This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Various				
Diabetes; neurology	Glycogen synthase kinase 3 β (GSK3B)	<p><i>In vitro</i> and mouse studies suggest that new classes of GSK3B inhibitors could help treat diabetes and neurodegenerative diseases. Screening studies identified an oxadiazole analog and a hydantoin analog as selective, low nanomolar inhibitors of GSK3B. In normal mice, both compounds increased liver glycogen content compared with vehicle. Also in normal mice, the oxadiazole analog showed good blood brain barrier (BBB) permeability at three different doses, whereas the hydantoin analog showed good BBB permeability at one concentration. Next steps could include testing the compounds in animal models of diabetes and neurodegenerative diseases.</p> <p>DM-99, an undisclosed naturally occurring protein than inhibits GSK3B from DiaMedica Inc., is in Phase II testing to treat diabetes and Alzheimer's disease (AD).</p> <p>SciBX 3(47); doi:10.1038/scibx.2010.1424 Published online Dec. 9, 2010</p>	Patent and licensing status unavailable	<p>Khanfar, M.A. <i>et al. J. Med. Chem.</i>; published online Nov. 17, 2010; doi:10.1021/jm100941j Contact: Khalid A. El Sayed, The University of Louisiana at Monroe, Monroe, La. e-mail: elsayed@ulm.edu</p>