This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Polo-like kinase 4 (PLK4; STK18)	<i>In vitro</i> and mouse studies identified small molecule PLK4 inhibitors that could help treat breast cancer. Computational modeling, chemical synthesis and <i>in vitro</i> testing of (indazolyl)methylene indolinone analogs identified several lead compounds as selective, nanomolar inhibitors of PLK4. In multiple human breast cancer cell lines, one lead compound inhibited growth at low nanomolar IC ₅₀ values. In mice with xenograft breast tumors, the lead compound decreased tumor growth compared with vehicle. Ongoing work includes IND-enabling studies of an optimized PLK4 inhibitor and planning of a Phase I trial of that inhibitor to treat solid tumors.	Patented by the University Health Network; available for licensing or partnering	Laufer, R. <i>et al.</i> <i>J. Med. Chem.</i> ; published online July 6, 2013; doi:10.1021/jm400380m Contact: Henry W. Pauls, The Campbell Family Cancer Research Institute at the Princess Margaret Cancer Centre, Toronto, Ontario, Canada e-mail: hpauls@uhnresearch.ca
<i>SciBX</i> 6(31); doi:10.1038/scibx.2013.819 Published online Aug. 15, 2013				