# NHS BLOOD AND TRANSPLANT ORGAN DONATION AND TRANSPLANTATION DIRECTORATE THE TWENTY-SECOND MEETING OF THE NHSBT CTAG HEARTS ADVISORY GROUP ON WEDNESDAY 9 OCTOBER 2024 VIA MICROSOFT TEAMS MINUTES

## Attendees:

Rajamiyer Venkateswaran	CTAG Hearts Chair; Centre Director, Wythenshawe Hospital
Lynne Ayton	Transplant Managers Forum Representative
Jim Barnard	Manchester
Raymond Braid	NHS Services Scotland
Paul Callan	Consultant Cardiologist, Manchester University NHS Foundation Trust
Philip Curry	Cons Cardiac Transplant Surgeon. Golden Jubilee Hospital, Glasgow
Jonathan Dalzell	Centre Director, Golden Jubilee Hospital, Glasgow
Diana Garcia Saez	Specialty Doctor Cardiothoracic Surgery and Transplantation, Harefield
Shamik Ghosh	CTAG Lay Member Representative
Kathryn Green	CTAG Patient Group Representative
Margaret Harrison	CTAG Lay Member Representative
Delordson Kallan	CTAG BHSI Representative
Maggie Kemmner	National Head of Transformation, NHS England
Sern Lim	Deputy Chair, CTAG Hearts; Cons Cardiologist, QEH Birmingham
Guy MacGowan	Cardiologist, Freeman Hospital, Newcastle
Derek Manas	Medical Director, OTDT, NHSBT
Stephen Pettit	CT Centre Director, Royal Papworth Hospital
Zdenka Reinhardt	Cardiologist, Freeman Hospital, Newcastle
Miguel Reyes Roque	Statistics and Clinical Research, NHSBT
Sally Rushton	Principal Statistician, Statistics and Clinical Research, NHSBT
Fernando Riesgo-Gil	Interim Centre Director (Hearts), Royal Brompton and Harefield
	Hospitals
Marian Ryan	Specialist Nurse Organ Donation
Philip Seeley	Recipient Transplant Co-ordinator, Newcastle
Asif Shah	Consultant Cardiothoracic Surgeon, Newcastle
Jacob Simmonds	Consultant Cardiologist, Great Ormond Street Hospital
Lewis Simmonds	Statistics and Clinical Research, NHSBT
Hassiba Smail	Consultant Cardiologist, Royal Papworth Hospital
Sarah Watson	NHS England
Craig Wheelans	NHS Services Scotland
Daniel White	Recipient Transplant Co-ordinator, Royal Papworth Hospital
Julie Whitney	Head of Service Delivery, OTDT Hub, NHSBT

### In attendance:

Caroline Robinson (Minutes)	Advisory Group Support, NHSBT

### **Apologies received:**

Ayesha Ali, Marius Berman, Robert Burns, Jenny Collins, Ian Currie, Debbie Macklam, Jas Parmar, Aaron Ranasinghe

No.	Item	Action
	Welcome and Apologies	
	R Venkateswaran welcomed all to the meeting. Apologies are shown above.	
1.	Declarations of Interest in relation to the Agenda CTAGH(20)22	
	There were no declarations of interest in relation to today's Agenda.	
	Please note that it is the policy of NHSBT to publish all papers on the website unless the papers include patient identifiable information, preliminary or unconfirmed data, confidential and commercial information or will preclude publication in a peer-reviewed professional journal.  Authors of such papers should indicate whether their paper falls into these categories	
2.	Minutes and Action Points of the CTAGH Meeting held on 17 April 2024 CTAGH(M)(24)01 and CTAGH(AP)(24)01	
2.1	The Minutes of the CTAG Hearts Meeting held on 17 April 2024 were accepted.	

