

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Ophthalmic disease				
Retinal degeneration	Channelrhodopsin-2 (ChR2)	A study in mice suggests that light-sensitive ChR2 could be useful for treating retinal degeneration. In a mouse model of retinal degeneration, expression of ChR2 in ON retinal bipolar cells increased light responsiveness of retinas compared with that of retinas in mice that did not express ChR2. Mice treated with ChR2 showed improved performance in visual behavioral tasks compared with performance of untreated animals. Next steps include transfection studies in OFF retinal bipolar cells and developing more efficient transfection techniques.	Patents filed for use of light-sensitive genes to treat blindness; unavailable for licensing	Lagali, P.S. <i>et al. Nat. Neurosci.</i> ; published online April 27, 2008; doi:10.1038/nn.2117 Contact: Botond Roska, Friedrich Miescher Institut, Basel, Switzerland e-mail: botond.roska@fmi.ch