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THE DISTILLERY

## This week in therapeutics

| Indication | Target/marker/ pathway | Summary | Licensing status | Publication and contact information |
|---|---|---|---|---|
| **Neurology** | | | | |
| Alzheimer's disease (AD) | Sterol O-acyltransferase 1 (SOAT1; ACAT1) | A study in mice suggests that antagonizing ACAT1 could help treat AD. In a transgenic mouse model of AD, *Acat1* knockout increased brain levels of the cholesterol byproduct 24(*S*)-hydroxycholesterol (24SOH) and reduced levels of neurotoxic β-amyloid (Aβ) compared with those in wild-type controls. In cultured hippocampal slices from the AD mice, adding back 24SOH decreased levels of amyloid-β precursor protein (APP), the precursor to neurotoxic Aβ. Next steps include developing brain-permeable ACAT1 inhibitors.<br>ACAT1 inhibitors previously tested for cardiovascular indications include Pfizer Inc.'s CI 1011 and Daiichi Sankyo Co. Ltd.'s Pactimibe (CS-505). Both compounds are no longer in development.<br><br>***SciBX*** **3(8); doi:10.1038/scibx.2010.250**<br>**Published online Feb. 25, 2010** | Patents pending; available for licensing | Bryleva, E.Y. *et al. Proc. Natl. Acad. Sci. USA*; published online Jan. 26, 2010; doi:10.1073/pnas.0913828107<br>**Contact:** Ta-Yuan Chang, Dartmouth College, Hanover, N.H.<br>e-mail: ta-yuan.chang@dartmouth.edu |