

THE DISTILLERY

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Epithelial cancer	Bromodomain containing 4 (BRD4); nuclear protein in testis (C15orf55; NUT)	An <i>in vitro</i> and mouse study identified a BRD4 inhibitor that could help treat squamous carcinomas that express BRD4-NUT fusion proteins. <i>In vitro</i> , the BRD4 inhibitor JQ1 had IC ₅₀ values of 77 nM and 33 nM compared with no detectable inhibition for a control compound. In patient-derived mouse xenograft models of BRD4-NUT- dependent cancer, JQ1 decreased tumor size and increased survival compared with vehicle control ($p \le 0.0001$). Next steps include compound optimization and testing JQ1 in preclinical models of other cancers. <i>SciBX</i> 3(39); doi:10.1038/scibx.2010.1178 Published online Oct. 7. 2010	Patent filed covering JQ1 derivatives; available for licensing from the Dana-Farber Cancer Institute	Filippakopoulos, P. <i>et al. Nature</i> ; published online Sept. 24, 2010; doi:10.1038/nature09504 Contact: James E. Bradner, Dana-Farber Cancer Institute, Boston, Mass. e-mail: james_bradner@dfci.harvard.edu Contact: Stefan Knapp, Structural Genomics Consortium, Oxford, U.K. e-mail: