

THE DISTILLERY

This week in therapeutics

| Indication | Target/marker/pathway | Summary | Licensing status | Publication and contact information |
|--------------|-----------------------|--|---|---|
| Cancer | | | | |
| Brain cancer | Not applicable | <i>In vitro</i> and mouse studies suggest amphotericin B (AmpB) or other activators of microglia could help treat gliomas. In cultured, brain tumor–initiating cells from patients with glioma, media conditioned with microglia and macrophages decreased brain tumor–initiating cell proliferation and self-renewal capacity compared with media conditioned with astrocytes or neurons. The inhibition of cancer stem cell activity by the conditioned media was enhanced by AmpB, an antifungal agent, which activated microglia. In mice with intracranially injected human brain tumor–initiating cells, systemic AmpB increased macrophage and microglia recruitment and activation, decreased tumor volume and extended survival compared with vehicle. Next steps include testing AmpB in a clinical trial to treat glioblastoma. AmpB is a generic antifungal. | Unpatented; licensing status not applicable | Sarkar, S. <i>et al. Nat. Neurosci.</i> ; published online Dec. 8, 2013; doi:10.1038/nn.3597 Contact: V. Wee Yong, University of Calgary, Calgary, Alberta, Canada e-mail: vyong@ucalgary.ca |

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