Flecanide (serum)

Description	Flecanide is a Class 1C anti-arrhythmic drug which is used in the treatment of serious supraventricular and ventricular arrhythmias. It is prescribed as flecanide monoacetate and was originally marketed under the trade name Tambocor® although non-proprietary preparations are now available.
Indication	Flecanide has a narrow therapeutic range and toxic levels may induce life-threatening arrhythmias. The probability of adverse experiences may increase with higher trough serum levels. Periodic monitoring of flecanide levels may be useful for patient management and is especially indicated in patients with kidney or liver disease as elimination of flecanide may be markedly impaired.
Additional Info	**<u>Pharmacokinetics</u>:** Absorption of flecanide is almost complete following oral administration. It does not undergo extensive first-pass metabolism and bioavailability is approximately 90%. Peak concentrations occur within 1-6 hours post-dose. Flecanide is extensively metabolised by the liver and it has an elimination half-life of approximately 20 hours. Elimination is mainly via renal clearance, with 70% excreted as metabolites and 30% as the unchanged drug. Steady-state plasma concentrations are usually obtained within 3-5 days of starting treatment **<u>Action</u>:** Flecanide acts by blocking the Nav1.5 sodium channels of the heart. This increases the duration of the cardiac action potential, thereby slowing the electrical conduction of the heart and decreasing the contractility of the muscle. The effect of flecanide is heart rate-dependent and increases as heart rate increases. **<u>Toxicity</u>:** Flecanide has been shown to have pro-arrhythmic effects and can cause new supraventricular and ventricular arrhythmias, or worsen existing ones. In addition, flecanide acts to slow cardiac contraction and causes dose-related ECG changes, including: prolongation of

	the PR interval and widening of the QRS interval. Dose reductions may be indicated if the length of these intervals significantly increases.
Concurrent Tests	n/a
Dietary Requirements	n/a
Interpretation	Flecanide analysis is not performed by the laboratory at RLUH and samples are referred to an external laboratory. **Please contact the laboratory for further advice on interpretation of results.**
Collection Conditions	Pre-dose serum (**PLAIN TUBE**) blood samples should be taken for estimation of trough flecanide concentrations.
Frequency of testing	As required.