

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Renal disease				
Kidney disease	Notch 1 receptor (N1 receptor); N1 receptor intracellular domain (ICN1); γ -secretase	<p><i>In vitro</i> and <i>in vivo</i> experiments suggest that antagonizing the Notch pathway might help treat kidney disease. ICN1 levels were higher both in the kidneys of mice with glomerular disease and in the kidneys of patients with diabetic nephropathy and glomerulosclerosis than they were in healthy controls. Inhibition of the Notch pathway with a γ-secretase inhibitor protected rats with proteinuric kidney disease. γ-secretase activates the Notch pathway by cleaving ICN1 from the membrane-bound N1 receptor. The researchers are seeking a biotech or pharma partner for clinical testing of a Notch pathway inhibitor in renal indications.</p> <p>There are at least two γ-secretase inhibitors in clinical development: LY450139 from Eli Lilly and Co. is in Phase II testing to treat Alzheimer's disease, and MK-0752 from Merck & Co. Inc. is in Phase I testing to treat breast cancer.</p>	International patent application submitted covering use of γ -secretase inhibitors and other Notch pathway blockers to treat renal disease; available for licensing	<p>Niranjan, T. <i>et al. Nat. Med.</i>; published online March 2, 2008; doi:10.1038/nm1731</p> <p>Contact: Katalin Susztak, Albert Einstein College of Medicine, Bronx, N.Y. e-mail: ksusztak@aecom.yu.edu</p>