This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Various				
Autoimmune disease; neurological disease	Potassium channels	<i>In vitro</i> studies suggest that calixarene-based compounds could block potassium channels to treat autoimmune disorders, diabetes, epilepsy and other diseases. Analogs of calix[4]arene, a four-membered ring structure with the conical shape characteristic of calixarenes, penetrated the extracellular region of potassium channels in the Kv1.x (KCN) subfamily. Electrophysiological measurements showed that low micromolar concentrations of the analogs inhibited potassium channel ion currents. Ongoing work includes developing additional analogs of the calix[4]arene ring structure with increased selectivity for specific potassium channels. SciBX 2(19); doi:10.1038/scibx.2009.807 Published online May 14, 2009	Unpatented; unlicensed	Martos, V. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online May 4, 2009; doi:10.1073/pnas.0813396106 Contact: Javier de Mendoza, Institute of Chemical Research of Catalonia, Tarragona, Spain e-mail: jmendoza@icq.es