



This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Familial hemiplegic migraine type 1 (FHM1)	Calcium channel, voltage-dependent, P/Q type, α1A subunit (CACNA1A)	Studies in mice suggest that mutations in the <i>CACNA1A</i> gene could be useful for predicting migraine susceptibility. In transgenic mice, expression of the S218L <i>Cacna1a</i> gene mutation, which is linked to severe FHM1, led to increased susceptibility to abnormal cortical electrophysiological events compared with what was seen in mice expressing the R192Q mutation, which is linked to a milder form of FHM1. Those events were more noticeable in female than in male mice but were absent in ovariectomized female mice, suggesting that ovarian hormones contribute to the observed differences between FHM1 males and females. Next steps could include identifying additional mutations in the <i>CACNA1A</i> gene and determining the extent to which they affect abnormal cortical events.	Patent and licensing status unavailable	Eikermann-Haerter, K. et al. J. Clin. Invest.; published online Dec. 22, 2008; doi:10.1172/JCI36059 Contact: Cenk Ayata, Massachusett General Hospital, Harvard Medical School, Boston, Mass. e-mail: cayata@partners.org
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