

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Thyroid cancer	Ret proto-oncogene (RET)	<p><i>In vitro</i> studies identified a new series of indolinone-derived RET inhibitors that could potentially treat thyroid cancer. Several 4-substituted β-carbolin-2-ones inhibited both RET activity and cell proliferation of NIH3T3 cancer cells as effectively as or better than previously identified RET inhibitors. SAR analysis showed that the rigid backbone of β-carbolin-2-ones may be responsible for their potency. Next steps include pharmacological optimization of the new structures. Multikinase inhibitors in Phase II testing to treat thyroid cancer include Zactima vandetanib from AstraZeneca plc and motesanib from Amgen Inc. and Takeda Pharmaceutical Co. Ltd.</p> <p>SciBX 2(1); doi:10.1038/scibx.2009.12 Published online Jan. 8, 2009</p>	Findings unpatented; unavailable for licensing	<p>Cincinelli, R. <i>et al. J. Med. Chem.</i>; published online Nov. 19, 2008; doi:10.1021/jm8007823</p> <p>Contact: Maurizio Botta, University of Siena, Siena, Italy e-mail: botta@unisi.it</p> <p>Contact: Cinzia Lanzi, IRCCS Foundation, National Tumor Institute, Milan, Italy e-mail: cinzia.lanzi@istitutotumori.mi.it</p> <p>Contact: Sabrina Dallavalle, University of Milan, Milan, Italy e-mail: sabrina.dallavalle@unimi.it</p>