

# Paediatric Intensive Care Unit

## CHILDREN'S INTENSIVE CARE UNIT, LRI Non-routine Pathology Test Bottles

Staff relevant to:	PICU/CICU medical & nursing staff
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Written by:	C Orazulume & J Saywell
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### 1. Introduction and Who Guideline applies to

Non- routine specialised tests are usually required for patient care in CICU/PICU. This guide has been developed to support staff in the clinical area.

This guide applies to all medical and nursing staff who work in UHL CICU/PICU settings.

### 2. Guideline information/procedures

Why it is important to use the right bottle and appropriate volume:



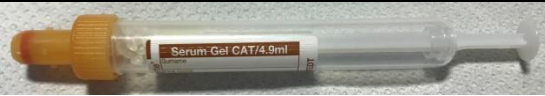

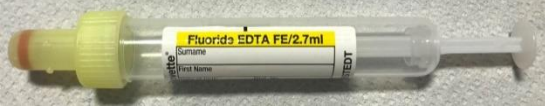

- Patient safety
- Repeating test causes unnecessary distress to patient, and bad hospital experience for patient/family
- Prevent of waste of resources





TEST	BOTTLE	Special Requirements
G6PD screen, haemoglobinopathy screen, DNA for storage, Viral PCR	EDTA RED BOTTLE	
Microarray gene analysis	EDTA RED BOTTLE	Also send lithium heparin bottle if possible
Aldosterone & renin	EDTA RED BOTTLE	Together within 30 mins
Blood group, DCT, Crossmatch	EDTA RED BOTTLE	Blood tracker
PTH	EDTA RED BOTTLE	To lab in 6 hours but can store at 4 degrees centigrade overnight
White cell enzymes	EDTA RED BOTTLE	Beed 5ml volume and to arrive in lab before 12:00 Monday-Thursday only
ACTH (x2 bottles)	EDTA RED BOTTLE	On ICE within 30 mins
Free fatty acids, B-hydroxybutyrate, Lactate	Yellow Fluoride Bottle	Put lactate on ICE within 30 mins. Free fatty acids and B-hydroxybutyrate to lab within 1 hour
Amino acid profile, Galactosaemia screen (Gal-1-PUT), Chromosome FISH testing (e.g. urgent trisomy test), VLCFA, Troponin	Lithium Heparin Orange	
7-dehydrocholesterol	Lithium Heparin Bottle	Protect from light
Ammonia, Insulin, C-peptide	Lithium Heparin Bottle	On ICE within 30 minutes
Acylcarnitine	Lithium Heparin Bottle	No longer use Guthrie card
Biotinidase	Lithium Heparin Bottle	Separate bottle
AntiXa level (Heparin Assay), Anti-thrombin assays, and other coagulation studies.	Green Citrate Bottle	
Antibiotic assay (e.g gentamicin, vancomycin), Amiodarone, Digoxin, Theophylline,  ANCA, Anti-antinuclear antibody panel e.g. dsDNA, Free T\$ and TSH, Cortisol, LDH  Cholesterol/Lipid profile, triglycerides.  Transferrin glycoforms (isoforms), Haptoglobin  Procalcitonin, CK, Pro-BNP	White bottle (serum gel)	
GH/IGF-1, LH, Progesterone, Prolactin, FSH, Testosterone, Viral serology (IgM, igG), Immunoglobulins, serum osmolarity.	White bottle (serum gel)	

Vitamins (B12, D), Iron studies, Transferrin, Zinc, Copper, Folate.		
Vitamin A and E	White bottle (serum gel)	To be delivered on same day of collection
Alpha-1-antitrypsin level and phenotype	White bottle (serum gel)	If possible, also send EDTA for Alpha-1 antitrypsin genotyping
<b>ADAMTS 13 TEST</b>	<b>3 green tops, and 1 white top</b> Call the haematology consultant to obtain permission for the test, then call special haematology lab to send the special request form to your email to print out and complete	Samples and completed request form should be hand delivered to the special haematology lab
Urine Osmolality	Plain urine bottle	

If there are other non-routine tests not included in the above table please email @ [chinedu.orazulume@uhl-tr.nhs.uk](mailto:chinedu.orazulume@uhl-tr.nhs.uk) or [julia.vujcikova@uhl-tr.nhs.uk](mailto:julia.vujcikova@uhl-tr.nhs.uk) so they can be included.

### UHL Sample bottles

Test	Bottle
FBC	 PINK
Group & Save	 BIG PINK
U&E, CRP, LFT, Amylase, TFT, Bile acids	 BROWN
HBA1C	 PURPLE
Glucose	 YELLOW
Clotting	 GREEN

Kleihauer		BIG PINK
PET		BROWN
		PINK
Troponin		ORANGE

### **3. Education and Training**

None

### **4. Monitoring Compliance**

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
Samples in the wrong container those sent from CICU	data from the pathology lab	PICU Consultants	Initially annually	PICU cpm

### **5. Supporting references:**

- (1) Information about right type of bottle obtained from the chemical pathology lab
- (2) Bottles for Pathology tests (UHL Neonatal Units)  
<http://www.library.leicestershospitals.nhs.uk/PAGL/Shared%20Documents/Blood%20Bottles%20for%20Tests%20UHL%20Neonatal%20Guideline.pdf>

### **6. Key Words**

**Specialised, EDTA, Fluoride, Lithium Heparin, Citrate, Serum gel, Sample**

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.  
 As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

<b>CONTACT AND REVIEW DETAILS</b>			
<b>Guideline Lead (Name and Title)</b> C Orazulume – Higher Specialty Doctor J Saywell – Advanced Nurse Practitioner J Vujcikova - Consultant		<b>Executive Lead</b> Chief medical officer	
<b>Details of Changes made during review:</b>			
<b>Date</b>	<b>Issue Number</b>	<b>Reviewed By</b>	<b>Description Of Changes (If Any)</b>
<b>March 2023</b>	<b>1</b>		<b>New document</b>