This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	β -Amyloid ($A\beta$); β -site APP-cleaving enzyme 1 (BACE1); mammalian target of rapamycin (mTOR; FRAP; RAFT1)	<p>Mouse and cell culture studies suggest the plant-derived compound arctigenin could help treat AD. In a series of human cell lines, arctigenin decreased $A\beta$ production compared with vehicle by inhibiting BACE1 translation. In these cell lines, arctigenin inhibited mTOR signaling and also increased $A\beta$ clearance compared with vehicle. In a transgenic mouse model of AD, arctigenin decreased memory impairment and plaque formation in the brain compared with vehicle. Next steps include seeking an industry collaborator to help develop arctigenin to treat AD.</p> <p><i>SciBX</i> 6(34); doi:10.1038/scibx.2013.930 Published online Sept. 5, 2013</p>	Patent pending covering arctigenin and its analogs; licensing status undisclosed	<p>Zhu, Z. <i>et al. J. Neurosci.</i>; published online Aug. 7, 2013; doi:10.1523/JNEUROSCI.4790-12.2013 Contact: Xu Shen, Shanghai Institute of Materia Medica, Chinese Academy of Sciences, Shanghai, China e-mail: xshen@mail.shcnc.ac.cn Contact: Hualiang Jiang, same affiliation as above e-mail: hljiang@mail.shcnc.ac.cn Contact: Lihong Hu, same affiliation as above e-mail: simmhulh@mail.shcnc.ac.cn</p>