

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Phosphoinositide 3-kinase (PI3K); mammalian target of rapamycin (mTOR; FRAP; RAFT1)	<p>Mouse studies identified a series of 4-morpholinopyrrolopyrimidine derivatives that inhibit PI3K and mTOR and could help treat cancer. In mouse breast cancer xenograft models, i.v. administration of the best optimized inhibitor prevented tumor growth and caused tumor regression compared with administration of vehicle control. Next steps include developing analogs with improved potency and pharmacokinetics and testing the new compounds in additional tumor models.</p> <p>At least four companies have dual mTOR and PI3K inhibitors in clinical and preclinical testing to treat cancer.</p> <p>The Wyeth unit of Pfizer Inc. has 4-morpholinopyrrolopyrimidine derivatives in preclinical testing for cancer.</p> <p>SciBX 3(15); doi:10.1038/scibx.2010.461 Published online April 15, 2010</p>	Patent application filed; licensing status unknown	<p>Chen, Z. <i>et al. J. Med. Chem.</i>; published online March 24, 2010; doi:10.1021/jm901783v</p> <p>Contact: Zecheng Chen, Wyeth Research, Pearl River, N.Y. e-mail: chenz1@wyeth.com or chenzecheng@hotmail.com</p>