This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Lymphoma	IL-6; janus kinase-2 (JAK-2); JAK-3	Mouse studies suggest that inhibiting IL-6 or JAK-2 could increase the effect of chemotherapy in lymphoma. In doxorubicin-treated mice with transplanted lymphomas, IL-6 deficiency led to longer tumor-free and overall survival and less residual disease than IL-6 expression. In a mouse model of Burkett's lymphoma, doxorubicin plus a JAK-2 and JAK-3 inhibitor improved tumor-free and overall survival compared with either agent alone. Next steps could include testing JAK-2 or IL-6 inhibitors in combination with additional chemotherapy agents. At least seven companies have inhibitors of JAK-2 in development from preclinical to Phase III testing to treat cancer. At least eight companies have inhibitors of IL-6 in development from preclinical to Phase II testing for cancer and autoimmune indications. SciBX 4(1); doi:10.1038/scibx.2011.8 Published online Jan. 6, 2011	Patent and licensing status unavailable	Gilbert, L.A. & Hemann, M.T. <i>Cell</i>; published online Oct. 28, 2010; doi:10.1016/j.cell.2010.09.043 Contact: Michael T. Hemann, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: hemann@mit.edu