STANDARD OPERATING PROCEDURE SOP3630/7

Diagnostics – Blood Tests

This SOP replaces SOP3630/6.1	**Copy Number**
	Effective **01/09/17**

Summary of Significant Changes

Updated to reflect nucleic acid testing (NAT) and requirement to send additional blood samples with the initial microbiology screen for donors in **Scotland only**.
Removal of reference to MPD873 and addition of FRM5814, INF1359 and MPD886 to "Items Required".
Requirement for SNODs to voice record telephone conversations where clinical information is passed to other health care professional added to text.

Purpose

The purpose of this document is to inform and guide the SNOD in requesting the relevant blood tests to be undertaken and reported, where possible and ensure that a complete characterisation of the patient is performed.

Responsibilities

Specialist Nurse Organ Donation (SNOD)
To ensure that the required blood tests are carried out, entered onto the DonorPath application and reported on.
To report and communicate the results to the Duty Office / Recipient Centre Points of Contacts (RCPoCs) / Tissue Establishments (TEs).
To identify actions and interventions required for abnormal results
To facilitate any additional testing as requested by the RCPoCs

Recipient Centre Points of Contact (RCPoC)
To receive the blood test results via EOS or EOS Mobile/email/fax/verbally
To relay the information to the implanting surgeons.
To arrange transport for additional samples requested from the donor hospital

Items Required

FRM4212 - Organ Donation Clinical Pathway
FRM4211 -Patient Assessment Form (PA1)
FRM4193 - Core Donor Data - SNOD (Used as EOS back-up)
SOP3925 –Manual Organ Donation Process for a Potential Organ and/or Tissue Donor in the event of DonorPath/IT network unavailability
FRM4278 –Virology/Microbiology Request Form
FRM5025 –Malaria/TCruzi Request Form
FRM5814 – Multi Organ Donor NAT Blood Request Form (Scotland Only)
INF1359 - NAT Testing of Scottish Organ Donors by SNBTS Tissues and Cells on behalf of NHSBT
FRM4279 – National HLA Typing Request Form
SOP4618 – Receipt and Management of Microbiological Blood Results at the Time of Donation
MPD865 - Obtaining Coroner/Procurator Fiscal Decision

FRM5044 – Malaria Request Form (Scotland Only)
MPD886 - Collection, Labelling and Transport (Organs and Samples)

SOP3649 – Voice Recording of Organ Donor Clinical Conversations
NHSBT Guidance on Handling Person Identifiable Information: http://nhsbtweb/userfiles/final%206%20IG%20proofs.pdf

1. Routine blood results including: Group & Save, FBC, U&Es, LFTs, Amylase and clotting screen

NOTE:

A paper copy of the blood group **must** be obtained and checked against the patient's identification band to confirm the **patient's name, date of birth, and NHS number / hospital number / CHI number** (Scotland). This **must** be witnessed by a qualified health care professional (HCP) and both the SNOD and HCP **must** sign, date and time the paper copy. The SNOD **must** confirm the blood group, as shown on the paper copy, with the duty office. SNODs should only use a blood group that has been confirmed by serology testing.

1.1. Identify the most recent blood results from the medical records. If no routine blood tests have been carried out on the day of donation, the SNOD will need to request that these are done.

1.2. Review the results, including the trends and discuss any abnormal results with the medical practitioner caring for the patient.

1.3. Identify any actions / interventions that may be required for abnormal results.

1.4. Document the results on DonorPath and communicate the results to the relevant RCPoC(s). Ensure that the RCPoC(s) are aware of any actions / interventions for abnormal results.

1.5. Request repeat testing or additional testing as requested by the RCPoC(s).

1.6. Voice record clinical conversations and document the time and date they occur on DonorPath or **FRM4212** in line with **SOP3649**

1.7. In the case of DonorPath, EOS or IT failure complete **FRM4212**, **FRM4211**, **FRM4193** as stipulated in **SOP3925.**

2. Arterial Blood Gases (ABGs)

NOTE:

Any interventions / treatment for a potential DCD **must** be discussed with the treating medical practitioner to determine any restrictions that may occur. The medical practitioner holds the final decision regarding any interventions / treatment.

