

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Melanoma; prostate cancer; colon cancer	CTLA-4 (CD152)	<p>Mouse studies suggest combining oncolytic Newcastle disease virus (NDV) and CTLA-4 inhibitors could help treat melanoma and other solid tumor types. In mice bearing melanoma tumors in each flank, NDV injection into tumors in one flank increased tumor antigen-specific CD8⁺ T cell infiltration and decreased tumor growth in both flanks compared with vehicle injection. In mice bearing bilateral melanoma, prostate or colon tumors, NDV injection into tumors in one flank plus a systemic antibody against mouse CtlA-4 decreased bilateral tumor growth and increased survival compared with injection of either agent alone. Ongoing work includes testing an NDV vector expressing undisclosed genes in the melanoma models.</p> <p>Bristol-Myers Squibb Co. markets Yervoy ipilimumab (BMS-734016), a human mAb against CTLA-4, to treat melanoma. The pharma also has the mAb in Phase III testing to treat prostate cancer and Phase II testing to treat non-small cell lung cancer (NSCLC), pancreatic cancer and solid tumors.</p> <p>Pfizer Inc. and AstraZeneca plc have tremelimumab (CP-675; CP-675206), a human mAb against CTLA-4, in Phase II testing to treat liver cancer and solid tumors and Phase I trials to treat melanoma and prostate cancer.</p> <p>Amgen Inc. has the combination of Talimogene laherparepvec (OncoVEX GM-CSF), a modified herpes simplex virus type 1 (HSV-1) encoding granulocyte macrophage colony-stimulating factor (GM-CSF; CSF2), and Yervoy in Phase Ib/II testing to treat melanoma. Amgen also has Talimogene monotherapy in Phase III testing to treat melanoma.</p> <p>SciBX 7(13); doi:10.1038/scibx.2014.371 Published online April 3, 2014</p>	<p>Patented by the Icahn School of Medicine at Mount Sinai and the Memorial Sloan-Kettering Cancer Center; available for licensing or partnering</p>	<p>Zamarin, D. <i>et al. Sci. Transl. Med.</i>; published online March 5, 2014; doi:10.1126/scitranslmed.3008095 Contact: Dmitriy Zamarin, Memorial Sloan-Kettering Cancer Center, New York, N.Y. e-mail: zamarind@mskcc.org Contact: James P. Allison, The University of Texas MD Anderson Cancer Center, Houston, Texas e-mail: jallison@mdanderson.org</p>