

NHS BLOOD AND TRANSPLANT
CTAG HEART - H&I UPDATE REPORT – 25th March 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 an organ. Transplantation in the presence of donor-directed HLA antibodies should be avoided wherever possible. H&I laboratories support heart transplantation through HLA typing all potential donors and providing compatibility assessments for potential recipient-donor pairs.

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

- National deceased donor HLA typing discrepancies [Section 2]
- H&I-related incidents reported to NHSBT [Section 3]
- Brief update on cRF calculator [Section 4]

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

2. HLA DECEASED DONOR CHARACTERISATION DISCREPANCY REPORT:

There have been two discrepancies reported between December 2024 and December 2025 for Human Leucocyte Antigen (HLA) donor characterisation [**TABLE 1**] with a total of 1,953 potential donors. Eight laboratories are now live with the Donor Characterisation Electronic Results Transfer (DCERT) programme for HLA typing of potential donors, with Glasgow having joined since the last meeting.

TABLE 1 – HLA typing incidents reported between December 2024 – December 2025.
Information provided by Sophie Cullen. Royal Free incident investigated as ODT-**INC-9130**,
Birmingham incident investigated as ODT-**INC-9632**]

Dec 2024 - Dec 2025		
Centre	Donor HLA Types (N) Annual	Total Incidents (N)
BARNSELY	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

Incident ODT-**INC-9130** resolved pre-offering – no clinical impact. Incident ODT-**INC-9632** occurred on 05/12/25 and unfortunately led to two recipients missing a kidney offer as the donor was originally considered immunologically incompatible – heart not offered for this donor.

3. NHSBT INCIDENTS RELATED TO H&I

A total of six H&I/HLA related incidents with potential impact on cardiothoracic organ transplant have been reported between September 2025 and February 2026. These are summarised in **TABLE 1** below.

TABLE 1 – Summary of H&I reported incidents in September 2025 to February 2026:

Incident Number	Description
ODT-INC-9434	No viable cells from spleen/lymph node sample – cause unclear.
ODT-INC-9632	As mentioned in Section 2, a donor type was incorrectly reported as HLA-DQ7, -DQ8 but later amended to HLA-DQ7, -DQ7.
ODT-INC-9642	No viable cells from spleen/lymph node sample – smashed storage pots.
ODT-INC-9685 ODT-INC-9698	Two independent but similar incidents where the incorrect attachment for the laboratory analyser report was sent alongside the correct donor HLA report.

Incident Number	Description
ODT-INC-9813	Hub emailed the incorrect HLA type report to the recipient H&I laboratory.

In summary, CTAG members should be aware that:

- There is monitoring of reported issues with spleen/lymph node material which could affect H&I laboratory ability to store donor material, perform confirmatory HLA typing and/or perform retrospective crossmatching.
- Be aware that laboratory or ODT-Hub errors can lead to incorrect HLA information being cascaded to laboratories and transplant centres – advise to double-check paperwork identifiers when reviewing compatibility for HLA sensitised recipients. It is hoped that digital offering will mitigate this risk in the future.

4. cRF CALCULATOR UPDATE

The integration of HLA-DP unacceptable antigens into the cRF calculator tool is in progress but has been delayed due to other priorities in the statistics team regarding matchability score calculations.

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