2.1. Identify and review previous ABGs, including the ABGs performed during the brain stem death testing if relevant.

2.2. Request that two new sets of ABGs are performed, both on the current oxygen settings and on 100% oxygen. Ensure that the ventilation is returned to it's original settings following the ABG on 100%.

2.3. Review the results and discuss any abnormal results with the medical practitioner caring for the patient.

2.4. Identify any actions / interventions that may be required for abnormal results.

2.5. Document the results on DonorPath and communicate the results to the relevant RCPoC(s). Ensure that the RCPoC(s) are aware of any actions / interventions for abnormal results.

2.6. Request any additional ABGs as requested by the RCPoCs.

2.7. Voice record clinical conversations and document the time and date they occur on DonorPath or **FRM4212** in line with **SOP3649**

3. Microbiology and Tissue Typing

NOTE:
For patients who are not on the ODR, the taking of blood samples for testing of microbiology and tissue typing for the purposes of donation **cannot** occur prior to consent/authorisation.
For patients who have expressed a wish to donate on the ODR blood samples may be taken and sent ahead but held in the laboratory and not tested until consent / authorisation has been established following discussion with the family.

3.1. Inform the relevant laboratory staff that samples are being sent giving details of the potential donor and an estimated time of arrival of the samples.

3.2. Confirm the minimum blood volume if required - for example, for a paediatric donor.

3.3. Confirm the contact details for the laboratory staff.

3.4. Collection of samples and labelling of sample tubes must be performed as one uninterrupted process.

3.5. Sample tubes must never be prelabelled.

3.6. Blood taken must always be labelled at the bedside by the HCP (SNOD or bedside nurse) who has taken the sample.

3.7. All handwritten labels must be legible with at **least three types of patient identifiers.** If used, preprinted labels must adhere to hospital and laboratory requirements. Additionally the **date and time the sample was taken must be clearly written on the label of each tube**.

3.8. If a pre-transfusion sample is required, ensure that the Coroner / Procurator Fiscal's permission has been sought if applicable – refer to **MPD865**. **Ensure that the time and date the sample was taken is written on the sample tube.**

3.9. Complete **FRM4278** and **FRM4279** and package the blood samples with the correlating form as per regional practice.

3.10. For donors in **Scotland only**. The initial microbiology screen must include additional blood samples to allow Nucleic Acid Testing (NAT). Further guidance contained in **INF1359**. An additional request form, **FRM5814**, must be completed to accompany these samples.

3.11. Arrange transport of the samples to the testing laboratories.

3.12. Ensure that any delays in obtaining and / or sending of the samples is communicated with the relevant laboratory staff.

3.13. Document conversations and actions for the donor file

3.14. Refer to **MPD886** for further detail regarding sending blood samples to external laboratories and **SOP4618** for detail and information on actions when receiving microbiological blood results

4. Malaria and Trypanosoma Cruzi (T.Cruzi) testing

4.1 Completion of patient assessment interview with the family, using DonorPath or **FRM4211** and / or information from the medical notes or GP history may indicate that the patient may be at potential risk of Malaria or T.Cruzi.

4.2 Additional samples will need to be sent for screening – please follow **SOP4618** and complete **FRM5025** and/or **FRM5044** if in Scotland.

5. Transfusions and Haemodilution

NOTE:

Transfusions / haemodilution may affect the reliability of microbiological tests.
Seek advice from the microbiologist and ODT team manager / regional manager if required and if indicated perform haemodilution calculation using DonorPath or **FRM4211**.

If HM Coroner / Procurator Fiscal is involved, their permission must be sought before a pre-transfusion sample is accessed and sent for microbiological testing

5.1 A haemodilution calculation must be performed if the patient has:

1. Been transfused with blood or blood products.
2. Received infusions of synthetic colloids and/or crystalloids following blood loss*.

A - If the donor has received blood products/components, a pre-transfusion sample must be sought irrespective of volume of blood or blood product. This sample must be submitted for microbiological characterisation of the donor.

B - If haemodilution calculation is ≥50%, a pre-dilution sample must be sought.
If pre-transfusion or pre-dilution samples can not be found, the Microbiology laboratory and all recipient centres/ tissue establishments must be informed and this documented.

* Decision on significance of blood loss should be discussed with clinical ITU team and made on a case by case basis.