This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine/metabolic disease				
Obesity; metabolic disease	Estrogen receptor- α ; peroxisome proliferation- activated receptor- γ coactivator 1 α (PPARGC1A; PGC-1 α)	<i>In vitro</i> and mouse studies suggest increasing hypothalamic PGC-1 α expression could help protect against obesity and metabolic disorders. In male mice, a high-fat diet decreased hypothalamic expression of PGC-1 α and its downstream target estrogen receptor- α , leading to increased CNS inflammation, impaired glucose tolerance and decreased myocardial function compared with what was seen in female mice with higher estrogen receptor- α expression. In cultured neurons, shRNA knockdown of PGC-1 α induced inflammation, but the proinflammatory effect was blocked by estrogen receptor- α overexpression. Next steps could include testing the effects of PGC-1 α upregulation in additional metabolic disease models.	Patent and licensing status unavailable	Morselli, E. <i>et al. Cell Rep.</i> ; published online Oct. 16, 2014; doi:10.1016/j.celrep.2014.09.025 Contact: Deborah J. Clegg, The University of Texas Southwestern Medical Center, Dallas, Texas e-mail: deborah.clegg@ushs.org
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