This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Brain cancer	Colony-stimulating factor 1 receptor (CSF1R; C-FMS; CD115)	<p>Mouse studies suggest the brain-penetrant CSF1R inhibitor BLZ945 could be used to treat glioblastoma multiforme (GBM). In a mouse model of platelet derived growth factor B (PDGFB; PDGF2)-driven proneural GBM, BLZ945 inhibited tumor-associated macrophages and blocked glioma growth, and it increased survival compared with vehicle. In mice with proneural GBM xenografts, BLZ945 decreased tumor growth, tumor invasion and expression of activated macrophage markers associated with tumor-promoting functions compared with vehicle. Next steps could include using CSF1R inhibitors in combination with glioma cell-directed therapies.</p> <p>The Novartis Institutes for BioMedical Research synthesized BLZ945 and collaborated on this study. The development status of the compound is undisclosed.</p> <p>Array BioPharma Inc. has the small molecule CSF1R inhibitor ARRY-382 in Phase I testing to treat cancer.</p> <p>Amgen Inc. has the humanized mAb AMG 820 in Phase I trials to treat cancer.</p> <p>Eli Lilly and Co. has the humanized mAb IMC-CS4 in Phase I testing to treat solid tumors.</p> <p>Roche has the humanized mAb RG7155 in Phase I trials to treat solid tumors.</p> <p>SciBX 6(42); doi:10.1038/scibx.2013.1182 Published online Oct. 31, 2013</p>	Patent application filed by Novartis AG and the Memorial Sloan-Kettering Cancer Center; licensing status undisclosed	<p>Pyonteck, S.M. <i>et al. Nat. Med.</i>; published online Sept. 22, 2013; doi:10.1038/nm.3337</p> <p>Contact: Johanna A. Joyce, Memorial Sloan-Kettering Cancer Center, New York, N.Y.</p> <p>e-mail: joycej@mskcc.org</p>