

**NHS BLOOD AND TRANSPLANT**  
**MULTI-VISCERAL AND COMPOSITE TISSUE ADVISORY GROUP**

Antibody screening is performed at multiple time points post-transplant. Cambridge & Oxford H&I laboratories maintain centralised records of these on a software program called Fusion. It is possible to obtain a download of single antigen bead data from Fusion for all recipients

Aim would be to:

1. Download the SAB data for recipients
2. Combine the single antigen bead files
3. Obtain pre-transplant donor & recipient information from NHSBT-ODT. This information is held and can be sent in this format as they have done before for NIHR Kidney study that Cambridge are co-ordinating.
4. The H&I laboratory are able to convert low resolution/first field (e.g. HLA-A2) typing information for both donor and recipient into high resolution/second field (e.g. HLA-A\*02:01) using a combiner program that has been developed and validated internally. This is then added to the data tab of the aggregator (link above in point 3)
5. The aggregator program (link above in point 3) can then be used to interrogate HLA typing & SAB data (link above in point 2) to identify:
  - a. HLA mismatches
  - b. MFI levels of donor specific antibodies

See any of the Data\_ tabs for results in the aggregator (far right hand side of spreadsheet)

*Note a tweak of the current aggregator will be needed to allow for the identification of pre-transplant antibody MFI level*

6. This information can then be applied to the entire intestinal transplant cohort and analysed with respect to outcome (TBC what outcome indicators to be used)