

HLA Selected Platelet Service Guidance

Patient testing

1) When would a patient require HLA selected platelets?

Platelet transfusion refractoriness may result from immune or non-immune platelet destruction. Only patients who are confirmed with immune platelet refractoriness due to the presence of HLA (and in a small number of cases to HLA and HPA) specific antibodies, should receive HLA (or HLA/HPA) selected platelets. Patients with non-immune causes of platelet refractoriness will not gain any additional benefit from receiving HLA/HPA selected platelets compared to non-HLA selected platelets. Operating the HLA selected platelet service is complex and dependent on a small number of donors and specialist scientists. This service should be reserved for patients who really need this product. If you are unsure if your patient would benefit from HLA selected platelets, please call your NHSBT H&I testing centre during routine hours (Mon – Fri 09:00 – 17:00).

2) What tests are required before HLA selected platelets can be provided for a patient?

The patient must be tested for:

- HLA specific antibodies (6ml clotted) and
- HLA type (6ml EDTA)

Our test request form (FRM 3A) is available on our website <http://hospital.blood.co.uk/diagnostic-services/hi/hi-test-request-forms/>

- Following completion of our tests, a report will be sent documenting the results and indicating if the patient is likely to benefit from HLA selected platelet transfusions.

3) Who do I contact to get these tests done, and who do I contact to receive HLA results?

NHSBT has six H&I laboratories located at:

- Barnsley tel: 01226 86 8241
- Birmingham tel: 0121 278 4105/08
- Colindale (North London) tel: 0208 957 2814
- Filton (Bristol) tel: 0117 912 5733
- Newcastle tel: 0191 202 4410
- Tooting (South London) tel: 0203 123 8347

The test request form (FRM 3A) and the samples should be sent to your local NHSBT H&I laboratory. The contact details and address are documented on the test request form and are also available on our website.

4) What clinical information is required by NHSBT to provide HLA selected platelets for new patients?

For **new patients** who have never received HLA selected platelets we require the following:

1. A completed First Request form for HLA Selected Platelets (FRM558)

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2. Incremental counts for the last two platelet transfusions
 3. Diagnosis/clinical details
 4. Patient requirements e.g. HEV neg, CMV neg

During normal working hours forms should be sent to your local H&I laboratory. Out of hours please e-mail Plateletoncall@nhsbt.nhs.uk and ring your local Hospital Services Department.

If you wish to discuss a patient, please contact your local H&I laboratory, and ask to speak to the Consultant Clinical Scientist.

5) What impact will a request for CMV negative, ABO or RhD matched requirements have on the HLA selected platelet for my patient?

If a CMV negative, ABO or RhD group matched platelet is requested for a patient it will reduce the pool of donations available for HLA matching by more than 50%. This may result in a less well HLA matched component being selected for your patient.

Please review the necessity to request either a CMV negative or ABO matched or RhD matched platelet for your patient.

6) Can patients be tested outside of routine working hours?

No. HLA typing and HLA specific antibody identification can take up to five working days to provide a result. Patients that are actively bleeding and have not been tested for HLA antibodies should be treated with random platelets.

For urgent cases we can test for HLA specific antibodies and provide a report within 24 hours of receiving a blood sample (Monday-Friday only). Please contact your local laboratory in advance of sending samples for urgent testing.

7) Can first requests for selected platelets be fulfilled out of hours?

Yes, but this may not always be possible. Selected platelets can only be provided if the patient has been tested by NHSBT and results are available. This is required for MHRA in order to provide an audit trail of allocation of products selected for a named patient.

The turnaround time for results is 9 calendar days, unless the testing laboratory has been informed that urgent testing is required. Urgent testing will take a minimum of 24 hours.

Post-transfusion

8) My patient doesn't seem to have benefited from the HLA selected platelet. What should I do now?

Contact your **H&I platelet desk** to discuss your patient. The Consultant Clinical Scientist will review the patient information and provide advice.

Contact details:

0208 957 2814

HLAMatchedPlatelets@nhsbt.nhs.uk during working hours 08:00 – 17:00.

Transfusion of HLA matched or HLA compatible selected platelets in patients with immune refractoriness results in a significantly improved post-transfusion increment in 60 - 70% of patients. In a small number of patients who have HLA specific antibodies, typically 1 to 3% of these patients, HPA specific antibodies are also present. These patients require HLA and HPA selected platelets. If a patient with HLA specific antibodies is not benefiting from HLA selected platelets, the patient should be tested for the presence of HPA specific antibodies. Our test request form '3D -Platelet Immunology' (available from our web site <http://hospital.blood.co.uk/diagnostic-services/hi/hi-test-request-forms/>) should be completed and samples for testing sent to the Filton H&I laboratory who will complete the investigation for HPA specific antibodies.

