

# TUBE GUIDE

## Recommended Order of Draw

In accordance with CLSI standard GP41 - Collection of Diagnostic Venous Blood Specimens, collector must sign all blood tube labels and request forms. Blood culture vials are to be collected first in order of draw (before any blood tubes).

Hemogard™ Closure & Specimen Volume			Tube Content	Determinations	Instructions Please gently invert all tubes after collection
	Paediatric	Microtainer™			
			Blood Culture Bottles	Sterile samples (e.g. blood, sterile fluids) The specimen must be collected using a sterile technique to reduce the chance of contamination Mycobacterium Blood Culture collections requires a specialised bottle Please contact the collection centre or laboratory	Adults two vials of liquid cultures per set: a) aerobic bottle with BLUE top 8-10ml - draw first b) anaerobic bottle with PURPLE top 8-10ml - draw second. Neonatal/Paediatric patients a single PEDS bottle with PINK top is used.
2.7ml 	1.8ml 		Sodium Citrate	Prothrombin Time (INR), APTT, D-Dimer, Synovial fluid cell count Coagulation Profile* Clotting Factors**, Lupus Anticoagulant**, Protein C/S**, Von Willebrand Screen** Platelet function***	All citrate tubes must be filled to the engraved line on the tube. Mix by gentle inversion 8-10 times following collection. * Collect EDTA also for Coagulation Profile ** Double spin, separate and freeze for Clotting Factors, Lupus Anticoagulant, Protein C/S, Von Willebrand Screen *** Platelet function do NOT spin or refrigerate.
8.5ml 			Acid Citrate Dextrose (ACD)	HLA Typing (NOT HLA B27)	DO NOT separate. Store at room temperature. Mix by gentle inversion 8-10 times following collection.
8.5ml 		0.5ml 	SST II Gel	Biochemistry; Troponin, U&E's, Creatinine, LFT's, CRP, Cardiac Enzymes, Lipids, Iron Studies, Serum Electrophoresis, Hormones / Endocrinology, Thyroid Studies, Immunology, Viral Serology including HIV / Hepatitis, Auto Antibodies, B12, Folate, IM, Magnesium, Insulin Therapeutic Drugs: Digoxin, Carbamazepine, Sodium Valproate Antibiotics: Gentamicin, Vancomycin, Alcohol, C-Peptide	Hepatitis C PCR - if PCR/viral load testing is requested collect a separate dedicated SST. Note last dose on request form for all antibiotic assays and drug levels. Spin, separate and freeze for C-Peptide. Mix by gentle inversion 8-10 times following collection.
10.0ml 			Plain	Therapeutic Drugs: Theophylline Androstenedione, 17-OH-Progesterone Any Hormone level requesting for LCMS	Note time, date and quantity of last dose on request form for all antibiotic assays and drug levels. Mix by gentle inversion 8-10 times following collection.
6.0ml 			Sodium Heparin	Chromosome Studies, Cytogenetics, Karyotype	Paediatric Cytogenetic requires Sodium Heparin and EDTA sample. Mix by gentle inversion 8-10 times following collection. Store and transport at room temperature.
6.0ml 			Lithium Heparin	*HLA B27, CD4/CD8 Ratio, Lymphocyte subsets, Flow cytometry Vitamins A, C, E, K, B1, B6, Gastrin	Note: Heparin tubes must be full draw volume. *If for HLA B27, CD4/CD8 Ratio, Lymphocyte subsets, Flow cytometry do not refrigerate. Vitamin B1, B6 unspun tube frozen and wrapped in foil for light protection. Vitamin A, E spin separate and freeze and wrap in foil for light protection. Vitamin C, K spin, separate and freeze and wrap in foil for light protection – needs to be dedicated tube. Mix by gentle inversion 8-10 times following collection.
6.0ml 			K <sub>2</sub> EDTA	Trace Elements/Trace Metals, including Aluminium, Copper, Mercury, Arsenic, Cadmium, Chromium, Zinc	Note: Trace Element tubes must be full draw volume. Mix by gentle inversion 8-10 times following collection.
8.5 mL 			Harmony NIPT	Harmony NIPT, Aspect Liquid Biopsy (EGFR, KRAS, NRAS, BRAF)	NIPT testing requires the collection of 2 tubes. Both tubes must be full draw volume. Do not collect if patient is less than 10 weeks pregnant. DO NOT USE FOR ANY OTHER TEST.
			Quantiferon Gold	Tuberculosis, Quantiferon Gold	Collect 1 mL of blood into each tube, following the tube order: Grey, Green, Yellow, and Purple. Gently invert 10 times to ensure inner surface of tubes are coated. Do not spin and keep at room temperature.
4.0ml 	2.0ml 	0.5ml 	EDTA	Haematology; FBC/indices, Hb, Platelets, Reticulocytes, Differential, White Cell Count, Blood Group, Glycated Hb (HbA1c), Malarial Parasites, Lead (Pb) Levels, Hb Electrophoresis, Cyclosporin, ESR (1.5ml required) *Haemochromatosis, Prothrombin Gene Mutation, Factor V Leiden	*A dedicated EDTA sample must be collected and cannot be used for any other purposes other than for Genetic testing. Mix by gentle inversion 8-10 times following collection.
6.0ml 			EDTA	Blood Banking, Group & Crossmatch, HIV DNA (PCR)/viral load - 2 dedicated tubes BCR-ABL - 3 x dedicated tubes	For blood banking samples all tubes / request forms must be signed and include time and date of collection (handwritten on the tubes). Please ensure the collector declaration on the request form is signed at the time. Mix by gentle inversion 8-10 times following collection.
5.0ml 			PPT	PTH, ACTH, BCL/CTX, CMV PCR, EBV PCR	Note: Pearl top EDTA tubes must be full draw volume. Centrifuge within 30 minutes. Mix by gentle inversion 8-10 times following collection.
5.0ml 	4.0ml 	0.5ml 	Fluoride Oxalate	Glucose only All GTT samples must be collected in this tube	May be performed on SST (Gold top) if other chemistry requested. If specimen delayed, always collect a Fluoride Oxalate tube. Note: Fluoride Oxalate tubes must be full draw volume. Mix by gentle inversion 8-10 times following collection.

