This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Transmembrane protein 142A (ORAI1; TMEM142A; CRACM1); Stromal interaction molecule-1 (STIM-1)	<i>In vitro</i> and mouse studies suggest that ORAI1 and STIM-1 are necessary for breast tumor metastasis and could be targeted to prevent the spread of cancer. <i>In vitro</i> , inhibition of Ca ²⁺ entry with SKF96365 or small interfering RNA knockdown of either ORAI1 or STIM-1 blocked Ca ²⁺ influx and decreased serum-induced cell migration compared with what was seen in controls. The studies also showed that blocking Ca ²⁺ influx prevented the focal adhesion turnover necessary for tumor cell migration. In mice with mammary gland tumors, SKF96365 lowered lung metastasis by 80% compared with that seen using control buffer. Next steps could include studying other metastasis animal models with both primary and secondary tumor formation.	Patent and licensing status unavailable	Yang, S. <i>et al. Cell</i> ; published online Feb. 2, 2009; doi:10.1016/j.ccr.2008.12.019 Contact: Xin-Yun Huang, Weill Medical College of Cornell University, New York, N.Y. e-mail: xyhuang@med.cornell.edu
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