online July 28, 2011				