

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Markers			
<i>NMDA receptor NR2A subtype (GRIN2A; NR2A) genotype as a marker for responsiveness to Parkinson's disease (PD) therapeutics</i>	<p>Genetic studies suggest the <i>GRIN2A</i> genotype could help determine patient responsiveness to PD therapies. In genome-wide association studies in 1,458 PD patients and 931 controls, heavy coffee drinkers with the lowest risk variant of rs4998386 in <i>GRIN2A</i> had an 81% reduced risk of PD than those with the highest risk variant. The findings were replicated in an additional cohort. Next steps include collaboration with pharmaceutical companies.</p> <p>Caffeine is an adenosine A_{2A} receptor (ADORA_{2A}) antagonist. Istradefylline, an ADORA_{2A} antagonist from Kyowa Hakko Kirin Co. Ltd., is in Phase III testing to treat PD. FDA issued a not approvable letter for the compound in 2008.</p> <p>Preladenant, a selective ADORA_{2A} antagonist from Merck & Co. Inc. is in Phase III testing for the same indication.</p> <p>At least four other companies have ADORA_{2A} antagonists in Phase II testing or earlier development for PD.</p> <p>SciBX 4(35); doi:10.1038/scibx.2011.1004 Published online Sept. 8, 2011</p>	Patent application filed; available for licensing	<p>Hamza, T.H. <i>et al. PLoS Genet.</i>; published online Aug. 18, 2011; doi:10.1371/journal.pgen.1002237</p> <p>Contact: Haydeh Payami, New York State Department of Health Wadsworth Center, Albany, N.Y. e-mail: hpayami@wadsworth.org</p>