

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Adenosine A _{2A} receptor (ADORA _{2A}); ADORA _{2B} ; ecto-5'-nucleotidase (NT5E; NT; CD73)	<p>Mouse studies suggest inhibiting ADORA_{2A} or ADORA_{2B} could help prevent metastasis of CD73⁺ tumors. Expression of CD73 in tumor cells is known to enhance metastasis, but the downstream mechanisms underlying this effect were not known. In mouse models of breast cancer and melanoma, ectopic Cd73 expression promoted the conversion of AMP to adenosine and increased lung metastases compared with ectopic GFP expression. In a mouse model of Cd73⁺ metastatic melanoma, an ADORA_{2A} or ADORA_{2B} antagonist decreased lung metastases compared with no antagonists.</p> <p>Researchers did not disclose next steps, which could include evaluating adenosine receptor antagonists in additional animal models of CD73⁺ tumors.</p> <p>Kyowa Hakko Kirin Co. Ltd. markets Nouriasitradefylline, an ADORA_{2A} antagonist, to treat Parkinson's disease (PD).</p> <p>At least eight other companies have ADORA_{2A} antagonists in Phase II testing or earlier to treat PD or other CNS disorders.</p> <p>SciBX 6(36); doi:10.1038/scibx.2013.989 Published online Sept. 19, 2013</p>	Patent and licensing status undisclosed	<p>Beavis, P.A. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Aug. 20, 2013; doi:10.1073/pnas.1308209110</p> <p>Contact: Phillip K. Darcy, Peter MacCallum Cancer Centre, East Melbourne, Victoria, Australia e-mail: phil.darcy@petermac.org</p>