

## Background

The Scottish National Blood Transfusion Service (SNBTS) will be offering access to the NHS Blood and Transplant (NHSBT) and NHS England blood group genotyping programme for patients in Scotland. This testing is available for patients living with inherited anaemias, including Sickle Cell Disorder (SCD), Thalassaemia, and other Rare Inherited Red Cell Disorders, who need regular blood transfusions for their health and well-being.

## Instructions for Blood Banks

You will receive the NHS Blood and Transplant 4A Molecular Diagnostics Red Cell HEA and HLA typing for patients form from your clinical areas. It can be found at the web address below:

<https://www.nhsbt.nhs.uk/ibgrl/services/molecular-diagnostics/nhs-england-programme-for-haemoglobinopathy-blood-group-genotyping/>

On receipt of the following request form and samples from the clinical areas:

- 1) Ensure the following details have been completed on the form (see below)

**4A MOLECULAR DIAGNOSTICS**  
Red Cell (HEA) and HLA typing for patients  
Sickle cell, thalassaemia and rare inherited anaemia blood group genotyping programme  
<https://www.nhsbt.nhs.uk/what-we-do/clinical-and-research/blood-group-genotyping/> See reverse of forms for sample labelling criteria

**NHS**  
Blood and Transplant

**Hand write in BLOCK CAPITALS**

**IMPORTANT:** Ensure that the three points of identification used on this form and all samples match.  
Use BLOCK CAPITALS to complete. Refer to reverse of form for sample labeling criteria.  
All samples **MUST** be signed and dated.

Guidance document: <https://www.nhsbt.nhs.uk/ibgrl/services/molecular-diagnostics/nhs-england-programme-for-haemoglobinopathy-blood-group-genotyping/>

**Essential information included in this box must be completed, or the sample may not be tested.**

Patient Details	Requester Details
Surname	Name of Requester
Forename	Department
NHS No.	
Hospital number	Hospital Name, Full Address and ODS code*
Male <input type="checkbox"/> Female <input type="checkbox"/>	
DOB DD/MM/YY	
Sample date DD/MM/YY	

*This service is for NHS patients only.*

☐ Tick to confirm that the patient has consented to the tests being undertaken (see reverse for further information)  
I acknowledge that by making this referral, I am agreeing to NHSBT's terms and conditions,\* subject to NHSBT's acceptance of the contents of this request form.

Hospital sample ID  :

Sample time taken  :

Ethnicity\*: Please select ethnicity

\*Please indicate if not provided

Complete for potential sibling stem cell donors  
(Name of sibling and DoB)

Name of Consultant

Contact Email address

Additional relevant clinical information:

**Ensure requester details provided**

**Box **MUST** be ticked**

**Ensure DOB filled in**

**Name**


**CHI**

- 2) Ensure the correct sample type and volume has been provided (see below):

- Adults or children over 12 years – 6 ml EDTA
- Children 6 months – 12 years – 2 ml EDTA
- Children less than 6 months – 1 – 2 ml EDTA


# Blood Group Genotyping in Scotland – Instructions for Blood Banks

- 3) Ensure the sample tube is **handwritten** and meets acceptance criteria for blood transfusion samples
- 4) **Clinicians at hospitals that do NOT have an SNBTS blood banks** have been asked to provide an additional group and save sample (same sample requirements as above)
  - a. This will be needed for reconciliation of programme results
- 5) Ensure the details on the request form and sample tube(s) match
- 6) If any details on the request form are missing, please contact the clinical requester, on the same day if possible, to avoid the sample being rejected.
- 7) Once satisfied request form and sample tube(s) have been correctly completed, please complete NATF 1648 (see below)



**NATF 1648 02**  
(Relates to SOP No. NATS CLS 104, 105, 106)

**PATIENT SERVICES NATIONAL**  
**RED CELL IMMUNOHAEMATOLOGY REQUEST FORM**



Refer to SNBTS Guidance for Completion of Red Cell Immunohaematology Request Form NATL 163.

AFFIX BAR CODE  
NO. (lab use only)

**PATIENT IDENTIFICATION (Please Circle or Enter Details as Applicable)**

SURNAME: \_\_\_\_\_ FORENAME: \_\_\_\_\_ PREVIOUS NAME(S): \_\_\_\_\_  
 D.O.B: \_\_\_\_\_ GENDER: M/F HOSPITAL/EMERGENCY No: \_\_\_\_\_ CHI: \_\_\_\_\_  
 HOME ADDRESS: \_\_\_\_\_  
 DATE SAMPLE TAKEN: \_\_\_\_\_ TIME SAMPLE TAKEN: \_\_\_\_\_ SAMPLE TYPE: \_\_\_\_\_  
 REQUESTING HOSPITAL: \_\_\_\_\_ WARD: \_\_\_\_\_  
 REQUESTING CONSULTANT: \_\_\_\_\_ BLOOD GROUP (IF KNOWN): \_\_\_\_\_

