This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Lymphoma	Bromodomain containing 4 (BRD4); BRD2; BRD3	<p>Cell culture and mouse studies suggest BET inhibitors of BRD2, BRD3 and BRD4 could help treat diffuse large B cell lymphoma (DLBCL). In a panel of human cell lines, BET-family inhibitors selectively decreased proliferation of DLBCL and Burkitt lymphoma subtypes compared with vehicle. In mouse xenograft models of human DLBCL, BET-family inhibition decreased DLBCL proliferation and bone marrow infiltration and increased median survival compared with vehicle. In cultured DLBCL cells, BET-family inhibition decreased expression of oncogenes and BRD4 was enriched at enhancers associated with oncogenes and transcription factors important for B cell lineage specification. Next steps include elucidating mechanisms of resistance to BET-family inhibitors and developing combination strategies to counter resistance.</p> <p>At least seven companies have BET bromodomain inhibitors in preclinical through Phase II development for oncology and other indications including inflammatory diseases.</p> <p>SciBX 7(2); doi:10.1038/scibx.2014.52 Published online Jan. 16, 2014</p>	Patent and licensing status unavailable	<p>Chapuy, B. <i>et al. Cancer Cell</i>; published online Dec. 9, 2013; doi:10.1016/j.ccr.2013.11.003</p> <p>Contact: James E. Bradner, Dana-Farber Cancer Institute, Boston, Mass. e-mail: james_bradner@dfci.harvard.edu</p> <p>Contact: Margaret A. Shipp, same affiliation as above e-mail: margaret_shipp@dfci.harvard.edu</p>