

NHS BLOOD AND TRANSPLANT

CARDIOTHORACIC ADVISORY GROUP

SUMMARY FROM STATISTICS AND CLINICAL STUDIES

INTRODUCTION

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

UPDATE FROM STATISTICS AND CLINICAL STUDIES

- 2 The *Organ Donation and Transplantation Annual Activity Report for 2017/18* was published in July 2018, reporting a total of 5,090 live-saving and life-transforming transplants last financial year. 412 (8%) of these were cardiothoracic organ transplants. <http://www.odt.nhs.uk/statistics-and-reports/annual-activity-report/>
- 3 New and updated reports, Advisory Group papers and conference presentations continue to be posted on the new ODT Clinical Site www.odt.nhs.uk. All organ-specific Annual Reports for 2017/18 have been prepared, reviewed and published on this site. The 2017/18 Annual Report on Mechanical Circulatory Support Related to Heart Transplantation is being prepared and will be sent to centres for review in due course.
- 4 Please note our current arrangements for staff responsibilities in ODT related work below. We are expanding our portfolio of clinical trials in NHSBT related activities and our involvement in blood donation and transfusion studies, and a number of additional staff are dedicated in these areas.

Area	Lead	Support(s)
Donation	Susanna Madden	Rebecca Curtis
Organ retrieval	Rebecca Curtis	Sophie Hughes
Enquiries	Statistical.enquiries@nhsbt.nhs.uk	
Kidney transplantation	Lisa Mumford	Matthew Robb, Chloe Brown
Pancreas transplantation	Claire Counter	Jo Bunnnett
Liver transplantation	Rhiannon Taylor	Rachel Hogg, Lewis Downward
Small bowel transplantation	Sally Rushton	Rachel Hogg
Cardiothoracic transplantation	Sally Rushton	Rachel Hogg

PRESENTATIONS

- 5 There are no recent presentations of note.

PUBLICATIONS

- 6 Two studies which analysed data on the UK VAD Database have recently been published or accepted for publication:

Patient survival and therapeutic outcome in the UK bridge to transplant left ventricular assist device population, Parameshwar et al

Durable left ventricular assist device support as a bridge to heart transplant candidacy, Shaw et al
- 7 An analysis of the incidence, risk factors and outcome of primary graft dysfunction following heart transplantation in the UK was published in Transplantation in May. This was work conducted by the CTAG clinical fellow Sanjeet Singh in collaboration with the Statistics team.

CLINICAL FELLOWS

- 8 Following a competitive application process, work is underway to recruit a new CTAG clinical fellow who will be based at Newcastle. The fellow will be employed by NHSBT and will work closely with the Statistics and Clinical Studies team. Details of the winning proposal are included in the CTAG Clinical Audit Group Chair's Report.
- 9 Additionally, two clinical fellows have been employed to work with NHSBT on organ utilisation alongside Professor John Forsythe and Mr Chris Callaghan and malignancy in transplantation alongside Professor Chris Watson and Mr Chris Callaghan and the Statistics team.

STANDARD CARDIOTHORACIC TRANSPLANT DATASET

- 10 In line with other organs, it has been agreed that a standard cardiothoracic transplant dataset is created for provision in response to data applications that meet a number of criteria. The intention is that it will save statistical time in preparing bespoke datasets and provides a wealth of information for research. We are working with the Clinical Audit Group to define the variables to be included in this standard dataset.

RECENT AND FUTURE WORK

- 11 The changes to the UK VAD Database are currently being defined in collaboration with the Clinical Audit Group. The proposed changes will be circulated to VAD leads and coordinators for review and the aim is to have clinical sign off by the end of the calendar year.
- 12 Statistical support has been provided to the Heart Allocation Sub-Group which has been established to improve aspects of the current heart allocation policy. Statistical support has also been provided to the Scout Subgroup of the NORS Workforce Transformation Project.

	Title	Planned completion date	Current priority	S&CS resource reqd
1	Heart Allocation Sub-Group (HASG) Support implementation of 2018 Heart Allocation Scheme	End-2020	**	**
2	Lung Allocation Sub-Group Support monitoring of SULAS, ULAS and NULAS	To start	*	*
3	Paediatric Allocation Working Group Support implementation of paediatric allocation zones	On-hold	*	*
4	Scout Project Support scout sub-group of NORS Workforce Transformation Board	End-2018	***	**
5	DCD Heart Programme Support RINTAG DCD Heart Working Group	On-going	***	**
6	Implementation of new data collection			
	Grading of retrieved organs	2019	**	**
	Ischaemia time and perfusion techniques	2019	**	**
	Decline reasons	2019	**	**
	Update Transplant Record form	Unknown	*	**
7	Organ utilisation projects			
	Ideal lung donor initiative	On-going	***	***
	Ideal heart donor initiative	On-going	***	***
8	VAD Database restructure	2019	***	***
9	HM3 VAD project	2019	**	**
10	Impact of duration between brain stem death and retrieval on lung utilisation and post-transplant outcomes	End-2018	*	**
11	Analysis of impact of ischaemia time on lung transplant outcomes	End-2018	*	**
12	DCD lung transplant outcome analysis	On-hold	*	***
13	VAD risk-adjustment for Annual MCS report	Summer 2019	*	***

Table 2 Regular Reports

	Title	Frequency	Current priority	Time taken
1	Summary of CUSUM signals for CTAG	Biannually	**	< 2 hours
2	Heart-Lung transplant outcomes for CTAG	Biannually	**	<2 hours
3	Urgent/Super-Urgent Heart Allocation Scheme annual review for CTAG	Annually	***	One week
4	Urgent/Super-Urgent Lung Allocation Scheme annual review for CTAG	Annually	***	One week
5	Zonal activity review and adjustment of zonal boundaries if required for CTAG	Annually	**	One week
6	Prolonged registrations for CTAG	Annually	*	Half day
7	DCD Heart activity report for RINTAG	Biannually	**	One day
8	Organ grading form return rates	Quarterly	**	Two days
9	<i>Audit of ischaemia time components</i>	<i>Annually (once data collection process is in place)</i>	*	<i>One day</i>
10	Annual Report on Cardiothoracic Transplantation	Annually	***	Two weeks
11	Interim Report on Cardiothoracic Transplantation	Annually	***	One week
12	Annual Report on Mechanical Circulatory Support Related to Heart Transplantation	Annually	***	Two weeks
13	Monthly reporting of transplant and VAD numbers to NHS England	Monthly	***	Half day
14	Centre specific organ offer reports	Weekly, Monthly and Quarterly	**	Half day
15	CUSUM reports to centres	Monthly	***	Half day
16	Organ damage and usage reports to NORS teams	Monthly	**	<2 hours
17	<i>Cardiothoracic NORS KPIs</i>	<i>Monthly/quarterly (in development)</i>	**	<i>One day</i>
18	Data submission to METHODS for cardiothoracic transplant dashboard for NHS England	Annually	**	One day
19	VAD data chasing reports	Monthly/quarterly	**	<2 hours
20	Harefield transplant record report	Quarterly	*	<2 hours
21	Glasgow survival report	Biannually	*	<2 hours