i o be rati	nea CTAGH(I	VI)(24)UZ
2.2	The following Action Points were discussed:	
2.2.1	CTAG Patients Routine Blood Monitoring Report –See Item 8.3	
2.2.2	CAV Vasculopathy – Due to commitments of OUG and the CT Review, there has	
	been no further discussion since the initial meeting.	
2.2.3	Super-urgent paediatrics and ECMO – A meeting was held with the two	COMPLETE
	paediatric centres regarding agreement on urgency relative to patients waiting on	
	Berlin hearts. There is no change in policy at present. A meeting will take place	
	between the 2 centres and NHSE and any proposed change to the policy will be	
	discussed in a further meeting.	
2.2.4	Six-month review of 20 CM rule change for GOSH - See Item 10.4	
2.2.5	Non-compliance with Heart Allocation – Changes were needed to the DCD heart	COMPLETE
2.2.0	policy based on recent events involving DCD hearts, eg team mobilisation before	
	there is a confirmed donor, requests for repeat echocardiograms and an incident	
	where a recipient was anaesthetised before the organ was approved for	
	transplant and then had to be woken up. A draft has been completed and once it	
	is approved it will be circulated to all units.	
2.2.6	Re-transplant into CUSUM calculation – There is a range of limits across different	ONGOING
2.2.0	organ CUSUM reports ranging from 1.5 to 3.5 with limits determined through	O. COUNT
	simulations. To balance the chance of detecting a real problem with detecting too	
	many false positives, a threshold of 1.5 for paediatrics and 2.5 for adults is being	
	proposed and was agreed at the Spring meeting but is not yet implemented into	
	routine reporting of CUSUMs. Until implementation, there are no re-grafts	
	included in CUSUM reporting.	
2.2.7	DCD Hearts Regular Report – This action relates to DCD and DBD survival rates	COMPLETE
2.2.1	recorded in the annual report. For this year, DCDs are only included in the	OOMII EETE
	unadjusted rates, but not risk adjusted rates. Further alterations in the regular	
	report are included in the report at Item 7.2.	
2.2.8	CTAG Patient Report - R Burns previously highlighted concerns the Patient	COMPLETE
2.2.0	Group has regarding the proposed single adult cardiothoracic transplant tariff. J	OOMII EETE
	Parmar and R Venkateswaran added their signatures to a letter to NHSE which	
	has been sent and is awaiting acknowledgment.	
2.2.9	Osteoporosis in the Cardiothoracic Transplant Population – See Item 8.2	
2.2.10	Adjudication Panel – The form for SU and U recipient registration (FRM4351) has	COMPLETE
2.2.10	been revised and is now in use. Data on patients who go through the adjudication	30m 2212
	panel and their outcomes will be included in the activity papers for CTAG Heart in	
	Spring 2025.	
2.2.11	Survival from Listing The analysis has been changed to impute missing values	ONGOING
	rather than drop patients with missing data, so no patients are being excluded.	on our
	Survival from listing for paedatrics is ongoing.	
	Carried Hom houring for pacedamos to origining.	
3.	Medical Director's Report	
3.1	Developments in NHSBT – CTAG(24)34	
<u> </u>	D Manas gave an update on current issues and reminded CTAG members that	
	all decisions need to come to the advisory group to become policy:	
	An environmental sustainable group linked in with wider national and	
	European groups has been created chaired by Matt Wilbur Smith. A	
	cardiac representative is needed for this.	
	<ul> <li><u>Finances</u> – Increased support is being requested from DHSE, specifically</li> </ul>	
	for DCD hearts and NRP to be included in baseline funding.	
	£1M of funding has been received to date from Department of Health and distributed to units doing NRP.	
	distributed to units doing NRP.	
	A strategy document for the development of ARCs (Assessment  Page 1972 (Assessment and Assessment Assessm	
	Recovery Centres) has been submitted with the outcome expected in	
	April 2025.	
	<u>SCORE</u> – some workstreams have been completed. The workforce	
	stream has completed recommendations. Transport is still work in	
	progress. There is no plan to stop flying organs, but as smaller airports	
	are closing out of hours, more planning is needed re timing of retrievals.	

