Scottish National Blood Transfusion Service
Policy Record

Ref: NATP DON 13 002 03
Cat: DONOR

Title:

HAEMOGLOBIN AND FULL BLOOD COUNT TESTING OF PLATELET DONORS

Background:

It is not required to measure the haemoglobin level of platelet donors before starting the collection procedure. This can be determined by a Full Blood Count (FBC) sample taken at the start of the donation procedure. Such an approach is dependant on certain requirements being met.

The 'Guidelines for the Blood Transfusion Services in the UK' require platelet donors to have their platelet count determined at each donation. These donors also require a FBC to be tested every year. Routine FBC testing within SNBTS donor apheresis units is sufficient for both these requirements.

Key Changes from Previous Revision
Template Change Section 5: Updated to include management of falling haemoglobin levels

Policy Agreement	CGSG: n/a	SMT: n/a
Supersedes Policy Ref:	NATP DON 13 002 02	
Date Of Implementation:	10th January 2025	

Scottish National Blood Transfusion Service
Policy Record

Ref: NATP DON 13 002 03
Cat: DONOR

Statement Of Policy

1. Introduction

The Blood Safety and Quality Regulations (BS&QR) 2005 indicate that the haemoglobin (Hb) levels in a donor's blood should be:-

For females ≥ 125 g/l
For males ≥ 135 g/l
Applicable to allogeneic donors of whole blood and cellular components

The acceptance criteria for donors of whole blood and blood components defined by the Blood Safety and Quality Regulations 2005 allow some discretion as defined in the statement:

'Under exceptional circumstances, individual donations from donors who do not comply with the following criteria may be authorised by a qualified healthcare professional in the blood establishment. All such cases must be clearly documented and subject to the quality management provisions in Articles 11, 12 and 13 of Directive 2002/98/EC.'.

Quantitative Hb testing will also identify platelet donors with high haemoglobin. SNBTS Whole Blood and Component Donor Selection Guidelines and Geographical Disease Risk Index (NATS MED 008) state the acceptable limits to be:

Males	135 to 180 g/L inclusive
Females	125 to 165 g/L inclusive

This document will:

- define the policy for assessment of haemoglobin for component donors
- suggest circumstances where the discretion outlined above may be applied
- define the policy for FBC testing of platelet donors and interpretation of the results

2 Previous Hb results and eligibility to donate

A platelet donor can be accepted on the haemoglobin result obtained at their previous donation, or the donor's initial apheresis assessment, provided:

- this was no more than eight weeks before
- the donor's haemoglobin was within the limits specified above.

If these criteria are not met, the donor should have their Hb measured by FBC or Hb analyser using an appropriate venous or capillary sample.

3 Management of Donors with current Hb levels outside acceptable limits

3a. Haemoglobin less than 115g/l [Female donors] or less than 125g/l [Male]

The procedure will be terminated at a point which would ensure that red cell loss is minimised, i.e. not withholding cells. The donor should be deferred for six months. Further actions are described in NATS MED 008.

3b. Haemoglobin 115 to 124g/l [F] or 125 to 134g/l [M]

The procedure can be completed. The donor should be deferred for three months. Further actions are described in NATS MED 008.

3c. Haemoglobin greater than 165 g/l [F] or 180 g/l [M]

The procedure will be completed. The donor should be deferred for three months. Further actions are described in NATS MED 008.

3d. Donors with repeated Hb results outside acceptable limits

Future eligibility should be considered by reviewing all previous FBC results.

3.e. Accepting platelet donors known to have a Hb level below BSQR limits

In general, this will apply only when a special donation is required for a patient with an urgent clinical requirement for platelets, and where no alternative source of platelets can be identified, e.g.

- HLA matched
- HPA matched
- Compatible family member as only source.

In such instances, the acceptance of these donors for donation must be discussed with a Donor Services consultant and an appropriate member of the Quality Directorate.

4. FBC testing of platelet donors

As a minimum this must include:

- Hb concentration, haematocrit, red cell count and other red cell indices
- Total white cell count
- Platelet count

It is not necessary to obtain a differential white cell count. Should this be indicated (e.g. high total white cell count), the donor should be referred to their GP or another healthcare professional.

The haematology analysers within SNBTS Donor Apheresis units are therefore suitable for annual FBC testing of platelet donors.

FBC results must be recorded in the donor's notes and/or the apheresis database (or any system that succeeds them).

FBCs must be performed by staff trained to use the relevant analyser. Appropriate quality controls must be in place.

5. Interpretation of FBC results

Guidance is presented in NATS MED 008.

Traditional normal ranges should be used for guidance, but it is also important to apply clinical judgment, and consider the donor's previous results, before taking action. Donors who have falling haemoglobin levels (5 g/L or more) for 3 attendances in a row should be discussed with the DCSO before their next appointment, even if their haemoglobin remains within acceptable limits for donation.

6. Donor management when a FBC analyser is not available

In these circumstances, donors who meet the criteria in section 2 can start their donation and have their Hb checked by Hb analyser using a venous sample taken with other testing samples at the start of donation. The apheresis machine will be programmed with the average platelet counts from the last three samples.

Where possible, samples should be retained for FBC using an available analyser (either local or at another donor centre).