This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Parkinson's disease (PD)	α -Synuclein (SNCA)	<i>In vitro</i> fruit fly and mouse studies suggest mannitol, a known disrupter of the blood brain barrier (BBB), could help treat PD. In biochemical studies, mannitol inhibited amyloid fibril formation and disrupted the formation of α -synuclein aggregates. In a fruit fly model for PD, mannitol decreased α -synuclein aggregation in the brain and increased locomotion compared with no treatment. In a human α -synuclein (SNCA) transgenic mouse model for PD, mannitol conferred a neuroprotective effect in dopaminergic neurons and decreased α -synuclein levels in specific brain regions compared with saline. Next steps include confirming the behavioral effects of mannitol in mouse models for PD and evaluating the compound in combination with amyloid inhibitors that do not efficiently cross the BBB.	Patent and licensing status undisclosed	Shaltiel-Karyo, R. <i>et al. J. Biol. Chem.</i> ; published online May 1, 2013; doi:10.1074/jbc.M112.434787 Contact: Ehud Gazit, Tel Aviv University, Tel Aviv, Israel e-mail: ehudg@post.tau.ac.il Contact: Daniel Segal, affiliation same as above e-mail: dsegal@post.tau.ac.il
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