

**NHS BLOOD AND TRANSPLANT**  
**ORGAN DONATION AND TRANSPLANTATION DIRECTORATE**  
**LIVER ADVISORY GROUP**  
**SUMMARY FROM STATISTICS AND CLINICAL STUDIES**

**INTRODUCTION**

- 1 This paper provides an update from Statistics and Clinical Studies and summarises recent presentations and projects.

**UPDATE FROM STATISTICS AND CLINICAL STUDIES**

- 2 The Annual Organ Donation and Transplantation Activity Report for 2014/15 has been published with an accompanying slide set that can be found here - <http://www.odt.nhs.uk/uk-transplant-registry/annual-activity-report/>.
- 3 The second Annual Liver Transplant Report was published by NHSBT in September 2015. The report covers 10 years of liver transplant data to 31 March 2015. It presents information on patients on the transplant list, number of transplants and survival after transplantation on a national and centre-specific basis. Reports for all organs are available from <http://www.odt.nhs.uk/uk-transplant-registry/organ-specific-reports>. Accompanying slide sets are also available.
- 4 Elisa Allen went on maternity leave for a year at the end of June 2015. Rachel Johnson took over as the NHSBT lead statistician for liver transplantation for the year, closely supported by Kate Martin.

**RECENT WORK**

- 5 The super-urgent registration form with the new categories developed by the acute liver failure FTWU was introduced on 17 June 2015.
- 6 Work on the survival benefit of accepting the offer of a DCD liver compared to remaining on the transplant list waiting for a potential DBD liver was presented as a poster and won first prize during the Royal Statistical Society Annual Conference, Exeter UK, September 2015. This is collaborative work with clinicians at Addenbrooke's Hospital, Cambridge. Future work will investigate survival benefit for specific disease groups and develop an online tool to quantify survival benefit for specific patient and donor types.
- 7 Data analysis to assess the impact of weekend liver transplantation upon transplant survival has been completed. We have found a significant reduction in death or graft failure associated with liver transplantation at weekends of 10-20%, which is pertinent only to short-term post-transplant survival. An abstract was accepted at the BASL session of the Digestive Disorders Federation 2015. This is joint work with clinicians at the Royal Free Hospital, London. We are planning to submit to the BMJ.
- 8 Work on alternative national allocation schemes was presented at the Royal Statistical Society Annual Conference, Exeter UK, September 2015. This focused on Cox proportional hazards regression modelling and simulations used to compare need, utility and transplant benefit allocation.

**DATA APPLICATIONS**

- 9 A standard liver transplant data set has previously been agreed by LAG for provision in response to data applications. The intention is that it will save statistical time in preparing bespoke datasets and provides a wealth of information for research. At the last meeting of the Liver Core Group, a set of criteria were agreed which, if met, would allow automatic release of the liver transplant dataset without LAG Core Group approval. The criteria are as follows:

The standard liver dataset can be automatically released where:

- a) Data requested is included in the standard dataset

AND

- b) The request is from one of the following:

- 1 A current liver transplant unit in the UK (with consultant level support)
- 2 A group with funding through an NIHR grant (or equivalent peer review funding stream)
- 3 A public health or government body

AND

- c) No statistical support is required from NHSBT

Data applications not meeting these criteria will be reviewed by the Liver Core Group. The Core Group will also receive brief details of all studies for which the standard dataset has been issued. This will be provided at the group's meetings.