

**THERAPEUTIC DRUG MONITORING**

<b>Document number</b>	LA-75-WI-120E_03.30
<b>Revision date</b>	2024-Avr-24
<b>Required specimen type</b>	Blood sample
<b>Medical supplies</b>	<ul style="list-style-type: none"> <li>• Tube (refer to section 6 Individual Tests of the catalogue);</li> <li>• Biohazard bag.</li> </ul>
<b>General Guidelines</b>	<ol style="list-style-type: none"> <li>1) All specimens must include a double identification (first and last name of the patient and date of birth or medicare number).</li> <li>2) The use of gloves is required when handling all biological specimens.</li> <li>3) A valid requisition must include the following information :           <ul style="list-style-type: none"> <li>• First and last name of the patient, date of birth or medicare number and gender.</li> <li>• Date and time of specimen collection and signature of collector.</li> <li>• Physician's full name, signature and license number (or other qualified prescriber).</li> <li>• Any relevant clinical information.</li> <li>• Requested tests.</li> </ul> </li> </ol>
<b>Patient preparation</b>	N/A
<b>Specimen Collection Instruction</b>	<ol style="list-style-type: none"> <li>1) Wear protective gloves;</li> <li>2) Obtain the blood sample;</li> <li>3) Identify the tube with :           <ul style="list-style-type: none"> <li>• First and last name of the patient;</li> <li>• Date of birth and/or Medicare number.</li> </ul> </li> <li>4) On the requisition, indicate :           <ul style="list-style-type: none"> <li>• Date and time of the last dose of medication;</li> <li>• Date and time of collection.</li> </ul> </li> <li>5) Send the sample to the laboratory as soon as possible.</li> </ol>
<b>Additional information</b>	<p>Therapeutic drug monitoring allows you to:</p> <ol style="list-style-type: none"> <li>1) Ensure the patient is taking the proper dose of medication;</li> <li>2) Determine if the patient has an unusual reaction or condition to the administered medication;</li> <li>3) Evaluate the effect of the physical changes to the patient (e.g., pregnancy);</li> <li>4) Establish a dose which is suitable to the patient and which will optimize the effect of the drug.</li> </ol> <p>In general, the blood test should be taken in order to measure the concentration of the medication at its lowest level (also known as the trough level). This is the point just before taking the next dose of medication. However, certain medications such as the Aminoglycosides (e.g., Vancomycin), require the measurement at the highest point (also known as the peak level).</p> <p>Refer to a pharmaceutical manual or call the laboratory for more information, if required.</p> <p>The stable status or dynamic equilibrium is generally obtained after 5-7 consecutive doses of the half-life of the medication. The half-life of the medication is variable and varies between medications</p>
<b>Specimen Conservation and Stability</b>	Refer to section 6 Individual Tests of the catalogue