9) Why does NHSBT need the transfusion data following transfusion of an HLA selected platelet?

When we provide an HLA selected platelet for a patient, it is accompanied with FRM570 'HLA and/or HPA selected platelets -Follow-up'.

On this form we ask you to document:

- The pre and post transfusion platelet counts
- The dates and times these counts were determined
- The date of the transfusion
- Any transfusion reactions

We use this information to:

- Review the care we are providing for your patient
- Identify which donors/donations provide the best benefit for your patient
- Alerts us if further tests are required (e.g. new HLA antibody screen or HPA investigation)

We are reviewing our processes to identify ways to make it easier for hospitals to return this information.

Orders and delivery

10) Are HLA selected platelets an “off the shelf” product?

No. Selection of a suitable unit requires intervention by an H&I clinical scientist to assess the patient and the suitability of available units and is not considered to be an “off the shelf” product. **24 hours notice is required for these products.**

Patients must be HLA typed and HLA specific antibody tested before HLA platelets can be provided. HLA selected platelets can only be selected from apheresis stock which is held at all stock-holding units across the country. When a patient requires platelets, an H&I clinical scientist must match the DNA type and antibody profile of the patient to units that are held in stock at that time. The best unit may not be located at your local centre, and we may need to move stock across the country for the patient.

This process will take a minimum of 6 hours but can often be longer depending on where the selected unit is located.

11) How do I place a new request for HLA selected platelet?

- Please contact **your local H&I laboratory** to discuss the patient's clinical details.
- Order form (FRM558 - First Requests for HLA Selected Platelets) will be e-mailed or faxed by the H&I Laboratory
- The completed form should be e-mailed or faxed back to the H&I laboratory from an nhs.net account.
- Once the patient has been approved by a NHSBT Consultant Clinical Scientist to receive HLA selected platelets, orders can be placed using our OBOS

Please note: Faxing is for business continuity purposes and wherever possible forms should be e-mailed.

Please ensure that the first request and any special instructions are authorised by an appropriate clinician treating the patient.

12) What is OBOS?

OBOS is our Online Blood Ordering System where all blood transfusion products from NHSBT can be ordered. The system is located in your hospital blood bank department. Your blood bank staff will place your order on OBOS for you.

13) How do I place second and subsequent HLA selected platelet orders?

- Orders should be placed using OBOS
- Selection and issue of HLA selected platelets is managed from one NHSBT site
- If you need to discuss your order requirements, please telephone the HLA selected platelet Service Desk on 0208 957 2814.

Out of hours requests will be reviewed and may require discussion between the NHSBT H&I Consultant and the medical staff responsible for the patient to determine if it is appropriate to process the order out of hours.

14) Why have I been charged for an ad hoc delivery?

Selected platelet units will be selected stock. On occasions the unit may not reach your local centre to be included on your routine delivery or collection. If the unit is requested for a specific time it may be necessary for an ad hoc delivery to your centre to meet the requested time for your patient. Placing orders with less than 24 hours-notice or requests out of hours is likely to result in an ad hoc charge being applied.

HLA selected order cancellation

15) How do I cancel HLA selected platelet standing orders?

Once a standing order is submitted, the individual order will move over to the home page three days prior to delivery. These can be cancelled via the home page BUT only cancels the individual order. To cancel future orders from the standing order, changes must be made to the standing order schedule accessed by clicking on 'amend scheduled or ordered products' in blue on the order summary screen. This will cancel all related orders that have not moved to the home page.

- For standing orders ending within 7 days from current date, please contact the platelet desk on 0208 957 2814.
- For standing orders 7 days after the current date, (1) please cancel the OBOS schedule reference found on the OBOS home page and (2) contact the platelet desk on 0208 957 2814.

Our staff will assist with the cancellation of orders and will confirm which orders are not cancelled due to already being in transit.

For further information please refer to the page 36 of the OBOS User guide or call the Platelet Desk Mon- Fri 09:00 – 17:00hrs.

NHSBT requirements

16) Are HLA selected platelets an “off the shelf” product?

No. Selection of a suitable unit requires intervention by an H&I clinical scientist to assess the patient and the suitability of available units and is not considered to be an “off the shelf” product. **24 hours notice is required for these products.**

Patients must be HLA typed and HLA specific antibody tested before HLA platelets can be provided. HLA selected platelets can only be selected from apheresis stock which is held at all stock-holding units across the country. When a patient requires platelets, an H&I clinical scientist must match the DNA type and antibody profile of the patient to units that are held in stock at that time. The best unit may not be located at your local centre, and we may need to move stock across the country for the patient. This process will take a minimum of 6 hours but can often be longer depending on where the selected unit is located.

17) Why should I place my order during routine working hours?