2

3.2	<ul> <li>OUG – NHSBT is making progress on the areas assigned to it. CLUs are having regular meetings and centres will be approached by Gareth Jones regarding set up of cardiothoracic collaboratives.</li> <li>HHV8 – this has previously been higher in the UK than expected at close to 4%. There have been 4 cases of transmission mostly to liver patients. CT patients do not appear to be at such high risk. Consenting of patients is critical and a document will be circulated to support this. It is anticipated this will not be an ongoing problem due to interpretation of the serology.</li> <li>The NHSBT clinical team is working hard to deliver ERAS (led by Lisa Burnapp). If CTAG members would like to be involved, they should contact D Manas.</li> <li>New Appointments</li> <li>Lorna Marson is now on the NHSBT Board.</li> <li>Laura Barton has been appointed as OUG Programme Manager. She has already made a huge difference in implementing OUG</li> </ul>	
	recommendations and to deliver the business case for the ARCs.	
A	NUSE CT Paviow - Undata and Progress Panort	
4.	<ul> <li>MKemmner gave an update on NHS England's CT review which is currently in a scoping phase.</li> <li>The review's aim is to increase access to transplant and to improve outcomes. This will have a 3-year focus within NHSE and will be a process of ongoing improvement to help identify patients at the right point so risk can be managed effectively.</li> <li>The review will also focus on elements of the CT pathway to see where demand is and what referring clinics and transplant centres are doing to promote this. The work of the collaborations will be important in this.</li> <li>The process of organ acceptance including information exchange on organs will also be included along with long term outcomes and risk management eg CAV and other wider long term health risks.</li> <li>How units are paid will also be important, particularly income v. spend.</li> <li>M Kemmner emphasised the review will not include paediatrics until the outcome of and recommendations from the paediatric peer review. Anne Butler is looking at the commissioning specification and setting up gender reviews. Communication is planned between A Butler and R Burns (CTAG Patient Group co-Chair).</li> <li>Thanks were given to units visited to date for their co-operation and for their contributions to the ICE report which will be distributed on 21 October.</li> <li>NHSE has also attended the co-ordinator's network.</li> <li>Recruitment is ongoing for 3 speciality national advisory roles and 2 patient and public voice roles for which there have been a lot of applicants. These roles will last for the life of the programme.</li> <li>The report will not contain centre identifiable data.</li> <li>It is acknowledged that there will be actions and outcomes for some of NHSE's recommendations in the lifetime of the review. M Kemmner will provide further updates at forthcoming CT Centre Directors' and CTAG meetings.</li> </ul>	
5.	Governance Issues	
5.1	Non-Compliance with Heart Allocation	
5.2	In R Baker's absence, D Manas stated there have been a few incidents of poor communication where the donation team within ICU has communicated with the retrieval team about whether a donation will be DBD or DCD. He emphasised that donation and retrieval teams should always be kept separate.  Clinical Governance Report - CTAGH(24)35	
	This report was circulated prior to the meeting. One incident was highlighted	
	where the OCS module was primed incorrectly with 200-300 mls of 'maintenance' solution instead of 'priming solution leading to the proposed DCD heart process	

		/(/-
	being abandoned. The investigation findings and learning points are included in the report.	
5.3	CUSUM Monitoring of 90-day outcomes following heart transplantation -	
	CTAGH(24)36	
5.4	This report was circulated prior to the meeting. There have been no CUSUM signals for heart transplantation in the last 6 months for 90 days mortality. Thanks to all for maintaining high standards. S Pettit thanked S Rushton for her help clarifying the methodology for the CUSUM process He stated that Papworth has done work internally to help them identify problems before they arise which they are happy to share.	
5.5	Group 2 Transplants	
0.0		
	There were no recent transplants to discuss.	
6.	OTDT Hub Update	
	J Whitney confirmed that DCD Heart allocation changes were made at the end of	
	August. Offers now go to SU named recipients (including SU paediatric	
	recipients) before going out to centre based offers for the rest of the list.	
6.1	Sustainability and Certainty in Organ Retrieval (SCORE) - CTAGH(24)37	
	In D Macklam's absence, J Whitney gave an update on SCORE's activities and	
	goals:	
	<u>Donation</u>	
	<ul> <li>Improved certainty around the time of donation within a fixed window</li> </ul>	
	allowing time to plan.	
	<ul> <li>Improved predictability for donor hospitals of where theatres are required.</li> </ul>	
	<ul> <li>Improved certainty for donor families on when donation will take place.</li> </ul>	
	<u>NORS</u>	
	<ul> <li>Improved working patterns for NORS teams to allow increased planning</li> </ul>	
	<ul> <li>Improved predictability of when NORS teams can be expected back at</li> </ul>	
	base.	
	Increased time for decision making to improve logistic planning and	
	efficiencies.	
	<u>Transplant Centres</u>	
	Daytime offering windows leading to improved decision-making regarding	
	organ acceptance.	
	<ul> <li>Increased certainty of organs being received in daytime hours.</li> </ul>	
	<ul> <li>Transplants to take place at optimal times for surgeons and recipients.</li> </ul>	
	Support Services	
	Increased time to plan will result in more efficient use of resources.	
	·	
	Increased certainty of retrieval will allow labs more time to plan.	
	CT Centres will need to consider the following:	
	<ul> <li>Consideration of an offering window of 8:00-10:00</li> </ul>	
	How to manage the offers and surgical/medical input	
	How to manage the one's and surgiculmedical input     How to plan access to theatres (including avoidance of theatre wastage)	
	and use of lung fridges and machine perfusion) through an audit.	
	CTAG members agreed that while the plan is very good, some consideration	
	must be given to centres' current struggles maintaining the cardiac workload with	
	a diminishing workforce. It was also noted that NORS teams are hard to sustain	
	as retrieval surgeons are often implanting surgeons as well. It is hoped that the	
	plans to create more certainty will improve working conditions and collaboration	
	with colleges will also help to encourage new trainees to come into the workforce.	
<u></u>		
7.	DCD Hearts	
7.1	DCD Hearts Oversight Meeting update (Sept 2024)	
	In A Ali's absence, R Venkateswaran gave an update from the recent meeting	
	which suggested there is sufficient funding to support DCD activity for the	
	remainder of this year.	
7.2	DCD Hearts Regular Report - CTAGH(24)38	
	This paper illustrating DCD heart activity from 1 February 2015 to 31 May 2024	S Rushton / M
	and patient outcomes and offering data from 7 September 2020 to 31 May 2024	Reyes Roque
	was circulated prior to the meeting. Full data can be found in the report.	, oo itoquo
	was sirediated prior to the meeting. I all data can be found in the report.	<u> </u>

