This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Lung cancer	PD-1 receptor (PDCD1; PD-1; CD279); programmed cell death 1 ligand 1 (CD274 molecule; PD-L1; B7-H1); epidermal growth factor receptor (EGFR)	Primary tumor and mouse studies suggest inhibitors of PD-1 and PD-L1 could help treat lung cancer harboring *EGFR* mutations. In primary lung tumors and transgenic mouse models of lung cancer, mutations in *EGFR* were associated with increased expression of PD-1 or PD-L1. In transgenic mouse models with *EGFR* mutations, a murine anti-Pd-1 mAb decreased tumor growth and increased survival compared with no treatment. Ongoing work includes testing combinations of EGFR and PD-1 or PD-L1 inhibitors in mouse models of lung cancer. Ono Pharmaceutical Co. Ltd. and Bristol-Myers Squibb Co. have nivolumab (ONO-4538; MDX-1106; BMS-936558), a human mAb against PD-1, in Phase III testing to treat non–small cell lung cancer (NSCLC), renal cancer and melanoma and in Phase I testing to treat liver cancer and solid tumors. Roche and its Genentech Inc. unit have RG7446 (MPDL3280A), a human mAb against PD-L1, in Phase II testing to treat NSCLC and Phase I testing to treat melanoma and solid tumors. Merck & Co. Inc. has MK-3475, an anti-PD-1 mAb, in Phase II/III trials to treat NSCLC and in Phase III testing to treat melanoma. At least five other companies have anti-PD-1 or anti-PD-L1 antibodies in Phase II or earlier development. ***SciBX*** **6(41); doi:10.1038/scibx.2013.1159** **Published online Oct. 24, 2013**	Unpatented; unlicensed; available for partnering	Akbay, E.A. *et al. Cancer Discov.*; published online Sept. 27, 2013; doi:10.1158/2159-8290.CD-13-0310 **Contact:** Kwok-Kin Wong, Dana-Farber Cancer Institute, Boston, Mass. e-mail: kwong1@partners.org