This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Eukaryotic translation initiation factor 4F (eIF4F)	<i>In vitro</i> and mouse studies identified an inhibitor of the eIF4F complex that could lower the resistance of cancers to chemotherapy. A high throughput screen identified a small molecule inhibitor that prevented dimerization between eIF4F and either eIF4G or eukaryotic translation initiation factor 4E binding protein 1 (eIF4EBP1; 4EBP1). In breast cancer and HeLa cells, the inhibitor prevented cap-dependent translation and pro-oncogenic protein synthesis. In a mouse model of doxorubicin-resistant lymphoma, doxorubicin plus the eIF4F inhibitor caused tumor regression compared with either agent alone. Next steps could include testing eIF4F inhibitors with other chemotherapeutics.	Patent and licensing status unavailable	Cencic, R. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online Dec. 27, 2010; doi:10.1073/pnas.1011477108 Contact: Jerry Pelletier, McGill University, Montreal, Quebec, Canada e-mail: jerry.pelletier@mcgill.ca
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