

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Neurology</b>				
Alzheimer's disease (AD); cognitive dysfunction	Muscarinic acetylcholine receptor M1 (CHRM1; HM1)	<p>A study in rodents and in cell culture identified an allosteric HM1 inhibitor that could help improve cognitive ability to treat AD and cognitive dysfunction. In rodent cell lines expressing human muscarinic receptors, Lu AE51090 selectively inhibited <i>HM1</i> with an EC<sub>50</sub> value of 61 nM. In mice, Lu AE51090 caused dose-dependent improvements in learning and memory compared with vehicle. Next steps could include using Lu AE51090 as a lead for developing optimized allosteric HM1 inhibitors.</p> <p>At least four companies have muscarinic receptor agonists in Phase II or earlier to treat AD or cognitive dysfunction.</p> <p><b>SciBX 3(33); doi:10.1038/scibx.2010.1017</b> Published online Aug. 26, 2010</p>	Patent and licensing status unavailable	<p>Sams, A.G. <i>et al.</i> <i>J. Med. Chem.</i>; published online Aug. 4, 2010; doi:10.1021/jm100697g</p> <p><b>Contact:</b> Anette G. Sams, Lundbeck Research Denmark, Valby, Denmark e-mail: <a href="mailto:anette.sams@leo-pharma.com">anette.sams@leo-pharma.com</a></p>