It was noted that with only one available DCD retrieval service which is ring fenced, there can be occasions when triage happens regarding available DCD donors and the best DCD donor is chosen. It was also noted that some results include paediatric data and others do not. Some guidance is needed on when data should include paediatrics to ensure that no-one is missing from the DCD cohort. As DCD transplant is not possible for younger patients, it was agreed that paediatrics would be excluded from future reports. ACTION: Paediatric transplants to be excluded from future reports comparing DCD and DBD. Teams were congratulated for continuing DCD work and encouraged to send representatives to the forthcoming DCD Heart Retrieval stabilisation group meeting to make decisions on how the service can be sustained. The Statistics team were congratulated for the high quality of the report and the data included within it. ACTION: The next report will seek to separate out paediatric and adult activity at Newcastle 8. **CTAG Patient Group** CTAG Patient Group (CTPG) report (11 Sept 2024) - CTAGH(24)39 8.1 The most recent CTPG report was circulated to CTAG Heart members. The following points were highlighted: In R Burns' absence, K Green stated patient group members remain concerned about the cardiothoracic funding mechanism. While R Burns has been in communication with NHSE along with the Somerville Heart Foundation, as the tariff is still being discussed, it was advised there should be no further action at present. The DHSC will host a transplant commissioning symposium in November 2024 at which R Burns will speak. R Burns continues to engage with various stakeholders and charities across the UK. He also attended and spoke at the annual Somerville Heart Foundation Conference in May 2024. The Patient Group continues to be a formal stakeholder in NICE appraisals relating to COVID prevention and treatment and submitted a response to the upcoming appraisal of Sipavibart. NICE have also invited R Burns to join the committee for the appraisal of Molnupiravir. The CTPG Co-chair also attended NHSE's annual review meeting for mechanical circulatory support in June 2024 and is actively engaged in ISOU work. 8.1.1 CTAG Patient Group Minutes (11 Sept 2024) - CTAGH(24)40 The Minutes from September's Patient Group meeting were circulated prior to the 8.1.2 CTAG Patient Group Action Log - Sept 2024 - CTAGH(24)41 The Action Log from the September Patient Group meeting was also circulated. 8.2 Papworth osteoporosis management audit - CTAGH(24)42 Following a survey by the Patient Group expressing concerns about risk of osteoporosis following transplant, S Pettit presented an audit of osteoporosis risk management in heart transplant patients at Papworth 2021-22. Details of this were circulated prior to the meeting. Audit standards are summarised: Patients with risk factors should have a DEXA scan before transplant. Osteoporosis risks should be explored during the assessment. Bone mineral density should be assessed by DEXA scan in year 2 The need for calcium and Vitamin D supplements should be revisited in All transplant recipients should receive bone protection in year 1 GPs should be informed of the risk of osteoporosis in year 1 Patients with osteoporosis should be offered treatment in year 2. The audit highlighted the following areas for potential improvement: Add osteoporosis risk assessment to a 2-day proforma and request a DEXA scan for patients with risk factors eg broken bones or diagnosis of

