# NHS BLOOD AND TRANSPLANT

# CTAG LUNGS - H&I UPDATE REPORT – 4th June 2026

## 1. BACKGROUND AND LAY SUMMARY

Histocompatibility and Immunogenetics (H&I) laboratories, often referred to as "Tissue Typing", are linked with transplant centres. They are involved in the assessment of patient and donor compatibility pre-transplant. This work involves comparison of the Human Leucocyte Antigen (HLA) proteins produced by an individual to provide an assessment of the level of HLA matching and immunological compatibility between the recipient and potential donors. Antibodies produced against non-self HLA proteins can lead to rejection of a donor organ. Transplantation in the presence of donor-directed HLA antibodies should be avoided wherever possible. H&I laboratories support deceased and living solid organ transplantation through HLA typing of all potential donors and compatibility assessments for recipient-donor pairs.

This report provides an update on H&I-related work/issues which impact on lung transplantation. This includes:

- National deceased donor HLA typing discrepancies [Section 2]
- H&I incidents reported to NHSBT related to lung transplantation [Section 3]
- Donor Spleen and Lymph node material [Section 4]

The contents of this report are intended for informational and discussion purposes only.

## 2. HLA DECEASED DONOR CHARACTERISATION – DISCREPANCY MONITORING

Following a review of the previous calendar year (December 2024-December 2025) for national Human Leucocyte Antigen (HLA) deceased donor characterisation, a total of two incidents were raised in relation to errors in deceased donor HLA typing [**TABLE 1**]. Incident ODT-INC-9130 involved an error in laboratory analysis which was corrected pre-allocation, so had no clinical impact. Incident ODT-INC-9632 was also attributed to an error in the initial analysis but this was not identified until the following working day leading to two recipients missing a potential kidney offer (lungs were not offered for this donor).

***TABLE 1*** *– HLA typing incidents reported between December 2024 – December 2025. Royal Free incident investigated as ODT-**INC-9130**, Birmingham incident investigated as ODT-**INC-9632***]. *Data previously reported to NHSBT CARE on 24/02/26.*

| Dec 2024 - Dec 2025 | | |
|---|---|---|
| Centre | Donor HLA Types (N) Annual | Total Incidents (N) |
| BARNSLEY | 98 | 0 |
| BELFAST (DCERT) | 68 | 0 |
| BIRMINGHAM | 160 | 1 |
| BRISTOL (DCERT) | 117 | 0 |
| CAMBRIDGE | 193 | 0 |
| CARDIFF | 83 | 0 |
| DUBLIN | 0 | 0 |
| EDINBURGH | 65 | 0 |
| GLASGOW (DCERT) | 62 | 0 |
| GUY'S | 115 | 0 |
| HAMMERSMITH (DCERT) | 79 | 0 |
| LEEDS | 98 | 0 |
| LEICESTER | 51 | 0 |
| LIVERPOOL (DCERT) | 79 | 0 |
| MANCHESTER (DCERT) | 111 | 0 |
| NEWCASTLE | 120 | 0 |
| OXFORD CHURCHILL (DCERT) | 69 | 0 |
| PLYMOUTH | 73 | 0 |
| ROYAL FREE (DCERT) | 26 | 1 |
| TOOTING | 187 | 0 |
| ROYAL LONDON | 99 | 0 |

The Donor Characterisation Electronic Results Transfer (DCERT) programme enables the electronic transfer of deceased donor HLA typing results from the H&I laboratory into the NHSBT database without transcription. Nine laboratories are now live with DCERT, with Edinburgh having joined in January 2026. The remaining 11 UK laboratories will be going live during 2026.

## 3. H&I INCIDENTS RELATED TO LUNG TRANSPLANTATION

There were a total of 29 incidents reported to the NHSBT Patient Safety team in 2025 that had a potential impact on transplantation [**FIGURE 1**]. Incorrect information transfer from Hub to the H&I laboratory and problems with the spleen/lymph node crossmatch material had the highest number of reported incidents. Further details are available in **TABLE 2** for incidents between December 2025 and April 2026 not previously reported in the December 2025 CTAG-Lung.

