

## Hints and tips for venepuncture

### Taking a Sample

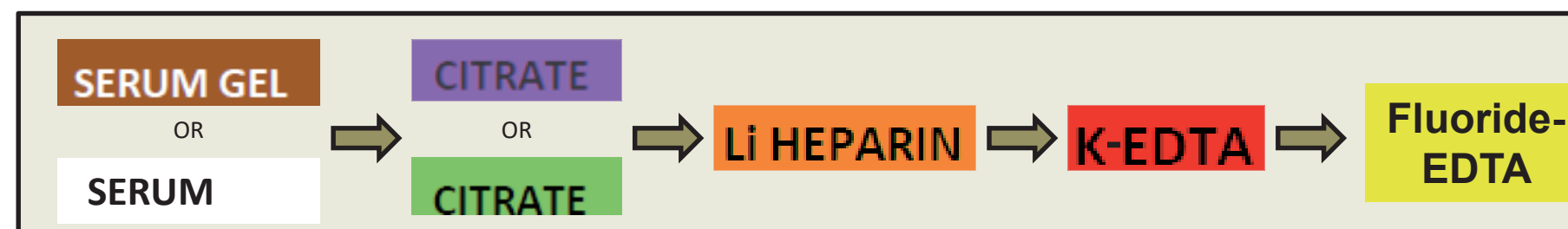
#### BEFORE

- Choose the right specimen tube(s). If in doubt, see: <http://www.edinburghlabmed.co.uk/TestDirectory>
- Check the **expiry dates** of the blood tubes

#### DURING

- If a tourniquet is left on for too long, it can lead to incorrect results. Tourniquets should **not** be left on for **more than a minute**.
- Filling blood tubes in the wrong order can cause **cross-contamination** and incorrect results\*
- To **minimise the risk of contamination**, please fill tubes in the order below:

Order  
of draw



\* For example: filling a red-topped FBC tube, *before* a brown-topped tube for U&Es, can cause a falsely elevated potassium

#### AFTER

- Once blood samples have been collected, blood tubes should be **gently inverted** at least **3 times** to ensure blood is mixed with additives in the tube

## Adding on blood tests (biochemistry)

- Additional blood test requests can be added to existing samples stored in the laboratory:
  - Biochemistry samples are usually stored for 5 days \*\*
  - Haematology samples are usually only stored for 24 hours

\*\* although not all tests are stable for up to 5 days
- To **make an additional test request**, you will need:
  - Additional tests to be added
  - Patient name
  - CHI number
  - Date original sample was collected
  - **Laboratory specimen number** e.g. HB123456X
- **Laboratory specimen numbers** are found on the patient results sheet. Specimen numbers are not visible on GP ICE. If a sample is still in transit to the laboratory, it will not yet have a specimen number.
- The two letters at the beginning of the specimen number identify which biochemistry laboratory has received the sample:
  - HB = Royal Infirmary Edinburgh, HE = Royal Hospital for Sick Children
  - QB = Western General Hospital, Edinburgh
  - SB = St John's Hospital, Livingston
- Requests for additional tests can be made by telephone or email (RIE only):
  - RIE** 0131 242 6091, [addonbloodtests.RIE@nhslothian.scot.nhs.uk](mailto:addonbloodtests.RIE@nhslothian.scot.nhs.uk)
  - WGH** 0131 537 1910
  - SJH** 01506 523160

## Labelling, sending and storing samples

- If a sample requires **urgent analysis**, please place plastic specimen bag inside a paper envelope and clearly mark the outside: "URGENT – BLOODS"
- **Specimen tubes labels** are best applied as pictured opposite in order to allow for **barcode scanning**:
- All samples should be **sent to the laboratory as soon as possible**, as some tests have short stability times:
  - 12 hours = potassium
  - 24 hours = Includes: magnesium, phosphate, CK, ferritin, folate...
  - 48 hours = Includes: LFTs, creatinine, calcium, albumin, glucose...



**Avoid taking blood samples on a Friday afternoon** as they will often be too old for analysis after the weekend.

If a delay in samples being sent is anticipated, store samples in a refrigerator or at room temperature (depending on the sample) – see opposite for a brief guide. For further guidance, see the test directory at: <http://www.edinburghlabmed.co.uk/TestDirectory>

### Brief guide to storage of commonly requested laboratory samples

Tube Type/colour	Common Tests	Delayed Transport Storage	Additional Advice
<b>Blood Science (Biochemistry, Haematology &amp; Coagulation)</b>			
Gel tube (Brown)	Electrolytes, LFT, Vitamin B12 & Folate,	ROOM TEMP	If POTASSIUM requested store at ROOM TEMP for up to 4 hours. If routine Biochemistry tests do not include POTASSIUM then refrigerate. If time from collection to arrival at lab >12 hours then POTASSIUM measurement will <b>not</b> be possible.
Li Hep (Orange)			
Serum (White)	INR, Coag Screen	Refrigerate (2-8°C)	Please ensure tube is filled correctly
Citrate (Green)	Glucose		
Fluoride-EDTA (Yellow)	FBC, HbA1c		
EDTA (Red)	ESR		Please ensure tube is filled correctly
ESR (Purple)	ACR, PCR		
URINE	Blood Group		Requests for Cold Agglutinin <b>MUST</b> not be stored in refrigerator. Please contact laboratory for advice.
<b>Microbiology</b>			
Skin Scraping	Mycology	ROOM TEMP	
Swabs		Refrigerate (2-8°C)	Please see <a href="http://www.edinburghlabmed.co.uk/TestDirectory">http://www.edinburghlabmed.co.uk/TestDirectory</a> for test-specific information on type of swab required and instructions for collection
Urine			
Faeces			
Others			
<b>Pathology</b>			
Biopsy Specimens		ROOM TEMP	Biopsy specimens to be placed in and covered by 10% neutral buffered formalin and stored at room temperature in yellow topped pot.
Skin *		Refrigerate (2-8°C)	Skin for Immunofluorescence should be kept fresh and <b>not placed in formalin</b> .