This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Parkinson's disease (PD)	Adenosine A_{2A} receptor	A structure-activity relationship study identified a series of 2-amino-*N*-pyrimidin-4-yl acetamide compounds as adenosine A_{2A} receptor antagonists that could be useful for treating PD. In a rat model of PD, the compounds showed bioavailability and efficacy. Next steps include further optimization of compound selectivity for A_{2A} versus adenosine A1 receptor and evaluation of the compounds in other models of PD. Last year, Kyowa Hakko Kogyo Ltd. submitted an NDA to the FDA for istradefylline, an adenosine A_{2A} receptor antagonist, for use as adjunctive therapy to levodopa/carbidopa to treat idiopathic PD. At least three other adenosine A_{2A} receptor antagonists are in development to treat PD: SCH 420814 from Schering-Plough Corp. is in Phase II testing,BIIB014 from Biogen Idec Inc. and Vernalis plc is in Phase II testing, and SYN-115 from Synosia Therapeutics Inc. and Roche is in Phase I testing.	Patent application covering the series of compounds was filed worldwide for indications in which A_{2A} antagonists would be useful, including Parkinson's disease; available for licensing outside EU	Slee, D. *et al. J. Med. Chem.;* published online Jan. 12, 2008; doi:10.1021/jm070623o **Contact:** Deborah H. Slee, Neurocrine Biosciences, San Diego, Calif. e-mail: dslee@neurocrine.com