

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 RESEARCH

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. The Annual Report on Mechanical Circulatory Support Related to Heart Transplantation for 2021/22 was published December 2022.
3. A new NHS England funded clinical fellow, Rebeka Jenkins, started working with the team in January 2023 for 3 years. Rebeka's work will be focused on PREMS and will mostly be working with the BTRU. Her work will cover all organs and age groups, and will be done over 3 stages – an initial literature review on what is currently available in PREMS, moving to then focus on kidney implementation (due to her renal background) whilst ensuring the work is transferable to other organs, and finally looking at dissemination to patients. She will be making contact with advisory groups in the coming future as her work progresses.
4. Please note our current arrangements for staff responsibilities in support of organs and tissues.

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PRESENTATIONS

5. Gill Hardman presented her work on The UK Lung Risk Index (UKLRI); An Objective Prognostic Score Based on Donor and Recipient Factors to Aid Decision Making in Lung Utilisation at ISHLT in April 2023. Several members of the team gave presentations at the NHSBT Lung Summit which was held in February 2023.

PUBLICATIONS

6. One recent study has been submitted to a medical journal for publication and is awaiting decision:
 - Early Experience of a New National Lung Allocation Scheme in the UK Based on Clinical Urgency
7. Members of the team have co-authored two recently accepted papers in The Journal of Heart and Lung Transplantation:
 - A National Pilot of Donation After Circulatory Death (DCD) Heart Transplantation Within the United Kingdom
 - Risk of Prolonged Ischaemic Time Linked to Use of Cardio-Pulmonary Bypass During Implantation for Lung Transplantation in the United Kingdom

APPLICATIONS FOR DATA

8. There have been 5 recent applications for national registry data:

Centre	Applicant	Application date	Study title	Status
Newcastle	Pauline Pradere	14/11/2022	Outcomes of group 1, group 4, and group 5 pulmonary hypertension (PH) patients after listing for lung and heart-lung transplantation in the UK	Completed
Edinburgh	Adam Marshall	11/10/2022	Enlighten - Optical Molecular Imaging and Sensing During Ex Vivo Lung Perfusion	Completed
Newcastle	Pauline Pradere	25/01/2023	Organ donor utilisation; a comparison between UK and French national practice. Validation of the UK Lung Risk Index in the French lung transplant cohort	Completed
Manchester	Rebecca Varley	27/01/2023	The impact of time of day on solid organ transplant outcomes	Completed
University of Cambridge	Meghna Sreekumar	04/04/2023	Impact of socioeconomic deprivation on the referral for and the outcomes of lung transplantation	In progress

RECENT AND FUTURE WORK

9. We have recently reviewed the adult heart post-transplant risk-model used in the Cardiothoracic Annual Report to produce risk-adjusted survival rates. This was following the previous development of the model in 2016. The adult lung risk-model is currently being reviewed.

10. Statistical analyses have been provided to the CTAG Heart Allocation Working Group (HAWG) to review outcomes of patients who receive urgent transplant following LVAD complications as well as super-urgent transplant outcomes from ECMO versus temporary VAD bridging.
11. We have also supported the CTAG Lung Allocation Working Group (LAWG), working closely with Sam Kennedy at Newcastle University to aid simulations of different possible future lung allocation systems.
12. We continue to support the DCD heart programme, providing regular monitoring reports.
13. Progress is continuing on the enhancements to the UK VAD Database, with the delayed launch now expected in Autumn 2023.

Rachel Hogg
Statistics and Clinical Research

April 2023