	,	
	osteoporosis, hip fracture, do you have regular menstrual periods (female	
	patients)	
	<ul> <li>Advise Vitamin D supplements during autumn/winter for al patients and</li> </ul>	
	all year round in patients of black/Asian ethnicity.	
	<ul> <li>Avoid calcium supplements in year 2 unless dietary deficiency.</li> </ul>	
	<ul> <li>Send a standard letter requesting local DEXA scan in year 2 and referral</li> </ul>	
	for specialist assessment if T score <-2.5 at any site.	
	This work does not need to be done by a cardiologist but needs to be part of a	
	system in place at the centre to help optimise better 1, 3 and 5 year survival.	
	Individual centres are advised to look at what their practice is.	
8.3	Reaudit of the implementation of the Post transplant routine blood monitoring	
0.0	working group recommendations – CTAGH(24)43	
	Following the Patient Group's survey of post-transplant routine blood monitoring it	
	was suggested that there was a re-audit of patients in 3-6 months. The results	
	and recommendations were circulated prior to the meeting.	
	Since the last audit there has been progress in key areas, but	
	improvement is still needed with a shared monitoring agreement with GP	
	practices and follow up of patients. Both these areas are challenging	
	given patient mobility and change of GP practice as well as GP	
	willingness to engage and the numbers of patients on follow up who	
	create a substantial workload.	
	<ul> <li>Amyloidosis - Concerns have been previously expressed by the Patient</li> </ul>	
	Group regarding services for patients with amyloidosis. This is a	
	heterogenous condition that should be manageable in transplant centres.	
	However, for more complex patients, haematology and chemotherapy	
	input may be required pre- and post-transplant. Although Royal Free	
	Hospital has provided a service to help with these patients, access to transplant can be more challenging and communication across teams	
	and close monitoring is needed to ensure adequate care post-transplant.	
	Heart Hilliagtion	
9.	Heart Utilisation	
<b>9.</b> 9.1	CLU Update - CTAGH(24)53	
	<u>CLU Update</u> - CTAGH(24)53 In A Ranasinghe's absence, this report was circulated prior to the meeting. Key	
	<u>CLU Update</u> - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for	
	CLU Update - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ	
	CLU Update - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT	
	CLU Update - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ	
9.1	CLU Update - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.	
9.1	CLU Update - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports	
9.1	CLU Update - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45	
9.1	CLU Update - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:	
9.1	CLU Update - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  • The annual heart and lung reports have been published and circulated.	
9.1	CLU Update - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  • The annual heart and lung reports have been published and circulated.  • The draft MCS report has been circulated. It is important that centres note	
9.1	CLU Update - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research - CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  • The annual heart and lung reports have been published and circulated.  • The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to	
9.1	CLU Update - CTAGH(24)53  In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research - CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  • The annual heart and lung reports have been published and circulated.  • The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.	
9.1	<ul> <li>CLU Update - CTAGH(24)53</li> <li>In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.</li> <li>Statistics and Clinical Research reports</li> <li>Summary from Statistics and Clinical Research - CTAGH(24)45</li> <li>The report was circulated prior to the meeting. Key points highlighted include:         <ul> <li>The annual heart and lung reports have been published and circulated.</li> <li>The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.</li> <li>A new clinical research fellow, Fiona Hunt, based in Edinburgh, has</li> </ul> </li> </ul>	
9.1	In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  • The annual heart and lung reports have been published and circulated.  • The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.  • A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.	
9.1	In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  • The annual heart and lung reports have been published and circulated.  • The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.  • A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.  • There have been no new applications for data, but 2 previous	
9.1	In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  The annual heart and lung reports have been published and circulated.  The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.  A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.  There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The	
9.1	In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  The annual heart and lung reports have been published and circulated.  The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.  A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.  There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The other is for a group in Newcastle who want to link a previous clinical	
9.1	In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  The annual heart and lung reports have been published and circulated.  The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.  A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.  There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The	
9.1	In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  The annual heart and lung reports have been published and circulated.  The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.  A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.  There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The other is for a group in Newcastle who want to link a previous clinical	
9.1	In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  • The annual heart and lung reports have been published and circulated.  • The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.  • A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.  • There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The other is for a group in Newcastle who want to link a previous clinical fellow, Sanjeet Singh's data to run a study on long term outcomes after	
9.1	<ul> <li>CLU Update - CTAGH(24)53</li> <li>In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.</li> <li>Statistics and Clinical Research reports</li> <li>Summary from Statistics and Clinical Research - CTAGH(24)45</li> <li>The report was circulated prior to the meeting. Key points highlighted include:         <ul> <li>The annual heart and lung reports have been published and circulated.</li> <li>The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.</li> <li>A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.</li> <li>There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The other is for a group in Newcastle who want to link a previous clinical fellow, Sanjeet Singh's data to run a study on long term outcomes after PGD.</li> <li>Meetings are ongoing with NHSE regarding the Transformation</li> </ul> </li> </ul>	
9.1	<ul> <li>CLU Update - CTAGH(24)53</li> <li>In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.</li> <li>Statistics and Clinical Research reports</li> <li>Summary from Statistics and Clinical Research - CTAGH(24)45</li> <li>The report was circulated prior to the meeting. Key points highlighted include:         <ul> <li>The annual heart and lung reports have been published and circulated.</li> <li>The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.</li> <li>A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.</li> <li>There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The other is for a group in Newcastle who want to link a previous clinical fellow, Sanjeet Singh's data to run a study on long term outcomes after PGD.</li> <li>Meetings are ongoing with NHSE regarding the Transformation Programme for the CT review. A lot of data is required so S Rushton will</li> </ul> </li> </ul>	
9.1	In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.  Statistics and Clinical Research reports  Summary from Statistics and Clinical Research – CTAGH(24)45  The report was circulated prior to the meeting. Key points highlighted include:  • The annual heart and lung reports have been published and circulated.  • The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.  • A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.  • There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The other is for a group in Newcastle who want to link a previous clinical fellow, Sanjeet Singh's data to run a study on long term outcomes after PGD.  • Meetings are ongoing with NHSE regarding the Transformation Programme for the CT review. A lot of data is required so S Rushton will be contacting centre directors regarding this.	
9.1	<ul> <li>CLU Update - CTAGH(24)53</li> <li>In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.</li> <li>Statistics and Clinical Research reports</li> <li>Summary from Statistics and Clinical Research – CTAGH(24)45</li> <li>The report was circulated prior to the meeting. Key points highlighted include:         <ul> <li>The annual heart and lung reports have been published and circulated.</li> <li>The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.</li> <li>A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.</li> <li>There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The other is for a group in Newcastle who want to link a previous clinical fellow, Sanjeet Singh's data to run a study on long term outcomes after PGD.</li> <li>Meetings are ongoing with NHSE regarding the Transformation Programme for the CT review. A lot of data is required so S Rushton will be contacting centre directors regarding this.</li> <li>Work progresses to develop a new lung allocation scheme.</li> </ul> </li> </ul>	
9.1	<ul> <li>CLU Update - CTAGH(24)53</li> <li>In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.</li> <li>Statistics and Clinical Research reports</li> <li>Summary from Statistics and Clinical Research – CTAGH(24)45</li> <li>The report was circulated prior to the meeting. Key points highlighted include:         <ul> <li>The annual heart and lung reports have been published and circulated.</li> <li>The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.</li> <li>A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.</li> <li>There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The other is for a group in Newcastle who want to link a previous clinical fellow, Sanjeet Singh's data to run a study on long term outcomes after PGD.</li> <li>Meetings are ongoing with NHSE regarding the Transformation Programme for the CT review. A lot of data is required so S Rushton will be contacting centre directors regarding this.</li> <li>Work progresses to develop a new lung allocation scheme.</li> <li>L Simmonds is working on the extract for the ISHLT registry. There will be</li> </ul> </li> </ul>	
9.1	<ul> <li>CLU Update - CTAGH(24)53</li> <li>In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.</li> <li>Statistics and Clinical Research reports</li> <li>Summary from Statistics and Clinical Research – CTAGH(24)45</li> <li>The report was circulated prior to the meeting. Key points highlighted include:         <ul> <li>The annual heart and lung reports have been published and circulated.</li> <li>The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.</li> <li>A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.</li> <li>There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The other is for a group in Newcastle who want to link a previous clinical fellow, Sanjeet Singh's data to run a study on long term outcomes after PGD.</li> <li>Meetings are ongoing with NHSE regarding the Transformation Programme for the CT review. A lot of data is required so S Rushton will be contacting centre directors regarding this.</li> <li>Work progresses to develop a new lung allocation scheme.</li> <li>L Simmonds is working on the extract for the ISHLT registry. There will be an annual extract in the autumn of fully anonymised data and as a result</li> </ul> </li> </ul>	
9.1	<ul> <li>CLU Update - CTAGH(24)53</li> <li>In A Ranasinghe's absence, this report was circulated prior to the meeting. Key points highlighted include the recent Organ Utilisation Conference, funding for local CLUS, scheduling of regular CLU meetings and the National Organ Utilisation Proforma for which there has been excellent feedback from the CT community. Further details on these items can be found in the paper.</li> <li>Statistics and Clinical Research reports</li> <li>Summary from Statistics and Clinical Research – CTAGH(24)45</li> <li>The report was circulated prior to the meeting. Key points highlighted include:         <ul> <li>The annual heart and lung reports have been published and circulated.</li> <li>The draft MCS report has been circulated. It is important that centres note the contents of this so there is a 2 week review period and responses to the report were requested to go to L Simmonds by 21 October.</li> <li>A new clinical research fellow, Fiona Hunt, based in Edinburgh, has joined the team to undertake a PhD in NRP outcomes.</li> <li>There have been no new applications for data, but 2 previous applications have been re-visited, one of which is now complete. The other is for a group in Newcastle who want to link a previous clinical fellow, Sanjeet Singh's data to run a study on long term outcomes after PGD.</li> <li>Meetings are ongoing with NHSE regarding the Transformation Programme for the CT review. A lot of data is required so S Rushton will be contacting centre directors regarding this.</li> <li>Work progresses to develop a new lung allocation scheme.</li> <li>L Simmonds is working on the extract for the ISHLT registry. There will be</li> </ul> </li> </ul>	

