



Australian Government

Assessment Requirements for MSL975037

Perform chemical pathology tests

Release: 1

Assessment Requirements for MSL975037 Perform chemical pathology tests

Modification History

Release	Comments
Release 1	<p>This version was released in <i>MSL Laboratory Operations Training Package Release 2.0</i>.</p> <p>Supersedes and equivalent to MSL975004 Perform chemical pathology tests. Conditional/optional prerequisite removed – code retained. Changes to elements and performance criteria. Foundation skills information added. Range of conditions removed. Assessment requirements amended.</p>

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- safely performed at least 4 different tests or procedures associated with the detection and monitoring of tissue and bodily fluid responses to normal physiological processes and disease through the identification and quantifying of chemical components, including:
 - identifying and measuring chemical substances that are associated with organ dysfunction or indicators of success or failure of treatment
 - detecting and measuring drugs and toxins
 - testing for biological activity, such as assessment of enzyme activity indicative of organ/tissue damage
 - testing for evidence of prior exposure to infective agents such as identifying plasma changes that are consequent to, or associated with, immune responses (antigens and/or antibodies).

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- scientific, clinical, technical and workplace terminology relevant to normal and abnormal anatomy, physiology, biochemistry and immunology to enable efficient communication with laboratory and clinical staff
- workplace procedures for selection and use of testing procedures, in terms of the supposed or defined clinical problem
- handling of unstable or hazardous chemicals or samples and/or the fragile/labile nature of biological material

- processing and storage requirements for chemical pathology samples to ensure sample integrity prior and post testing
- principle and purpose of test methods implemented (why they are used and what they demonstrate)
- significance of quantifying routine biological ions, proteins and hormones
- significance of the detection and measurement of drugs, toxins, antibodies and antigens
- immunological concepts including:
 - acquired immunity
 - antibody structure and function
 - characteristics of polyclonal versus monoclonal antibodies
 - principle of immunological assays
- interpretation of test results that have meaningful clinical significance
- selection and use of quality control and quality assurance processes for the issuance of meaningful results
- sources of pre- and post-analytical errors and corrective actions
- management of work flow for effective and efficient use of resources
- technological advances that include automation
- awareness of environmental sustainability issues as they relate to the work task
- legal, ethical and work health and safety (WHS) requirements specific to the work task including traceability, confidentiality and security requirements of all clinical information, and laboratory data and records.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - a standard chemical pathology laboratory with relevant equipment, samples and reagents, laboratory information system, databases and record/filing system
 - instruments, such as manual and automated spectrometers and other related measurement devices, and various discrete and multi-channel analysers for chemical analytes
 - workplace procedures, test methods and equipment manuals.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Training Package Companion Volumes -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>