

<h2>Digoxin</h2>	
Description	Digoxin is measured to monitor therapeutic drug concentration, to allow adjustment of dosage, so avoiding sub-therapeutic or toxic levels.
Indication	Digoxin is prescribed mainly for the treatment of cardiac arrhythmias with or without congestive cardiac failure.
Additional Info	<p>Digoxin takes approximately one to two weeks to reach a steady state level in the blood and in the heart.</p> <p>Physiological changes that may affect levels of digoxin in the blood are: kidney function, thyroid problems, cancer and stomach or intestinal illness.</p> <p>Timing of the digoxin blood test is important. The sample should be collected at least 6-8 hours post dose. If the sample is collected too soon after the drug is taken, the results of the test may be erroneously high and may appear to be toxic when this is not the case.</p>
Concurrent Tests	Potassium, sodium, magnesium
Dietary Requirements	N/A
Interpretation	<p>The therapeutic range for digoxin is 0.5-2.0 ug/L, with a target of 0.5-1.0 ug/L in heart failure. (Pathology Harmony 2011/ 2012 FAQs).</p> <p>Digoxin is excreted via the kidney and will accumulate in renal failure.</p> <p>Hypokalaemia, hypernatraemia, or hypomagnesaemia increase the toxic cardiovascular effects of digoxin because of their depressive effects on the Na⁺/K⁺ ATPase pump.</p> <p>Toxicity is difficult to diagnose as anorexia, nausea and vomiting, mental confusion and cardiac arrhythmias may all be signs of both cardiac failure and digoxin toxicity. Specific signs of toxicity include bradycardia, bigeminy, reverse tick on ECG and visual disturbances.</p> <p>Digibind administration may be used to treat severe toxicity, but may falsely increase digoxin concentration.</p>
Collection Conditions	At least 6 hours post dose.
Frequency of testing	Long term monitoring