**CLINICAL INFORMATION (Please Circle or Enter Details as Applicable)**

DIAGNOSIS: \_\_\_\_\_ KNOWN DANGER OF INFECTION: YES / NO  
 PREVIOUS TRANSFUSIONS: YES / NO / UNKNOWN NO UNITS TRANSFUSED: \_\_\_\_\_ DATE OF TRANSFUSION: \_\_\_\_\_  
 PREGNANT WITHIN PAST 3 MONTHS: YES / NO  
 ADDITIONAL INFORMATION: \_\_\_\_\_

**OBSTETRIC INFORMATION (Please Circle or Enter Details as Applicable)**

EDD: \_\_\_\_\_ PARITY: \_\_\_\_\_ CURRENT ANTIBODY TITRE: \_\_\_\_\_  
 CURRENT ANTI-D PROPHYLAXIS: YES / NO DATE: \_\_\_\_\_ DOSAGE: \_\_\_\_\_  
 ADDITIONAL INFORMATION: \_\_\_\_\_

**REASON(S) FOR REFERRAL (Please Tick or Enter Detail as Applicable)**

ABO INVESTIGATIONS/ANOMALIES	RhD TYPE CONFIRMATION	ANTIBODY IDENTIFICATION
ANTIBODY QUANTIFICATION	HAEMOLYTIC TRANSFUSION REACTION	ANTENATAL/RENAL TITRATION
DARA DTT/MONOCLONAL THERAPIES	CROSSMATCH	ADDITIONAL SAMPLES REQUESTED BY SNBTS
OTHER <span style="border: 2px solid red; padding: 2px;">_____</span>		COPY OF RESULTS ATTACHED: YES / NO

DETAILS OF RED CELL ANTIBODIES (If Applicable): \_\_\_\_\_

Enter: "Blood Group Genotyping Programme" in "Other" field

- 8) Send NATF 1648, 4A Molecular Diagnostics Sample request form and sample tube to National Genotyping Laboratory, Gartnavel, Glasgow, **via your local SNBTS Patient Services laboratory** using local sample transport arrangements.

- 9) Please record sample receipt and transport in local log for audit and monitoring

## Instruction for SNBTS, Patient Services Laboratories

Complete NATF 1307 (see below)



**NATF 1307 03**  
(Relates to SOP No. NATS CLS 091)

**REQUEST FORM FOR REFERRAL OF  
SAMPLES FOR RBC PCR-SSP GENOTYPING**

**Samples must be referred in line with SNBTS policy NATP CLIN 043**

Please ensure samples are clearly labelled with Surname, Forename, DOB, CHI/Hospital number, and Gender. Sample tubes must be handwritten, dated, timed and signed by the person taking the sample. Use of addressograph labels on samples is prohibited. There must be no discrepancies between the details on the sample tube and request form.

**PATIENT INFORMATION** (ensure all sections of form are completed prior to referral)

Surname: \_\_\_\_\_ Forename: \_\_\_\_\_  
DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_ CHI/Hosp No \_\_\_\_\_ Hospital: \_\_\_\_\_  
Gender: \_\_\_\_\_ Diagnosis: \_\_\_\_\_  
Reason for Referral: \_\_\_\_\_  
RCI Sample Number: \_\_\_\_\_

**TESTING REQUIRED:**

Please tick relevant box:

<b>ABO</b> (O1, O2, B, A, A2)	<input type="checkbox"/>	<b>CDE</b> (C, Cw, c, E, e, D exons 1-7, 9, 10 and other variants)	<input type="checkbox"/>
<b>WEAK D</b> (Weak D type 1, 2, 3 and a range of variants)	<input type="checkbox"/>	<b>FULL GROUP</b> (D exons 3, 5, 10, C, Cw, c, E, e, K, k, Jsa, Jsb, Jya, Jyb, M, N, S, s, and other rare types)	<input type="checkbox"/>
<b>RARE TYPES</b> (low and high incidence types)	<input type="checkbox"/>		

Enter: "Blood Group Genotyping Programme"  
No requirement to select "Testing required"

- 10) Send NATF 1307, 4A Molecular Diagnostics Sample request form and sample tube to National Genotyping Laboratory, Gartnavel, Glasgow, using local sample transport arrangements.
- 11) Please record sample receipt and transport in local log for audit and monitoring and retain any NATF 1648 for reconciliation of results returned for reporting.

**For more information about Scottish testing arrangements, please email [nss.BGGenPrgTestEnquiries@nhs.scot](mailto:nss.BGGenPrgTestEnquiries@nhs.scot)**

NATL 493 03