to be ratii	lea CTAGH(II	11)(24)02
	<ul> <li>Work is ongoing with a couple of clinicians in Newcastle on a review of</li> </ul>	
	heart lung transplantation in the UK and historic and present	
	perspectives.	
	R Venkateswaran thanked NHSBT and the Stats team for their hard work and	
10.0	congratulated S Rushton on the opportunity to speak in USA regarding UK data.	
10.2	<u>Heart Allocation Review Paper</u> – <b>CTAGH(24)46</b>	
	The SU heart allocation scheme was introduced on 26 October 2016 and more	
	recently, on 29 March 2023, changes were made to the most common urgent	
	category (category 21).	
	This report, circulated prior to the meeting, presents outcomes of adult	
	patients on the heart transplant list, survival from listing and post-	
	transplant survival, by centre and urgency group.	
	<ul> <li>Specifically, the cohorts of registrations and transplants cover 3 years,</li> </ul>	
	from 1 April 2021 to 31 March 2024.	
	<ul> <li>The analysis considers adult patients only (≥16 years) and includes heart-</li> </ul>	
	lung block registrations/transplants. For survival from listing, survival time	
	· · · · · · · · · · · · · · · · · · ·	
	from first registration was considered, and for post-transplant analysis, re-	
	grafts were excluded. The results are given in the paper.	
	Variations between Newcastle and other centres were noted in the proportion of	
	super-urgent registrations, and it was agreed that objective criteria is required to	
	ensure that there is equitable access and outcomes.	
10.3	SU Heart Data Review - CTAGH(24)47	
7.0.0	The paper circulated shows that that the primary indication for super-urgent heart	
	listing is short-term ventricular assist device (ST VAD) or veno-arterial extra-	
	· · · · · · · · · · · · · · · · · · ·	
	corporeal membrane oxygenation (VA-ECMO) support. the number of patients	
	transplanted, demographic characteristics, median waiting time and post-	
	transplant survival between the two support types is compared and the time	
	period analysed was super-urgent transplants performed 1 September 2017 to 31	
	March 2022. Results indicate that patients on VA-ECMO support at time of super-	
	urgent heart transplant have significantly worse short term survival outcomes	
	than those patients on ST VAD only and it appears patients wait longer and	
	longer on routine and urgent lists. Travel time and total ischaemic time is also	
	rising. It is agreed that centres need to pull individual data to show what kind of	
	patients are being supported and then placed on the SU list as more granularity	
	of data is needed to fully understand the issues. It is not advisable to make	
	changes to the SU scheme without this information.	
	ACTION: A fixed term working group with representation from all centres	
	will look at the data to decide on future steps. It was agreed to meet in the	
	next 4-6 weeks and R Venkateswaran will chair this initially.	
10.4	6M review of 20 cm rule removal – CTAGH(24)48	
10.7	The 20cm rule was removed in December 2023, meaning Great Ormond Street	
	Hospital are now able to accept adult donor hearts in second position in the non-	
	urgent sequence from anywhere in the country, regardless of the height	
	difference between the recipient and donor. The report circulated reviews the	
	impact of this change in allocation policy, examining 9 months' worth of offering	
	and waiting list data.	
	<ul> <li>4% of hearts offered are from paediatric donors; paediatric patients are</li> </ul>	
	12% of the heart waiting list.	
	<ul> <li>There are longer waiting times for children on both the non-urgent and</li> </ul>	
	urgent lists. There is a median waiting time on the urgent list of 204	
	days for an urgent paediatric patients (compared with 43 for adults).	
	This is driven by smaller children who are not affected by the removal of	
	the 20cm rule, it also doesn't impact urgent patients as it only applies to	
	the non-urgent tier of the sequence.	
	It was noted that there is still a great need for transplant for children. Although	
	deaths have not been accurately collected to date, it is estimated that 20-25%	
	of children at both GOSH and Newcastle will die without getting a heart.	
	However, quality of life for paediatric patients who do get transplants is	
	excellent. A new paediatric specialist nurse (to replace A Scales) has been	

