



This week in therapeutics

| Indication | Target/marker/pathway | Summary | Licensing status | Publication and contact information |
|------------|-----------------------|---|------------------|---|
| Cancer | | | | |
| Cancer | Not applicable | Mouse studies suggest activating autophagy or increasing ATP release from tumor cells could help treat cancer. In a mouse xenograft model of colorectal cancer, the generic chemotherapeutic mitoxantrone induced autophagy and increased immunogenic ATP release compared with saline. In mice with mitoxantrone-treated human colorectal cancer cells, transplantation of autophagy-deficient cells decreased ATP release and the antitumor immune response and increased tumor growth compared with transplantation of autophagy-competent cells. Next steps could include developing strategies to promote autophagy or immunogenic ATP release in autophagy-deficient cancers. Hydroxychloroquine, a generic inhibitor of autophagy, is in investigator-led Phase II trials for various cancers. | | Michaud, M. et al. Science; published online Dec. 16, 2011; doi:10.1126/science.1208347 Contact: Laurence Zitvogel, Institut National de la Santé et de la Recherche Médicale (INSERM), Villejuif, France e-mail: zitvogel@igr.fr Contact: Guido Kroemer, same affiliation as above e-mail: kroemer@orange.fr |
| | | SciBX 5(3); doi:10.1038/scibx.2012.70 Published online Jan. 19, 2012 | | |