



This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Myelodysplastic syndromes (MDS)	Retinoblastoma protein (Rb)	Studies in mice suggest that manipulating Rb expression in hematopoietic cells could be a strategy for treating MDS and other erythropoiesis disorders. Rb is a cell-cycle regulator of the G1-to-S-phase transition. Erythroid-specific knockout of Rb in mice led to anemia and poor bone marrow erythropoiesis compared with control mice. Rb-null erythroid progenitors also failed to develop from early to late erythroblasts, a developmental abnormality often seen in human MDS. Future research is necessary to validate the mouse model before developing a therapeutic. No fewer than 16 companies have MDS therapeutics in development stages ranging from preclinical to marketed.	Research not patented; unavailable for licensing	Sankaran, V. et al. Genes Dev.; published online Feb. 7, 2008; doi:10.1101/gad.1627208 Contact: Stuart H. Orkin, Harvard Medical School, Boston, Mass. e-mail: stuart_orkin@dfci.harvard.edu