TO DE TALI	neu CIAGIIII	71)(24)02
	appointed and there is a paediatric action plan to help improve donation rates. Work is also ongoing with the European exchange programmes to increase the numbers of small hearts that are imported.  ACTION: Recipient Co-ordinators to state the reason when a patient is removed so that it is recorded in the data.	
11	Departs from sub-groups	
11.	Reports from sub-groups	
11.1	CT Centre Directors' Report	
44.0	In J Parmar's absence, R Venkateswaran highlighted the following topic:  • Peri-CCT fellowship – this is surgical training funded by DHSE and SAC for new transplant fellows. Interest to participate in the next programme has been expressed by Newcastle, Birmingham, Papworth, Harefield as well as Manchester. Following the failure of the last two Fellowship participants to get consultant posts, it was emphasised that training and mentoring is an important consideration for any participating centre.	
11.2	CT Transplant Co-ordinators' Report	
	<ul> <li>P Seeley reported that there was a recent meeting with M Kemmner/NHSE to discuss what co-ordinators would like in future for competency packages, NHS Frameworks, job descriptions and roles etc as these are variable across the UK.</li> <li>L Ayton also reported that she does not receive much feedback for the Transplant Managers' Forum. The forum has not met for some time, and it has proved difficult to keep an up-to-date list of managers.         ACTION: Centres are asked to feedback names of their Transplant Managers to L Ayton so the list of forum members can be updated.     </li> </ul>	All centres
11.3	Retrieval Advisory Group Update – CTAGH(24)49	
	In M Berman's absence, the most recent Minutes from RAG were circulated prior to the meeting.	
11.4	Workplan update – CTAGH(24)50	
	This was circulated for information.	
12.	SIGNET and CREST Trials	
12.1	Update on SIGNET Trial – CTAGH(24)52	
	A paper from J Dark was circulated prior to the meeting. Almost 1300 donors have been recruited, but the continued reduction in DBD donors since COVID, means the final target of 2600 donors is some way off. An application to NHRI for an extension is planned. Centres are asked for suggestions for SIGNET 2, a future study exploiting the framework assembled for SIGNET.	
12.2	Introduction to CREST	
	This project at Papworth is developing a new biochemical marker to evaluate the utilisation of DCD hearts during re-perfusion. The aim is to accompany the Papworth NORS team to a DCD retrieval and once the organ is put on the rig a series of blood samples will be taken at 5 different time points. These will be analysed at Addenbrookes to assess the biochemical markers for cardiac function and post-transplant outcomes. This will be correlated with ongoing animal work. Patients will be followed up for 1 year at recipient centres.	
13.	For Information	
13.1	Transplant Activity Report	
	See link https://www.odt.nhs.uk/statistics-and-reports/annual-activity-report/	
13.2	QUOD Update – CTAGH(24)51  This paper was circulated for information	
14.	Any other business	
14.1	IMACS Registry	
14.1	The IMACS Registry is now close to being up and running again. This will transfer data from the UK VAD database to the IMACS registry in the same way data is transferred from the UK Transplant Registry to the ISHLT registry. A one-	

