This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Colorectal cancer; ovarian cancer	Histone deacetylase (HDAC)	*In vitro* and mouse studies suggest thioacetate-lactam carboxamide analog–based pan-HDAC inhibitors could help treat colorectal or ovarian cancer. *In vitro* testing of multiple lead analogs from the series showed that they inhibited class I, IIb and IV HDACs at low nanomolar IC_{50} values. In mouse xenograft models of colorectal or ovarian cancer, a metabolically stable acetyl prodrug of one lead HDAC inhibitor decreased tumor growth compared with Zolinza vorinostat or the generic chemotherapy carboplatin without observable toxicity. Ongoing work includes testing in additional forms of cancer. Merck & Co. Inc. and Taiho Pharmaceutical Co. Ltd. market Zolinza, a small molecule HDAC inhibitor, to treat cutaneous T cell lymphoma (CTCL). The compound is in Phase III or earlier testing to treat various other cancers and graft-versus-host disease (GvHD). Celgene Corp. markets Istodax romidepsin, a small molecule HDAC inhibitor, to treat CTCL and lymphoma. The compound also is in Phase II testing to treat solid tumors. Onxeo S.A. and Spectrum Pharmaceuticals Inc. market Beleodaq belinostat, a small molecule HDAC inhibitor, to treat T cell lymphoma. The compound also is in Phase II or earlier testing to treat various other cancers. *SciBX* 7(39); doi:10.1038/scibx.2014.1151 Published online Oct. 9, 2014	Patented by Sigma-Tau Group; available for licensing	Giannini, G. *et al. J. Med. Chem.*; published online Sept. 18, 2014; doi:10.1021/jm5008209 **Contact:** Giuseppe Giannini, Sigma-Tau Group, Roma, Italy e-mail: giuseppe.giannini@sigma-tau.it