Unit 30: Haematology in Practice

Level: 4

Unit type: Optional (Laboratory Science)

Credit value: 30

Guided learning hours: 240

Unit summary

In this unit, you will apply the knowledge and skills gained in *Unit 19: General Laboratory Practice* to work in a haematology setting. You will also be required to demonstrate appropriate attitudes and behaviours, and to integrate your learning as you develop your professional practice.

Unit assessment requirements

There are no specific assessment requirements for this unit, however **learners completing this unit must also complete *Unit 19: General Laboratory Practice.*** Please refer to the assessment strategy in *Annexe B*.

Additional information

All procedures must be undertaken in accordance with the Standard Operating Procedure (SOP).

Learning outcome 2: the type of equipment that learners will be assessed using (automated/semi-automated or manual equipment) will depend on their specific area of clinical haematology.

AC2.3 includes:

- full blood count (FBC)
- when should a blood film be assessed
- plasma viscosity
- International normalised ratio **(**INR)
- D-dimers
- an infectious mononucleosis screen.

AC2.13 includes for:

- haemoglobin
- platelets
- neutrophils
- eosinophils
- red blood cells

- ESR/PV
- coagulation screen.

Learning outcomes and assessment criteria

To pass this unit, learners need to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements that the learner is expected to meet **in own area of work and in accordance with Standard Operating Procedures (SOPs)** to achieve the learning outcomes and the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the principles and practice of haematology	1.1	Compare the pre-analytical, analytical and post-analytical functions in a haematology setting			
		1.2	Explain the derivation and purpose of reference ranges in relation to routine haematology analyses			
		1.3	Describe the main cell types seen in normal blood			
		1.4	Discuss safe handling and preparation of human blood in a haematology setting			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Be able to perform routine analysis on equipment in haematology to specified quality standards	2.1	Explain the principles and practice of quality control, external quality assessment and quality management in haematology			
		2.2	Explain the role of audit and laboratory accreditation in haematology laboratories			
		2.3	Explain the common indications for routine measurements in haematology			
		2.4	Carry out a full blood count (FBC) and spread a blood smear			
		2.5	Carry out the measurement of plasma viscosity (PV) or erythrocyte sedimentation rate (ESR)			
		2.6	Carry out a manual differential count, recognising normal cells and referring samples with abnormal cells appropriately			
		2.7	Carry out the measurement of international normalised ratio (INR)			
		2.8	Carry out the measurement of D-dimers			
		2.9	Carry out a coagulation screen			
		2.10	Carry out an infectious mononucleosis screen			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		2.11	Maintain quality standards and related quality control, assessment and management techniques in haematology			
		2.12	Explain which FBC parameters are measured and which are calculated			
		2.13	Explain the steps needed to rectify a problem when an automated haematology analyser has 'flagged' that the white blood cells have not produced a differential count			
		2.14	Explain why different anti-coagulants are used for different tests			
		2.15	Describe common haematology conditions where a result is below or above the reference range			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Understand the impact of haematology on patients and the work of the multidisciplinary team	3.1	Describe a common condition that results in a raised plasma viscosity or Erythrocyte Sedimentation Rate and how this measurement contributes to the patient pathway			
		3.2	Describe a common condition that results in a raised D-dimer			
		3.3	Explain how the measurement of D-dimer contributes to the patient pathway			
		3.4	Explain the common symptoms experienced by a person who has infectious mononucleosis			
		3.5	Explain how an infectious mononucleosis screen contributes to the patient pathway			
		3.6	Describe partnership working in haematology settings as part of the delivery of a high-quality, safe, patient-centred services			
		3.7	Discuss how personalised medicine is/could be used in the diagnosis and treatment of conditions appropriate to own work area			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)