This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Papillary thyroid carcinoma	NK2 homeobox 1 (NKX2-1; TITF1)	<p>A screen of papillary thyroid carcinoma patients identified a germline mutation that could be a useful biomarker of disease susceptibility in patients with multinodular goiter. Analysis of patients with multinodular goiter and papillary thyroid carcinoma showed that the A339V mutation in the <i>TITF1</i> gene was associated with the development of significantly more advanced tumors compared with what was seen in patients without the mutation ($p=0.022$). In rat thyroid cells, overexpression of the mutation was associated with increased cell proliferation, increased activation of signal transducer and activator of transcription 3 (Stat3) and impaired transcription of several thyroid-specific genes compared with what was seen in cells overexpressing wild-type <i>TITF1</i>. Next steps include large-scale genetic screening for the A339V mutation in patients with a history of multinodular goiter.</p> <p>SciBX 2(6); doi:10.1038/scibx.2009.226 Published online Feb. 12, 2009</p>	Patent status not applicable; unlicensed	<p>Ngan, E. <i>et al.</i> <i>J. Natl. Cancer Inst.</i>; published online Jan. 27, 2009; doi:10.1093/jnci/djn471</p> <p>Contact: Elly S.W. Ngan, University of Hong Kong, Hong Kong, China e-mail: engan@hku.hk</p>