

## This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Ophthalmic disease</b>				
Retinitis	Halorhodopsin	<p><i>In vitro</i>, <i>ex vivo</i> and mouse studies suggest that <i>Natronomonas pharaonis</i> halorhodopsin gene therapy could help treat retinitis pigmentosa, a disease characterized by rod photoreceptor death and cone photoreceptor light insensitivity. In a mouse model of retinal degeneration, adeno-associated virus (AAV)-mediated gene delivery of halorhodopsin resensitized cones to light and improved behavioral responses to light compared with AAV-mediated delivery of a control protein. In <i>ex vivo</i> human retinas, halorhodopsin restored sensitivity to light-insensitive photoreceptors compared with no treatment. Next steps could include testing the gene therapy in additional animal models to determine its effect on photoreceptor survival.</p> <p><b>SciBX 3(27); doi:10.1038/scibx.2010.836</b>  <b>Published online July 15, 2010</b></p>	Patent and licensing status unavailable	<p>Busskamp, V. <i>et al. Science</i>; published online June 24, 2010; doi:10.1126/science.1190897  <b>Contact:</b> Botand Roska, Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland                      e-mail: <a href="mailto:botond.roska@fmi.ch">botond.roska@fmi.ch</a></p>