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THE DISTILLERY

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Heat shock protein 90 (HSP90AA1; Hsp90)	Studies in mice and cell culture suggest that gamitrinibs may be useful for treating cancer. Gamitrinibs consist of a 17-(allylamino)-17-demethoxygeldanamycin (17-AAG)-derived scaffold linked to a mitochondrial targeting moiety. In human leukemia, breast cancer and lung cancer xenograft mouse models, a gamitrinib analog decreased tumor proliferation compared with that seen using vehicle or 17-AAG. In cancer cell lines, gamitrinibs entered mitochondria, inhibited Hsp90 activity and induced cell death via mitochondrial apoptosis. Gamitrinibs also had broad-spectrum activity across a panel of 12 cancer cell lines, whereas 17-AAG did not. Next steps include evaluating gamitrinibs in long-term studies in animals. Tanespimycin (17-AAG), an Hsp90 inhibitor from Bristol-Myers Squibb Co., is in Phase III testing to treat multiple myeloma (MM). At least 11 other companies have Hsp90 inhibitors in Phase II or earlier to treat cancer. *SciBX* 2(10); doi:10.1038/scibx.2009.395 Published online March 12, 2009	Multiple patent applications filed covering structure and biology of the compounds; available for licensing from the University of Massachusetts Commercial Ventures and Intellectual Property **Contact:** James McNamara, University of Massachusetts Medical School, Worcester, Mass. phone: 508-856-4390 e-mail: james.mcnamara@umassmed.edu	Kang, B.H. *et al. J. Clin. Invest.*; published online Feb. 23, 2009; doi:10.1172/JCI37613 **Contact:** Dario C. Altieri, University of Massachusetts Medical School, Worcester, Mass. e-mail: dario.altieri@umassmed.edu