

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Nuclear assembly factor 1 ribonucleoprotein (NAF1); CDGSH iron sulfur domain 1 (CISD1; mitoNEET)	<i>In vitro</i> and mouse studies suggest inhibiting mitochondrial NAF1 or CISD1 could help treat breast cancer. In three human breast cancer cell lines, NAF1 and CISD1 levels were higher than those in a human epithelial breast cell line. In the cancer cell lines, small hairpin RNA against <i>NAF1</i> or <i>CISD1</i> increased mitochondrial iron and reactive oxygen species levels and decreased proliferation compared with scrambled shRNA. In a mouse xenograft model of human breast cancer, shRNA knockdown of <i>NAF1</i> or <i>CISD1</i> decreased tumor growth compared with no knockdown. Next steps could include identifying and testing pharmacological inhibitors of NAF1 and CISD1. SciBX 6(36); doi:10.1038/scibx.2013.988 Published online Sept. 19, 2013	Patent and licensing status unavailable	Sohn, Y.-S. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online Aug. 19, 2013; doi:10.1073/pnas.1313198110 Contact: Ron Mittler, University of North Texas, Denton, Texas e-mail: ron.mittler@unt.edu Contact: Rachel Nechushtai, The Hebrew University of Jerusalem, Jerusalem, Israel e-mail: rachel@vms.huji.ac.il Contact: Patricia A. Jennings, University of California, San Diego, La Jolla, Calif. e-mail: pajennings@ucsd.edu Contact: José N. Onuchic, Rice University, Houston, Texas e-mail: jonuchic@rice.edu