Flecainide

General	
• Class of the drug:	Antiarrhythmics
• Synonym(s):	
• Common trade name(s) in Switzerland:	Tambocor®
• Conversion factors:	*mg/l x 2.41 = µmol/l* *µmol/l x 0.414 = mg/l*
Clinical pharmacology	
• Indications for TDM:	Dose adaptation during reduced liver and/or kidney function. Avoidance of toxic levels in CYP2D6 poor metabolizers.
• Protein binding:	40% (α_1-acid glycoprotein)
• Elimination half-life:	12-20 h
• Volume of distribution:	8.5 l/kg
• Metabolism:	
- Main metabolic pathways:	Via CYP2D6 (stereoselective) and conjugated metabolites
- Active metabolite(s)?	Meta-o-dealkyl-flecainide (activity approx. 20%, clinically not relevant)
- Inhibitor or inductor of the cytochrome P450 system?	Inhibitor of CYP2D6
- Other significant pharmacokinetic interactions:	Inhibitors of CYP2D6 (e.g. amiodarone, cimetidine) increase flecainide serum levels
• Elimination of parent drug:	Hepatic >70% Renal <30%
• Typical therapeutic range:	0.2-0.8 mg/l (0.5-1.9 µmol/l)
• Potentially toxic concentration:	>1mg/l (>2.4 µmol/l)
Pre-analytics	
• Time to steady-state since beginning of treatment or change of posology:	3-5 days
• Time for blood sampling:	Before next dose at steady state
• Type(s) of sample:	Serum or plasma
• Stability:	Several days at 4°C

Analytics	
• Position(s) in the analysis list/Method:	8635.02 HPLC/GC 8635.03 LC-MS/GC-MS
Remarks	Heart, kidney, and liver failure reduce flecainide clearance
References	• *ValdesR et al., Clin. Chem. 44 (1998) 1096* • *Campbell TJ and Williams KM, Br. J. Clin. Pharmacol. 46 (1998) 307* • *Jürgens G et al., Clin. Pharmacokinet. 42 (2003) 647*