

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	Tumor necrosis factor receptor superfamily, member 21 (TNFRSF21; DR6); caspase-6 apoptosis-related cysteine peptidase (CASP6; MCH2); amyloid precursor protein (APP)	<p>A study in murine cell culture suggests that targeting DR6 and CASP6 could help treat AD. In cultured neurons, a non-amyloidogenic fragment of AD-associated APP activated the proapoptotic receptor DR6 and increased neurodegeneration compared with what was seen using mock control. Cells treated with small molecule inhibitors of CASP6, an axon-specific apoptotic protease, showed less neurodegeneration than mock-treated controls. Next steps include examining the effect of DR6 and CASP6 inhibition in mouse models of AD.</p> <p>Genentech Inc. is developing preclinical compounds that target DR6 and CASP6 to treat AD.</p> <p>Anavex Life Sciences Corp.'s Anavex 1-41, a small molecule that blocks the expression of neuronal caspases, is in preclinical development for AD.</p> <p>SciBX 2(8); doi:10.1038/scibx.2009.328 Published online Feb. 26, 2009</p>	Patents pending; unavailable for licensing	<p>Nikolaev, A. <i>et al. Nature</i>; published online Feb. 4, 2009; doi:10.1038/nature07767</p> <p>Contact: Marc Tessier-Lavigne, Genentech Inc., South San Francisco, Calif. e-mail: marctl@gene.com</p>