***FIGURE 1*** *– Trending HLA/H&I related incident reports from January to December 2025. Categories are for information only and do not correspond to NHSBT incident categories:*

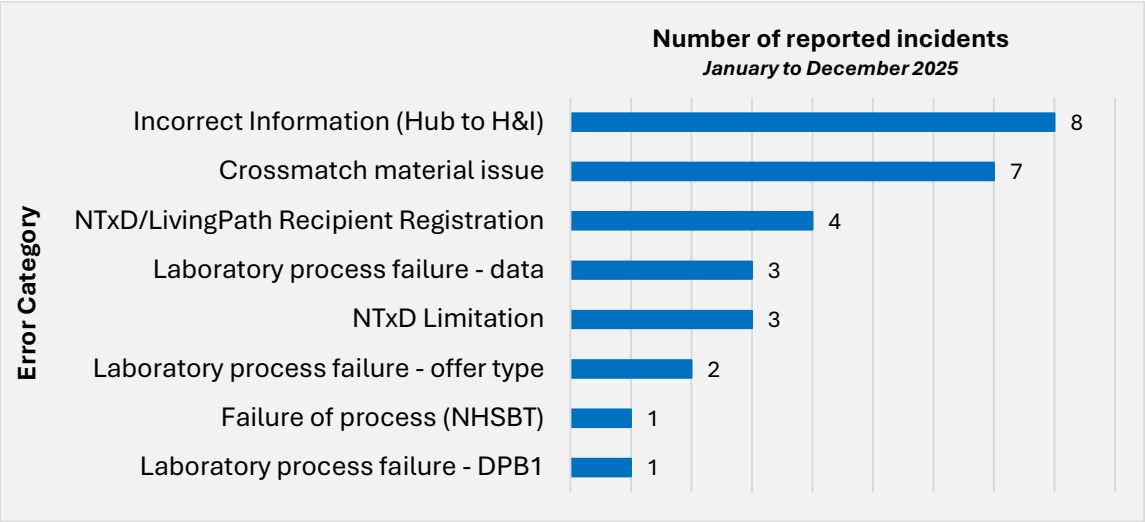


*TABLE 2 – Further details for NHSBT Patient Safety incidents reported between December 2025 and April 2026 potentially impacting on lung transplantation process*:

| Incident Number | Event Date | Description |
|---|---|---|
| ODT-INC-9616 | 02/12/2025 | Mismatched PID in email body vs attachments from Hub to H&I. |
| ODT-INC-9632 | 05/12/2025 | Revised HLA type for 177465 following offering. DQ7, DQ8 to DQ7, X. Led to two adult recipients missing a kidney offer. |
| ODT-INC-9642 | 10/12/2025 | Smashed spleen pots received. |
| ODT-INC-9682 | 22/12/2025 | DPB1 not reported with offer type due to test failure. |
| ODT-INC-9685 | 20/12/2025 | Incorrect laboratory analyser report attached via DCERT leading to incorrect information in TransplantPath for HLA offer type. |
| ODT-INC-9698 | 30/12/2025 | Incorrect laboratory report attached to FRM4936 for HLA offer type. |
| ODT-INC-9704 | 30/12/2025 | DRB3/4/5 heterozygous allele reporting issue with one laboratory via DCERT - no patient harm |
| ODT-INC-9813 | 05/02/2026 | Incorrect donor typing report shared by Hub. |
| ODT-INC-9938 | 19/03/2026 | Incorrect manual entry of deceased donor HLA-DPB1 result into NTxD. Rectified during offering. |

A recurring theme is mismatched information received from Hub by the H&I laboratory via manual processes of data upload, including email. This is a reminder to double-check all donor identifiers when reviewing information relating to an organ offer.

## 4. DONOR SPLEEN AND LYMPH NODE MATERIAL

There have recently been questions raised about the need for H&I spleen and lymph node (LN) samples to accompany deceased donor lungs due to this potentially delaying transportation for lungs where abdominal NRP is being used. H&I laboratories use these samples as a source of donor cells to

perform confirmatory donor HLA typing, retrospective crossmatching and long-term storage of donor material for further testing or research. The retention of donor material aligns with the RCPath sample retention guidelines (G031). In contrast, peripheral blood generally only provides sufficient donor cells to support DNA extraction and minimal cellular crossmatching, with insufficient material for long-term storage.

The six H&I laboratories supporting lung transplantation (Birmingham, Cambridge, Guys, Manchester, Newcastle and Royal London) were contacted for their thoughts regarding a potential proposal to change from spleen/LN to peripheral blood. Laboratories were generally supportive and understanding of the rationale but expressed some concerns about availability of sufficient material for crossmatching of higher-risk recipients (e.g. with DSA) and confirmed that there would not be sufficient material for long-term storage.

It has been suggested that lymph tissue could be collected by the recipient centre at the point of implantation for use by the local H&I laboratory. This would also be supported by the H&I laboratories. However, this would need to be established as a local process.

**AUTHOR(s):**

Carla Rosser H&I Consultant Clinical Scientist, NHSBT OTDT H&I Lead