We have trained specialist staff who manage the HLA selected platelet service and operate during normal working hours (Monday to Friday 09:00 to 17:00 hours, excluding bank holidays). They manage all orders for HLA selected platelets, ensuring each day that all patients nationally are receiving the most suitable unit. This includes orders for platelets required for evenings and weekends. Outside of these hours, we provide units for clinical emergencies only.

18) Why should I not request an HLA selected platelet to be delivered on the same day as placing the order?

We will endeavour to provide the best matched unit for your patient, however finding a suitably matched unit at short notice may not always be possible.

This may result in:

- A risk of increasing the HLA sensitisation patient due to mismatching which may be avoided if 24 hours notice is given.
- A risk of a poorer post transfusion increment compared to the best available matched unit.
- A risk more transfusions are required for the patient.
- An ad hoc charge may be applied.
- Increased costs for NHSBT which may be passed on to the hospital

19) Why do I need to complete a First Request form (FRM558) AND place the order on OBOS for NEW patients to receive HLA selected platelets?

All product orders are managed by our two platelet desks who will receive the orders from OBOS. However, the clinical care of your patient (and FRM558) is reviewed by the Consultant Clinical Scientist at your local H&I laboratory. NHSBT is required to keep a copy of the form on record for MHRA licensing requirements.

We are planning to develop our IT systems to allow new patients to be processed using OBOS and hope to provide this service in the future.

20) Why must I provide at least 24 hours-notice to receive an HLA selected platelet?

The 24 hours' notice allows us:

- To source the most suitable unit for your patient from all stock held across the country.
- Time to transport the unit across the country to meet the requested delivery time.
- Less than 24 hours' notice may result in a less well-matched unit being provided.
- A less well-matched unit may give a poorer post transfusion increment and there is a risk of increasing the antibody profile of the patient

21) Why do I sometimes receive my order on time without giving 24 hours notice?

Sometimes a suitable unit is located at a NHSBT site close to the requesting hospital. In these instances, we are able to deliver the product more quickly and it may be included on your next routine delivery run. In these circumstances we are exceeding the contractual requirements but unfortunately this cannot be achieved for the majority of orders placed with less than 24 hours' notice.

Out of hours service

22) What if I need HLA selected platelets outside of normal working hours?

Outside of normal working hours (Monday to Friday, 09:00 to 17:00, excluding bank holidays) we provide a service for **clinical emergencies only**. The emergency service will endeavour to provide the best matched unit for your patient from local stock, however finding a suitably matched unit at short notice may not always be possible. The selection and provision of units is likely to take a minimum of 6 hours and may take longer.

Orders should be placed on OBOS (Online Blood Ordering System) which is available through your Blood Transfusion Department and followed up with a telephone call to your local Hospital services department.

23) What times are the out of hours service for emergencies?

Monday – Friday	06:00-09:00 and 17:00-23:00
Weekends and bank holidays	06:00-23:00

Outside of these hours a Consultant Clinical Scientist (CCS) is available to **medical staff** to provide advice on transplantation and transfusion.

24) Can I place a request at the weekend for HLA selected platelets for a planned procedure on Monday?

No, the out of hours service is provided for unexpected clinically urgent cases at weekends. Orders for planned transfusions on Monday should be placed by 17.00 on Friday. Placing orders at the weekend that are not for clinical emergencies will result in:

- Selection of a unit which may not be the most beneficial unit available for your patient.
- Increased NHSBT transport costs and additional stock movements.
- Increased cost of providing this service, which may be passed on to the customer.

25) Can first requests for selected platelets be fulfilled out of hours?

Yes, but this may not always be possible. Selected platelets can only be provided if the patient has been tested by NHSBT and results are available. This is required for MHRA in order to provide an audit trail of allocation of products selected for a named patient.

The turnaround time for results is 9 calendar days, unless the testing laboratory has been informed that urgent testing is required. Urgent testing will take a minimum of 24 hours.

26) Can patients be tested outside of routine working hours?

No. HLA typing and HLA specific antibody identification can take up to five working days to provide a result. Patients that are actively bleeding and have not been tested for HLA antibodies should be treated with random platelets.

For urgent cases we can test for HLA specific antibodies and provide a report within 24 hours of receiving a blood sample (Monday-Friday only). Please contact your local laboratory in advance of sending samples for urgent testing.

27) What if I need HPA selected platelets outside of normal working hours?

Outside of normal working hours (Monday to Friday, 09:00 to 17:00, excluding bank holidays) contact your local Hospital Services Department. If you require clinical advice this is available from the NHSBT On-Call Patient Consultant Haematologist (**Not the H&I Consultant**).

HPA-1a(-)5b(-) platelets can be ordered via OBOS and the NHSBT Consultant Haematologist will check the appropriateness of the request.