

EQA PARAMETERS MONITORED BY QMP-LS, BY DISCIPLINE—2008

CHEMISTRY

Chemistry-General

Albumin
Albumin Excretion Rate (AER)
Bicarbonate
Bilirubin, Total
Blood Gases (pH, pCO₂, pO₂, Na⁺, K⁺, Glucose, Ionized Calcium)
Hb A_{1c}
Calcium, Total
Chloride
Creatinine
Glucose
Magnesium
Phosphate
Potassium
Protein, Total
Sodium
Total Iron, TIBC, UIBC, Transferrin Saturation
Urate
Urea
Urine Chemistry (Quantitative Protein, Sodium, Potassium, Creatinine, Osmolality)

Drug Monitoring

Acetaminophen
Carbamazepine
Digoxin
Drugs of Abuse
Ethanol
Gentamicin
Lithium
Phenobarbital
Phenytoin
Salicylate
Theophylline
Tobramycin
Valproic Acid
Vancomycin

Endocrinology

Thyrotropin (TSH)
Free Thyroxine (FT₄)
Free Triiodothyronine (FT₃)
Vitamin B₁₂
Ferritin
Cortisol
Total Testosterone
Follicle Stimulating Hormone (FSH)
Luteinizing Hormone (LH)
Parathyroid Hormone
Progesterone
Prolactin
Chorionic Gonadotropin (CG)
Alpha Fetoprotein (AFP)
Estradiol
Prostate Specific Antigen (PSA)
Free PSA
Dehydroepiandrosterone sulphate (DHEA-S)
25 Hydroxy Vitamin D

Enzymes, Cardiac Markers & Lipids

Alkaline Phosphatase (ALP)
Alanine Aminotransferase (ALT)
Amylase
Aspartate Aminotransferase (AST)
Gamma Glutamyl Transferase (GGT)
Lactate Dehydrogenase, Total (LD)
Lipase
Total Creatine Kinase (Total CK)
CK-2
Serum Myoglobin
Serum Troponin I
Serum Troponin T
Cholesterol
Triglycerides
HDL-cholesterol (HDL-C)
LDL-cholesterol (LDL-C)
Cholesterol : HDL-C Ratio

Immunology

Antinuclear Antibody (ANA)
Rheumatoid Factor (RF)
High Sensitivity CRP (hsCRP)
Specific Proteins:
IgG
IgA
IgM
IgE
C3
C4
Protein Electrophoresis

Maternal Serum Screening

Serum Analytes:
Alpha Fetoprotein (AFP)
Total Human Chorionic Gonadotropin (Total hCG)
Unconjugated Estriol (μE₃)
Dimeric Inhibin-A (DIA)
Free beta Human Chorionic Gonadotropin (free β-hCG)
Pregnancy-Associated Plasma Protein A (PAPP-A)
Multiple of Median (MoM):
AFP, hCG, μE₃, DIA, free β-hCG and PAPP-A

HEMATOLOGY

Bone Marrow

Aspirate and/or Biopsy preparation
Descriptive Morphology
Diagnosis

Coagulation

International Normalized Ratio (INR)
Activated Partial Thromboplastin Time (APTT)
Fibrinogen
Heparin Assay
Factor VIII
Factor IX
D-dimer
Thrombophilia Investigation:
Activated Protein C (APC) Resistance
Antithrombin
Protein C
Protein S
Anticardiolipin Antibody (ACA)
Factor V Leiden
Prothrombin Gene Mutation
Russell Viper Venom (dilute and confirm)

Flow Cytometry

Lymphocyte CD3/CD4/CD8 quantitation by immunophenotyping
Leukocyte Immunophenotyping in the investigation of hematological disorders (lymphoma/leukemia)
CD34⁺ Stem Cell Enumeration

Red Cell Disorders

Hemoglobin S Screen
Hemoglobin Fraction Quantitation

Morphology

Peripheral Blood Film:
Differential Leukocyte Count
Descriptive Morphology
Diagnosis

Routine Hematology

Leukocyte Count
Erythrocyte Count
Hemoglobin
Hematocrit
Mean Corpuscular Volume
Thrombocyte Count
Automated Leukocyte Differential
Reticulocyte Count
Manual Body Fluid Cell Count

Transfusion Medicine

ABO and Rh Grouping and Interpretation
Antibody Detection
Antibody Identification
Direct Antiglobulin Testing (DAT)
Crossmatching
Phenotyping
Antibody Titration

MICROBIOLOGY**Bacteriology**

Isolation and identification
of aerobic/anaerobic organisms from:
Blood
Genital specimens
Throat swabs
Urine
Body fluids
Other swabs/pus
Sputum
Stool samples
Quantitative urine cultures
Interpretation and reporting of cultures
Antimicrobial susceptibility testing
Interpretation and reporting of antimicrobial
susceptibility findings
Serological grouping and identification
Gram stain interpretation
Detection of *Clostridium difficile* toxin
Detection of acid-fast bacilli from direct smears
Quantification of acid-fast bacilli

Mycology

Isolation and identification of:
Dermatophytes
Moulds
Yeasts
Wet preparations for fungal elements

Parasitology

Wet preparation examination of stool samples
Preparation of faecal concentrates
Staining of samples for gastrointestinal parasites
Identification and quantification of parasites
Use of special stains

Virology

Antibody detection:
Cytomegalovirus (CMV)
Hepatitis A, B, and C
HIV
Rubella IgG
Varicella-zoster virus (VZV)
Antigen Detection:
Chlamydia trachomatis
Respiratory Syncytial Virus (RSV)
Influenza A virus
Influenza B virus
Parainfluenza virus

GENETICS**Cytogenetics**

Blood
Bone Marrow
Tumour
Tissue
Amnion Cells
Fixed cell culture

**Molecular Diagnostics of Inherited Diseases –
Suspended for 2008**

ANATOMIC PATHOLOGY**Histopathology****Histotechnology**

Routine stains
Special stains
Immuno-histochemistry stains

Cytopathology

Gynecological
Non-Gynecological
Respiratory:
Sputum
Bronchial washings
Bronchial brushings
Urinary
Body fluids
Fine needle aspiration of breast
Fine needle aspiration of head and neck:
Thyroid
Lymph node
Salivary glands

OTHER**Point-of-Care Testing**

Glucose Meters