### Microtainer™ AND GENERAL LABELLING INSTRUCTIONS:

- Always label tubes legibly – Include patient surname, given name, DOB, time and date of collection, collectors initials and lab number.
- When placing a label on the tubes (especially Microtainers™), ensure the volume of blood remains visible.
- Paediatric tubes to be placed into labelled, sterile, 70ml yellow top container for transport to laboratory.
- DO NOT transfer blood from tube to tube.
- MIX ALL TUBES THOROUGHLY BY GENTLE INVERSION 8 – 10 TIMES.



### HAZARD WARNING:

Never inject blood into the tube from needle and syringe

# STORAGE OF SPECIMENS AT THE SURGERY

## BLOOD SPECIMENS

All blood specimens should be stored in refrigerator except for:

- HLA and CD4/CD8 ratio or lymphocyte subsets - store at room temperature.
- Glucose, Electrolytes/Potassium, Phosphate, LDH - collect into SST tubes and centrifuge before refrigeration. Unspun overnight specimens are unsuitable.
- Prothrombin times - must be processed the same day as collection.

## ROUTINE MICRO CULTURE

Urines	-	Store in refrigerator at 4°C
Faeces	-	Store in refrigerator at 4°C
Sputum	-	Store in refrigerator at 4°C
Dry Swabs - PCR	-	Store in refrigerator at 4°C
Blood Cultures	-	Store at room temperature.
Gel Swabs - MC&S	-	Store at room temperature.
Body Fluid (eg aspirates)	-	Store at room temperature.

All Microbiology samples must be delivered to the laboratory as soon as practicable after collection. Preferably on the same day as collection.

## SEMEN ANALYSIS

FERTILITY AND POST VASECTOMY SAMPLES:

**The motility (microscopy) on these samples should be examined within an hour of collection.**

- Patients should be instructed to deliver these samples to Concept Fertility centre (please pre-book sample drop off by calling 9382 2388). Collection rooms are also available to book at this location.
- Alternatively, samples can be delivered to a collection centre with a laboratory on site:
  - Australian Clinical Labs Bunbury SJOG Bunbury, Corner Robertson and Bussell Highway, Bunbury
  - Australian Clinical Labs Geraldton SJOG Geraldton, 12 Hermitage Street, Geraldton
  - Australian Clinical Labs Murdoch SJOG Murdoch, Wexford Medical Centre, 3 Barry Marshall Parade, Murdoch
  - Australian Clinical Labs Subiaco Subiaco, Suite 204, 25 McCourt Street, Subiaco
  - Australian Clinical Labs Midland SJOG Midland, 1 Clayton Street, Midland
  - Australian Clinical Labs Osborne Park 23 Walters Drive, Osborne Park
- Treat this sample as URGENT - deliver to laboratory immediately.
- Collect sample between 2-7 days after last ejaculation.
- Use a sterile container only (yellow top jar).
- Samples are accepted Monday-Friday between 8.30am-2.00pm only.

## 24 HOUR URINE SPECIMENS

Store in refrigerator at 4°C.

If in doubt as to special requirements for sample collection and storage please call 1300 134 111