

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Neuroendocrine tumors	Polo-like kinase 1 (PLK1; STPK13)	<p>Studies in mice and in cell culture suggest that inhibiting PLK1 could help treat neuroblastoma. In human neuroblastoma tumor-initiating cells, inhibition of PLK1 with small interfering RNA or the small molecule antagonist BI 2536 decreased tumor cell numbers compared with control siRNA or vehicle ($p < 0.01$). In a mouse model of human neuroblastoma, BI 2536 decreased tumor growth and increased survival compared with vehicle. Next steps could include evaluating additional clinical stage PLK1 inhibitors in animal neuroblastoma models. Boehringer Ingelheim GmbH's BI 2536 and BI 6727 are PLK1 inhibitors in Phase II testing for multiple cancers.</p> <p>At least five other companies have PLK1 inhibitors in Phase II trials or earlier for cancer.</p> <p>SciBX 4(9); doi:10.1038/scibx.2011.252 Published online March 3, 2011</p>	Patent and licensing status unavailable	<p>Grinshtein, N. <i>et al. Cancer Res.</i>; published online Feb. 8, 2011; doi:10.1158/0008-5472.CAN-10-2484</p> <p>Contact: David Kaplan, The Hospital for Sick Children, Toronto, Ontario, Canada e-mail: dkaplan@sickkids.ca</p>