

THE DISTILLERY

This week in therapeutics

| Indication | Target/marker/ pathway | Summary | Licensing status | Publication and contact information |
|------------|---|---|--|---|
| Cancer | | | | |
| Cancer | CD47; thrombospondin-1 (TSP-1; THBS1) | <i>In vitro</i> and mouse studies suggest that blocking CD47 signaling could help boost the efficacy of radiotherapy while protecting healthy tissues. Cultured cells treated antibodies against CD47 or its ligand, TSP-1, as well as CD47 antisense, showed lower susceptibility to radiation-induced cell death than untreated control cells. In mice, CD47 antisense reduced radiation-induced damage to vascular cells, skeletal muscle and bone marrow compared with vehicle or mismatched antisense control. In tumor-bearing mice, CD47 antisense plus radiation delayed tumor regrowth by 89% compared with radiation alone. Next steps include pharmacokinetic and toxicology studies. <i>SciBX</i> 2(43); doi:10.1038/scibx.2009.1594 Published online Nov. 5, 2009 | Patent applications filed; available for licensing | Maxhimer, J. <i>et al. Sci. Transl. Med.</i> ; published online Oct. 21, 2009; doi:10.1126/scitranslmed.3000139 Contact: David D. Roberts, National Institutes of Health, Bethesda, Md. e-mail: droberts@helix.nih.gov Contact: Lisa Ridnour, same affiliation as above e-mail: ridnourl@mail.nih.gov Contact: David Wink, same affiliation as above e-mail: wink@mail.nih.gov |