

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD); Parkinson's disease (PD)	Vesicular acetylcholine transporter (SLC18A3; VACHT)	<p>Studies in rats and in monkeys show that a modified benzovesamicol structure could be used as a marker of neurodegenerative diseases such as AD and PD. In Sprague-Dawley rats, biodistribution studies of the [¹⁸F]-vesamicol derivative showed preferential uptake by the brain. In rhesus monkeys, PET imaging following injection of the radioligand showed that the highest uptake was in the caudate and putamen, where VACHT concentration is most dense. Next steps could include determining whether the compound could be used to determine changes in cholinergic function in human brains in response to therapy.</p> <p>No fewer than eight companies have acetylcholinesterase (AChE) inhibitors in development stages ranging from preclinical to marketed to treat AD or PD.</p> <p>SciBX 2(8); doi:10.1038/scibx.2009.329 Published online Feb. 26, 2009</p>	Patent and licensing status unavailable	<p>Tu, Z. <i>et al. J. Med. Chem.</i>; published online Feb. 9, 2009; doi:10.1021/jm8012344</p> <p>Contact: Zhude Tu, Washington University School of Medicine, St. Louis, Mo. e-mail: tuz@mir.wustl.edu</p>