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THE DISTILLERY

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Identification of compounds that selectively kill cancer stem cells	A study in cultured cancer stem cells and mouse xenografts identified compounds that could help kill cancer stem cells that are resistant to chemotherapy. Mammary epithelial cells with cancer stem cell–like properties were generated and used to screen a 16,000-compound small molecule library. Thirty-two compounds were identified that were more toxic to breast cancer stem cells than to non–stem cell types of tumor cells. The most potent of the compounds—salinomycin, a generic veterinary antibiotic—decreased cancer stem cell levels 20-fold compared with mock treatment. In mouse xenografts, salinomycin-treated cancer stem cells had lower metastatic capacity than mock-treated controls. Next steps include developing drug-like derivatives of salinomycin or other compounds identified in the screen and conducting further xenograft experiments. *SciBX* 2(33); doi:10.1038/scibx.2009.1295 Published online Aug. 27, 2009	Patent pending; available for licensing	Gupta, P.B. *et al. Cell*; published online Aug. 13, 2009; doi:10.1016/j.cell.2009.06.034 **Contact:** Piyush B. Gupta, Broad Institute of MIT and Harvard, Cambridge, Mass. e-mail: piyush@broadinstitute.org **Contact:** Eric S. Lander, same affiliation as above e-mail: lander@broadinstitute.org **Contact:** Robert A. Weinberg, Whitehead Institute for Biomedical Research, Cambridge, Mass. e-mail: weinberg@wi.mit.edu

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