

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Brain cancer	Cyclooxygenase-2 (COX-2); viral polymerase	<p><i>In vitro</i>, primary tumor and mouse studies suggest that human cytomegalovirus (CMV) antivirals and/or COX-2 inhibitors could help treat medulloblastoma. More than 90% of primary medulloblastoma tumors expressed CMV proteins, which correlated with increased COX-2 expression. In mice bearing CMV-positive human medulloblastomas, compared with CMV-negative xenografts, valganciclovir and/or celecoxib decreased growth by up to 72%. Ongoing work includes further elucidation of CMV's role in brain tumor growth and progression.</p> <p>Roche markets the viral polymerase inhibitor Cytovene ganciclovir to treat CMV infection. Roche and Mitsubishi Tanabe Pharma Corp. market Valcyte valganciclovir, a prodrug of ganciclovir, to treat CMV infection. Pfizer Inc. and Astellas Pharma Inc. market Celebrex celecoxib, an inhibitor of COX-2 and mammalian target of rapamycin (mTOR; FRAP; RAFT1) to treat pain, rheumatoid arthritis (RA), osteoarthritis and other autoimmune indications. Pfizer also has the compound in Phase II/III testing to treat skin cancer and Phase II testing to treat lung cancer.</p> <p>SciBX 4(40); doi:10.1038/scibx.2011.1108 Published online Oct. 13, 2011</p>	Patent status undisclosed; available for licensing or partnering	<p>Baryawno, N. <i>et al. J. Clin. Invest.</i>; published online Sept. 26, 2011; doi:10.1172/JCI57147</p> <p>Contact: Cecilia Söderberg-Nauclér, Karolinska Institute, Stockholm, Sweden e-mail: cecilia.naucler@ki.se</p> <p>Contact: John Inge Johnsen, same affiliation as above e-mail: John.Inge.Johnsen@ki.se</p>