

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Stroke	Platelet-derived growth factor receptor- α (PDGFR- α)	<p>Studies in mice suggest that blocking PDGFR-α signaling in the brain could improve stroke patients' responses to the clot buster tissue plasminogen activator (tPA). In a mouse model of ischemic stroke, the PDGFR-α inhibitor Gleevec imatinib significantly reduced cerebrovascular permeability and infarct size compared with vehicle control ($p < 0.05$). In the same models, administration of Gleevec, after onset of ischemia but before administration of tPA, significantly reduced intracerebral hemorrhage compared with saline vehicle plus tPA ($p < 0.05$). Next steps include studying the safety and efficacy of the imatinib-tPA combination in stroke patients in a Swedish trial set to begin this quarter.</p> <p>Gleevec, a Bcr-Abl tyrosine kinase inhibitor, is marketed by Novartis AG to treat chronic myelogenous leukemia (CML) and gastrointestinal stromal tumors (GIST).</p> <p>Genentech Inc. and Boehringer Ingelheim GmbH market the tPA Activase alteplase to treat acute ischemic stroke, pulmonary embolism and myocardial infarction.</p>	<p>Research has been patented; available for licensing from the Ludwig Institute for Cancer Research</p>	<p>Su, E. <i>et al. Nat. Med.</i>; published online June 22, 2008; doi:10.1038/nm1787</p> <p>Contact: Daniel Lawrence, University of Michigan Medical School, Ann Arbor, Mich. e-mail: dlawrenc@umich.edu</p>