		.,(,0_
	to-one meeting will be arranged with IMACS to discuss how this will be done. S	
	Pettit will be happy to answer any questions CTAG members have.	
14.2	CT Annual Review – As this is due to take place in about 6 weeks, a request was	A Ali / All
	made for the agenda for this to be circulated soon so that appropriate people	CTAG
	from centres can attend.	members
	ACTION: A Ali to write to centres to request items for the agenda. CTAG	
	members are asked to correspond with her/NHSE to suggest items.	
14.3	Key points from this meeting to cascade to teams	
	CTAG members are asked to cascade the following points to their teams:	
	Papworth has completed a useful audit on osteoporosis which is	
	available for other teams to read.	
	There is concern about the way the SU scheme works currently. A fixed	
	term working group (to meet end Nov/early Dec will look at data collected	
	from each centre to decide on any changes. Representation from each	
	centre will be needed for this.	
	<ul> <li>Following a 6-month review, removal of the 20 cm rule was adopted.</li> </ul>	
	Expressions of interest have been requested for a new CTAG Hearts	
	Chair to replace R Venkateswaran.	
14.4	Appointment of new CTAG Hearts Chair	
	D Manas thanked R Venkateswaran for his work and positive engagement as	
	CTAG Hearts Chair which he is vacating shortly along with his role at	
	Wythenshawe Hospital to take up a new position in Alabama in the New Year. It	
	was agreed he will be a great loss to the cardiac community in the UK. R	
	Venkateswaran thanked everyone in CTAG Hearts for their support and both he	
	and D Manas will be happy to speak to anyone who is interested in taking on the	
	role of CTAG Hearts Chair.	
14.5	Next CTAG Hearts Meeting	
	The next meeting of CTAG Hearts will be on 26 March 2025.via Microsoft Teams	

# **Dates of future CTAG meetings**

CTAG Lungs – Thursday 12 December 2024 – via Microsoft Teams
CTAG Hearts – 26 March 2025 – via Microsoft Teams
CTAG Lungs – 12 June 2025 - Venue TBA
CTAG Hearts – 18 September 2025 – Venue TBA
CTAG Lungs – 4 December 2025 – via Microsoft Teams

9