This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Not applicable	<p>An <i>in vitro</i> study identified a small molecule inhibitor of breast cancer stem cell growth that could help treat the disease. A high throughput screen of about 300,000 small molecules was conducted in a cellular model of breast cancer stem cells (CSCs) in which <i>E-cadherin</i> (<i>CDH1</i>; <i>CD324</i>) was knocked down in human mammary epithelial cells to induce an epithelial-to-mesenchymal transition. Screening and optimization identified a lead compound, ML239, which inhibited two distinct breast CSC-like cell lines with IC_{50} values of 0.1 μM and 1.2 μM. Ongoing work has identified two additional classes of small molecules that inhibit breast CSC proliferation, and next steps include further characterizing the mechanism of action of these molecules.</p> <p>SciBX 5(47); doi:10.1038/scibx.2012.1229 Published online Dec. 6, 2012</p>	Patent application filed; licensed to Verastem Inc.	<p>Carmody, L.C. <i>et al.</i> <i>J. Biomol. Screen.</i>; published online Aug. 30, 2012; doi:10.1177/1087057112458317 Contact: Leigh C. Carmody, Broad Institute of MIT and Harvard, Cambridge, Mass. e-mail: lcarmody@broadinstitute.org</p>