

Laboratory Specimen Requirements

Tests	Volume	Container
Arterial gas Includes: Na, K, Glucose, Hb, Hct, MetHb. NICU Radiometer machine also measures bilirubin and lactate	0.3ml	Plastic, heparinised, 1mL Blood Gas syringe
NICU Radiometer Gas Machine Capillary gas - includes: Na, K, Glucose, Bilirubin, Hb, Hct, MetHb, lactate Glucose only Bilirubin only	95 uL 35uL 35uL	Gaslyte Small capillary tube Small capillary tube
Laboratory Gas Capillary gas - includes: Na, K, Glucose, Hb, Hct	0.2 ml	A full capillary gas tube
Biochemistry Laboratory SBR (total) only Total & Direct SBR <i>NB: Full biochemistry including all or any combination of: Electrolytes, Ca, Gluc, Creat, Urea, LFT, SBR, Mg, PO4</i> <i>When collecting 3-4 tests</i>	0.3 ml 0.4 ml 0.7ml 0.5-0.6 ml	Green top (heparinised) Green top (heparinised) Green top (heparinised) Green top (heparinised)
LFT - Liver Function Tests Bilirubin, AST, ALT, GGT, & ALP	0.7ml	Green top (heparinised)
Thyroid Function Tests TSH, Free T3 & T4 <i>Note: If LFT and Thyroid Function Tests</i>	0.7ml 0.9 ml	Green top (heparinised) Green top (heparinised)
CRP (C-Reactive Protein)	0.3 - 0.5 ml (depending on PCV)	Green top (heparinised)
Haematology Full Blood Count Coagulation Screen NB: NICU stock - if not available obtain from PICU (not Lab. incorrect size tube for neonates, larger volume required) Ferritin Whole blood PR/INR &/or APTT G6PD	0.2 ml 1.0 ml Venous/Arterial 0.3 ml Contact Lab 0.3 ml	Purple top (EDTA) Blue top micro-container Green top (heparinised) Special container Purple top (EDTA)
Drug Levels Amikacin Gentamicin Vancomycin Phenobarbitone Phenytoin Theophylline	0.4 ml Remainder of these drug levels require 0.3 ml for 1 assay 0.5 for more than 1	Green top container
Vitamin A - All samples taken for vitamin levels must be wrapped in tinfoil Vitamin D Vitamin E	0.4 ml 0.3 ml 0.4 ml	Yellow top (plain tube = no anticoagulant)

Tests	Volume	Container
Blood Bank Will only accept 'Request for blood components or products' form for blood samples - not laboratory form - complete 'tests required' section Blood Bank require their blood samples to be legibly hand labelled using the specific labels, with: patient's first & last names NHI number DOB date & time of collection signature/initials of collector Group & Coombs Neonatal Crossmatch	 0.5 ml 0.5 ml	 Purple top (Micro-EDTA) Purple top (Micro-EDTA)
Other Tests Neonatal Zinc level Lactate Albumin Cholesterol - level only TORCH Screen Hepatitis Screen Karyotype	0.3 ml Arterial or Venous sample 0.3 ml 0.3 ml 0.3 ml 0.6 ml 0.6 ml 1-2 ml Arterial or Venous	Green top (heparinised) Grey top Green top Green top (heparinised) Yellow top Yellow top Green top

- Other tests requested which are not routinely required for NICU infants - PLEASE consult the Laboratory staff for information on the amount of blood required and the appropriate container to use for the particular MICRO-COLLECT, also state for NEONATE.
- For infants with a high PCV (often new admissions) when the blood clots easily causing difficulty in obtaining a result via the Radiometer Gas Machine, we have a supply of **55uL glass capillary tubes containing extra Heparin** which may ensure you obtain a result - please ask the CCN for these capillary tubes when required.

Capillary Blood Sampling Devices		
Tenderfoot- Micro-preemie	Blue For infants up to 1000 grams	
Quikheel - Preemie Lancet	Mauve For infants 1005-1500 grams	Depth 0.85mm Length 1.75mm May also be used for a small collect of 35µL ONLY = glucose only or bilirubin only via Radiometer Gas Machine.
Quikheel - Infant Lancet	Teal For infants >1500 grams	Depth 1.00mm Length 2.50mm