This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Histone deacetylase (HDAC); NF-κB	<p>Studies in cell culture suggest that coupling HDAC inhibition with NF-κB inhibition could be a useful strategy for treating metastatic forms of cancer that are resistant to current therapies. Researchers developed a new version (Bu4ManNAc) of the short chain fatty acid-hexosamine cancer drug derivative Bu5Man. The new compound has inhibition activity on HDAC and NF-κB, unlike the parent version, which only works on NF-κB. In metastatic breast cancer cells, the new compound suppressed the activity of proinvasive oncogenes better than the old version. Next steps include <i>in vivo</i> preclinical testing with the new compound. Zolinza vorinostat, an HDAC inhibitor from Merck & Co. Inc., is approved to treat cutaneous T cell lymphoma (CTCL) and is in Phase I and Phase II trials to treat various other cancers. SNDX-275 (formerly MS-275), a small molecule HDAC inhibitor from Syndax Pharmaceuticals Inc., is in Phase II testing to treat breast cancer. At least 10 other companies are developing HDAC inhibitors for cancer.</p> <p>SciBX 2(3); doi:10.1038/scibx.2009.84 Published online Jan. 22, 2009</p>	U.S. patent application filed for compound composition and applications related to treating diseases where HDAC inhibitory activity and/or NF-κB are implicated in the disease etiology; available for licensing	<p>Campbell, C. <i>et al. J. Med. Chem.</i>; published online Nov. 20, 2008; doi:10.1021/jm800873k</p> <p>Contact: Kevin J. Yarema, Johns Hopkins University, Baltimore, Md. e-mail: kyarema1@jhu.edu</p>