This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Acute promyelocytic leukemia (APL)	Fusion oncoprotein of promyelocytic leukemia (PML) and retinoic acid receptor-α (RARA) (PML-RARA)	Studies in mice and in cell culture suggest that inducing degradation of PML-RARA to eliminate cancer stem cells could help prevent APL relapse. High rates of complete clinical remission have been seen in APL patients treated with retinoic acid and arsenic trioxide. In an APL mouse model, retinoic acid and arsenic removed leukemia cancer stem cells through cooperative degradation of PML-RARA. Cell culture assays showed that activation of cyclic adenosine monophosphate (cAMP) signaling increased stem cell clearance, and they showed that cAMP-dependent phosphorylation of PML-RARA is necessary for PML-RARA degradation. Researchers did not disclose next steps, which may include targeting cAMP signaling to further enhance PML-RARA degradation and evaluating the oncoprotein degradation as a general therapeutic strategy in other forms of cancer. *SciBX* **1**(44); doi:10.1038/scibx.2008.1066 Published online Dec. 11, 2008	Patent application filed; available for licensing from the University Paris Diderot-Paris Technology Transfer Office **Contact:** Laurence Le Texier, University Paris Diderot-Paris, Paris, France e-mail: laurence.letexier@univ-paris-diderot.fr	Nasr, R. *et al. Nat. Med.*; published online Nov. 23, 2008; doi:10.1038/nm.1891 **Contact:** Hugues de Thé, University Paris Diderot-Paris, Paris, France e-mail: dethe@univ-paris-diderot.fr