This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Other				
Hearing loss	γ -Secretase; notch 1 (NOTCH1)	<p>Studies in cell culture and in rodents suggest blocking NOTCH1 processing using γ-secretase inhibitors could help treat hearing loss. In cultured inner ear stem cells and inner ear tissue explants, small molecule inhibitors of γ-secretase induced growth of middle ear hair cells, which are damaged in noise-induced hearing loss. In mouse models of hereditary and noise-induced hearing loss, local or systemic delivery of a γ-secretase inhibitor caused the regrowth of hair cells and restored hearing. Next steps could include optimizing dosage and delivery to minimize toxicity of γ-secretase inhibitors.</p> <p>Audion Therapeutics B.V., cofounded by the study's leader, and Inception 3 Inc., have preclinical compounds to treat hearing loss.</p> <p>SciBX 6(2); doi:10.1038/scibx.2013.40 Published online Jan. 17, 2013</p>	Patent pending; licensing status undisclosed	<p>Mitzutari, K. <i>et al</i> <i>Neuron</i>; published online Jan. 9, 2013; doi:10.1016/j.neuron.2012.10.032 Contact: Albert S.B. Edge, Harvard Medical School, Boston, Mass. e-mail: albert_edge@meci.harvard.edu</p>