

# NHS BLOOD AND TRANSPLANT

## CARDIOTHORACIC ADVISORY GROUP

### SUMMARY FROM STATISTICS AND CLINICAL RESEARCH

#### INTRODUCTION

- 1 This paper provides an update from Statistics and Clinical Research and summarises recent presentations, publications, and current and future work in the area of cardiothoracic transplantation.

#### UPDATE FROM STATISTICS AND CLINICAL STUDIES

- 2 New and updated reports, all Advisory Group papers and conference presentations continue to be posted on the ODT Clinical Site [www.odt.nhs.uk](http://www.odt.nhs.uk). Since the last meeting, the Organ and Tissue Donation and Transplantation Activity Report 2020/21 has been published showing a 25% fall in the number of deceased donors and a 30% fall in the number of organ transplants during the pandemic. The lung transplant programme was severely impacted, with 43% fewer transplants during 2020/21 compared with the previous year, while heart transplantation was impacted the least with just 8% fewer transplants.
- 3 The Annual Report on Cardiothoracic Organ Transplantation 2020/21 is in draft and will soon be circulated to centres for review and comment.
- 4 Please note our current arrangements for staff responsibilities in support of organs and tissues.

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- 5 Bowel donor extension update for relevant advisory groups:  
On 1<sup>st</sup> November 2021, the current UK bowel donor criteria will be extended to consider donors after brain death up to 59 years of age (59 years old, or less; currently, up to 55 years old) and up to 89 kg (89 kg, or less; currently, up to 79 kg) for bowel donation. This decision was endorsed by the MCTAG in October 2020 after reviewing evidence presented by the Statistics and Clinical Research team that indicated that such an extension could result in approximately 4 extra bowel transplants, on average, per year. The change will be reflected in POL193 - Intestinal Transplantation: Organ Allocation, POL196 – Deceased Donor Liver Distribution and Allocation and POL188 – Clinical Contraindications to Approaching Families for Possible Organ Donation, <https://www.odt.nhs.uk/transplantation/tools-policies-and-guidance/policies-and-guidance/>.

## PRESENTATIONS

- 6 There are no recent presentations of note.

## PUBLICATIONS

- 7 A study looking at the impact of donor and recipient age on 5-year survival following heart transplantation, led by colleagues at Papworth but with authorship from all centres, has been submitted to American Journal of Transplantation but was rejected. Further work is required before submission to another journal.

## APPLICATIONS FOR DATA

- 8 Three recent applications for UK Transplant Registry data have been processed:
- Lung transplant dataset provided to Samuel Kennedy, Newcastle University, for “Development and Validation of an Automated UK Donor Lung Allocation Tool”.
  - Heart transplant dataset compiled (but not sent) for Prof John Dark, Newcastle University, for “Effect of PGD on medium term outcome after heart transplant”.
  - Heart transplant dataset provided to Malek Hassan and Dr Stephen Pettit, Papworth, for “Validation of scores to predict mortality after heart transplantation in a contemporary UK population”.

## RECENT AND FUTURE WORK

- 9 Work has continued towards development of Risk Communication Tools across all organs to support conversations between patients and clinicians at the time of listing with regards to the risks and benefits of transplantation. The lung and kidney tools have been developed first and work is well underway to develop models for heart patients.
- 10 We have been working on a project examining the outcomes after heart transplant for urgent listed LVAD patients, with Dr Sern Lim and Dr Jayan Parameshwar, which will be presented at the CTAG-Heart meeting.
- 11 Work is progressing on the enhancements to the UK VAD Database, with the aim to launch the new database in early 2022.

- 12 We have continued to support the DCD heart programme, providing regular monitoring reports and are currently working on a 1 year review of the Joint Innovation Fund and the business case for future funding.
- 13 Support has been provided towards the development of a UK trial comparing the effect of Custodiol HTK solution and St Thomas's solution on the outcomes of cardiac transplantation from DBD donors, including the recruitment of a Clinical Research Fellow for this trial, Luke Williams.
- 14 We are working with the International Society for Heart and Lung Transplantation to re-establish data sharing after the international registry suspended data collection in early 2019 as a result of GDPR.
- 15 Fixed term projects and regular reports are listed in **Tables 1** and **2** below

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**Statistics and Clinical Research**

**September 2021**

	<b>Title</b>	<b>Planned completion date</b>	<b>Current priority</b>	<b>S&amp;CS resource reqd</b>
1	Heart Allocation Support Heart Allocation Sub-Group Modelling of factors affecting waiting time	Unknown Autumn 2021	** ***	** ***
2	Lung Allocation Monitoring of Super-Urgent and Urgent Lung Allocation Schemes	On-going	**	***
3	DCD Heart Programme Support Joint Innovation Fund UK wide DCD heart pilot	Unknown	***	**
4	Implementation of new data collection Ischaemia time and perfusion techniques Decline reasons Update Transplant Record form and Follow-up	Unknown Unknown Unknown	** ** **	** ** **
5	Organ utilisation projects Supporting work of Cardiothoracic Clinical Research Fellow and Clinical Leads for Utilisation	2022	**	**
6	VAD Database restructure	Winter 2021	***	***
7	Review of outcomes of urgent heart transplantation in patients with LVAD-related complications	Autumn 2021	**	**
8	Age related outcomes in heart and lung transplantation	Autumn 2021	***	***
9	Analysis of impact of ischaemia time on lung transplant outcomes	Autumn 2021	*	*
10	Review of cardiothoracic risk models	Autumn 2021	**	**
11	VAD risk-adjustment for Annual MCS report	On-hold	*	***
12	Update of ISHLT data extract	Autumn 2021	**	*

**Table 2 Regular Reports**

	<b>Title</b>	<b>Frequency</b>	<b>Current priority</b>	<b>Time taken</b>
1	Summary of CUSUM signals for CTAG	Biannually	**	< 2 hours
2	Cardiothoracic multi-organ transplant outcomes for CTAG	Annually	**	Half day
3	Zonal activity review and adjustment of zonal boundaries if required for CTAG	Annually	**	One week
4	Adjudication panel review of cases for CTAG Heart and CTAG Lung	Biannually	**	Two days
5	DCD Heart activity report	Quarterly	**	One day
6	<i>Audit of ischaemia time components</i>	<i>Annually (once data collection process is in place)</i>	*	<i>One day</i>
7	Annual Report on Cardiothoracic Transplantation	Annually	***	Two weeks
8	Interim Report on Cardiothoracic Transplantation	Annually	***	One week
9	Annual Report on Mechanical Circulatory Support Related to Heart Transplantation	Annually	***	Two weeks
10	Monthly reporting of transplant and VAD numbers to NHS England	Monthly	***	Half day
11	Centre specific organ offer reports	Monthly and Quarterly	**	Half day
12	CUSUM reports to centres	Monthly	***	Half day
13	Organ damage and usage reports to NORS teams	Monthly	**	<2 hours
14	Data submission to METHODS for cardiothoracic transplant dashboard for NHS England	Annually	**	One day
15	VAD data chasing reports	Monthly/quarterly	**	<2 hours