

**Note to the Faculty member creating or revising a case-based learning module or a self-learning module for the UGME Program.**

The following is a template for laboratory test results. Please enter only the results you need for your module. Please also enter the patient’s name and age. Values for the other fields such as “date of service” will be added to the module unless you wish to also add them.

The normal laboratory values have been updated to align with the Medical Council of Canada laboratory results available as of December 2022. Please feel free to use your own normal value ranges and if so, please indicate that you wish the normal values to be changed for your module. Also, if you think the normal values should be updated for all modules, please advise us. Finally, if you need to add laboratory values that are not listed in the template, please add them with the normal value ranges.

## Lab Results

**Patient Name:** (to be added by the content expert)      **Lab No:** 2020-FM234709823941 (to be changed for each patient)

**HC#:** 582937597198 (to be changed for each patient)      **Patient ID:** JS135 (to be changed for each patient)

**Age:** (to be added by the content expert)      **Referring Site:** Green Valley Hospital

**DOB:** (to be added for each patient)      **Id:** 2324 (to be changed for each patient)

**Date of Service:** (to be added for each patient)      **Reported by:** Leaf Labs

**Reported on:** (to be added for each patient)

**Ordered by:** Dr. XYZ (to be changed for each patient)

Hemogram	Flags	Results	Reference values	Units
Red blood cell (RBC) count				
Female			0.81–1.58	x10 <sup>12</sup> /L
Male			4.00–5.50	x10 <sup>12</sup> /L
Hemoglobin (Hb)				
Female			115–155	g/L
Male			125–170	g/L
Hematocrit (HCT)				
			0.38–0.50	L/L
Mean corpuscular volume (MCV)				
			80–100	fL
Mean corpuscular hemoglobin (MCH)				
			25–34	pg
Mean corpuscular hemoglobin concentration (MCHC)				
			315–355	g/L
Red blood cell distribution width (RDW)				
			11.5–15.5	%
Platelet count				
			130–380	x10 <sup>9</sup> /L
Mean platelet volume (MPV)				
			9.0–14.0	fL

Reticulocyte count			23-90	x10 <sup>9</sup> /L
Nucleated red blood cells (NRBC)			0.00–0.00	x10 <sup>9</sup> /L

White blood cells and Differential	Flags	Results	Reference values	Units
White blood cell (WBC) count			3.5–10.5	x10 <sup>9</sup> /L
Neutrophils				
Segmented			2.0–7.5	x10 <sup>9</sup> /L
Band			<0.7	x10 <sup>9</sup> /L
Lymphocytes			0.8–3.5	x10 <sup>9</sup> /L
Monocytes			0.1–1.0	x10 <sup>9</sup> /L
Eosinophils			0–0.5	x10 <sup>9</sup> /L
Basophils			<0.2	x10 <sup>9</sup> /L

Chemical constituents	Flags	Results	Reference values	Units
Albumin, serum			35–50	g/L
Alkaline phosphatase, serum			38–126	U/L
Transaminase, serum				
Alanine aminotransferase (ALT or SGPT)			17–63	U/L
Aspartate aminotransferase (AST or SGOT)			15–37	U/L
Gamma-glutamyltransferase (GGT)				
Female			5.0–55.0	U/L
Male			15.0–85.0	U/L
Amylase, serum			25–115	U/L
Bicarbonate (HCO <sub>3</sub> ), serum			22–30	mmol/L
Bilirubin, serum			2–20	
Direct (conjugated)			2–9	µmol/L
Total			3–17	µmol/L
Calcium (Ca), serum				
Total			2.12–2.52	mmol/L
Ionized			1.14–1.28	mmol/L
Chloride (Cl), serum			98–107	mmol/L
Cholesterol, total, serum			<5.2	mmol/L
Cholesterol, low-density lipoprotein (LDL), serum			<3.37	mmol/L
Cholesterol, high-density lipoprotein (HDL), serum			>0.9	mmol/L
Cortisol, serum (a.m.)			185–624	nmol/L
Creatine kinase (CK), serum			30-250	U/L
Creatinine, serum				
Female			35–88	µmol/L
Male			62–106	µmol/L
Ferritin, serum			11–336	µg/L
Folate (folic acid), serum			>10	nmol/L
Glucose, serum				
Fasting			4.0-6.0	mmol/L
Random			4.0–11.0	mmol/L
Hemoglobin A <sub>1c</sub> (HbA <sub>1c</sub> ), serum			4–6	%
Iron, serum			6–35	µmol/L
Total iron-binding capacity (TIBC), serum			44–76	µmol/L
Transferrin saturation, serum			20–50	% saturation
Lactate dehydrogenase (LDH), serum			95–195	U/L

Lipase, serum			73–393	U/L
Magnesium (Mg), serum			0.74–1.03	mmol/L
Osmolality, serum			275–295	mmol/kg
Oxygen saturation (SaO <sub>2</sub> ), arterial blood			96–100	%
PaCO <sub>2</sub> , arterial blood			35–45	mmHg
PaO <sub>2</sub> , arterial blood			85–105	mmHg
pH, arterial blood			7.35–7.45	
Phosphate (PO <sub>4</sub> ), serum			0.81–1.58	mmol/L
Potassium (K), serum			3.5–5.1	mmol/L
Prostate-specific antigen (PSA), serum			0–4	µg/L
Protein, total, serum			60–80	g/L
Sodium (Na), serum			136–144	mmol/L
Triiodothyronine, free (FT <sub>3</sub> ), serum			3.5–6.5	pmol/L
Thyroxine, free (FT <sub>4</sub> ), serum			8.5–15.2	pmol/L
Thyrotropin (thyroid-stimulating hormone), serum			0.4–5.0	mIU/L
Triglycerides, serum			<2.20	mmol/L
Troponin T (TnT), serum			<0.10	µg/L
Urea serum			2.5–8.0	mmol/L
Uric acid, serum			180–420	µmol/L
Vitamin B <sub>12</sub> , serum			133–674	pmol/L
<b>CEREBROSPINAL FLUID</b>				
Cell count			<4	x10 <sup>6</sup> /L
Glucose			2–4	mmol/L
Proteins, total			0.20–0.45	g/L
<b>URINE</b>				
Calcium (Ca)			<7.3	mmol/day
Chloride (Cl)			110–250	mmol/day
Creatinine (Cr)			6.2–17.7	mmol/day
Osmolality			50–1200	mOsm/kg
Potassium (K)			25–120	mmol/day
Protein			<0.15	g/day
Sodium (Na)			25–260	mmol/day