This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Markers			
<i>Paraoxonase-1 (PON-1)</i> genotyping to guide use of clopidogrel to prevent stent thrombosis	<i>PON-1</i> genotyping could be used to avoid prescribing clopidogrel to patients that metabolize the drug inefficiently. Clopidogrel's variable efficacy for preventing stent thrombosis has been attributed to patient genetic factors that contribute to inefficient metabolism and activation of the drug. <i>In vitro</i> metabolomic profiling showed that the <i>PON-1</i> Q192R mutation led to the most efficient clopidogrel bioactivation. In stented patients receiving clopidogrel, homozygous subjects were more likely to have lower plasma amounts of both active <i>PON-1</i> and active clopidogrel metabolite, less platelet inhibition and to experience stent thrombosis compared with heterozygous subjects. Next steps include larger prospective randomized controlled trials investigating clinical endpoints with <i>PON-1</i> genotyping. Iscover/Plavix (clopidogrel) is marketed by sanofi-aventis Group and Bristol-Myers Squibb Co. for several cardiovascular indications.	Unpatented; unavailable for licensing	Bouman, H.J. <i>et al. Nat. Med.</i> ; published online Dec. 19, 2010; doi:10.1038/nm.2281 Contact: Dirk Taubert, Maastricht University, Maastricht, the Netherlands e-mail: dirk.taubert@medizin.uni-koeln.de
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