

Interferences in Assays and Specific test interferences

Analyte	Haemolysis	Bilirubin	Lipids	Other (not quantitative)
Albumin	↑		↑	high serum proteins; venous stasis at collection
ALP				Ascorbate
Amylase- total				Macoamylasaemia; salivary amylase component(usually done on fluids only).
AST	↑			
Bilirubin - conj	↓↓↓			avoid direct sunlight
Bilirubin - total	↓↓↓			avoid direct sunlight
Bilirubin - neonatal	↑↑			avoid direct sunlight
Calcium - ionised				Not reported if pH<7.2 or >7.7; use only designated blood gas syringe; do not use heparin to fill deadspace of syringe; aerobic collections
Calcium - Total				Citrated blood products, high protein
Chloride	↑			
Cholesterol - HDL				Not reported if triglycerides >10
Cholesterol - LDL				Calculated value, not reported if triglycerides >5.0
Cholesterol - Total	↑	↓↓↓		Ascorbate (Reporting of lipid values subject to change)
CK				macro-CK
Creatinine				Acetoacetate; cephalosporins; frusamide; glucose; protein; drugs
Glucose				Delayed processing if not in fluoride tube, High WBC
Iron	↑↑			Iron therapy

Interferences in Assays and Specific test interferences

Analyte	Haemolysis	Bilirubin	Lipids	Other (not quantitative)
LD	↑↑↑			Macro-LD
Mg ⁺⁺	↑↑↑		↑↑↑	
O ₂ Sat % Estimated				Carboxy-, Met-, sulphhaemoglobins; genetic HB variants.
pCO ₂				Air bubble
pH				Air bubble
pO ₂				Air bubble
Potassium	↑↑↑			Severe leucocytosis, fist clenching with tourniquet, delayed processing
PO ₄ ⁻	↑			
Protein	↑↑		↑	Venous stasis at collection
Sodium				Electrolyte exclusion effect of high triglycerides or protein; delay in processing
cTNI				Heterophil antibodies
cTNT				
Triglyceride	↑	↑↑↑		Ascorbate, glycerol
Urate	↑↑			

No usually affected: Lactate, GGT, ALT, Lipase, pancreatic amylase, urea.

Heterophil antibodies and rheumatoid factors can affect most immunoassays

Avoid contamination with incorrect anticoagulant, taking blood from drip arm, delayed separation.