

### This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
<b>Cancer</b>				
Esophageal cancer	$\gamma$ -secretase	<p>Studies in human samples, cell culture and mice suggest inhibiting notch signaling could help treat esophageal cancer. In primary esophageal adenocarcinoma (EAC) tumors, notch signaling was higher than that in surrounding normal tissue and correlated with poor prognosis. In human esophageal cell lines, a <math>\gamma</math>-secretase inhibitor that blocked notch signaling decreased proliferation compared with vehicle, and the inhibitor plus the generic chemotherapeutic 5-fluorouracil decreased proliferation compared with either agent alone. In mice bearing patient-derived EAC xenograft tumors, the <math>\gamma</math>-secretase inhibitor decreased tumor growth compared with vehicle. Next steps could include testing notch inhibition in combination with other therapeutics to treat EAC.</p> <p>Forum Pharmaceuticals Inc. has the <math>\gamma</math>-secretase inhibitor FRM-0962 in Phase II testing to treat Alzheimer's disease (AD). Humanetics Corp. has the <math>\gamma</math>-secretase inhibitor NIC5-15 in Phase II testing to treat AD.</p> <p>At least seven other companies have <math>\gamma</math>-secretase inhibitors in Phase I/II or earlier testing.</p> <p><b>SciBX 7(40); doi:10.1038/scibx.2014.1175</b>  <b>Published online Oct. 16, 2014</b></p>	Patent and licensing status unavailable	<p>Wang, Z. <i>et al. Cancer Res.</i>; published online Aug. 27, 2014;            doi:10.1158/0008-5472.CAN-14-2051  <b>Contact:</b> Anthony J. Capobianco, University of Miami, Miami, Fla.            e-mail:  <a href="mailto:tcapobianco@med.miami.edu">tcapobianco@med.miami.edu</a></p>