NHS BLOOD AND TRANSPLANT
ORGAN DONATION AND TRANSPLANTATION DIRECTORATE
THE EIGHTEENTH MEETING OF THE NHSBT CTAG HEARTS ADVISORY GROUP
ON WEDNESDAY 6 OCTOBER 2021
VIA MICROSOFT TEAMS

MINUTES

Attendees:

Rajamiyer Venkateswaren	**CTAG Hearts Chair,** Centre Director, Wythenshawe Hospital
Sarah Beale	NORS Workforce Transformation Programme Lead
Marius Berman	Associate Clinical Lead Organ Retrieval, NHSBT
Paul Callan	Consultant Cardiologist, Manchester University NHS Foundation Trust
Colin Chue	Consultant Cardiologist, University Hospitals Birmingham
Philip Curry	Consultant Cardiac / Transplant Surgeon. Golden Jubilee National Hospital
Jonathan Dalzell	Centre Director, Cardiologist, Golden Jubilee National Hospital
Lewis Downward	Statistician, Statistics and Clinical Research, NHSBT
Dale Gardiner	Associate Medical Director – Deceased Organ Donation, NHSBT
Gillian Hardman	CTAG Clinical Audit Group Cardiothoracic Fellow, Freeman Hospital
Margaret Harrison	CTAG Lay Member Representative
Delordson Kallan	CTAG BHSI Representative
Sern Lim	Cardiologist, Queen Elizabeth Hospital, Birmingham
Guy MacGowan	Cardiologist, Freeman Hospital, Newcastle
Anna Maria MacLeod	NHS National Services Scotland
Jorge Mascaro	Centre Director, Queen Elizabeth Hospital, Birmingham
Simon Messer	Senior Cardiothoracic Surgical Registrar, Royal Papworth Hospital
Andrew Morley Smith	Consultant Cardiologist, Harefield Hospital
Lisa Mumford	Head of ODT Studies, NHSBT
Jasvir Parmar	Chair CTAG Lungs, Royal Papworth Hospital
Stephen Pettit	Centre Director, Cardiologist, Royal Papworth Hospital
Richard Quigley	Recipient Transplant Co-ordinator, Harefield Hospital
Zdenka Reinhardt	Cardiologist, Freeman Hospital, Newcastle
Fernando Riesgo Gil	Consultant Cardiologist, Royal Brompton and Harefield Hospital
Marian Ryan	Specialist Nurse Organ Donation
Sally Rushton	Principal Statistician, Statistics and Clinical Research, NHSBT
Philip Seeley	Transplant Co-ordinator, Freeman Hospital
Jacob Simmonds	Consultant Cardiologist, Great Ormond Street Hospital
Ulrich Stock	Centre Director, Surgeon, Harefield Hospital
Sadie von Joel	Lead Nurse Recipient Coordinator, NHSBT
Julie Whitney	Head of Service Delivery, OTDT Hub, NHSBT

In attendance:

Caroline Robinson (Minutes)	Clinical and Support Services, NHSBT

Apologies:

Lynne Ayton, Richard Baker, Anthony Clarkson, Catherine Coyle, Anushka Govias-Smith, Rob Graham, Ben Hume, Derek Manas, Tracey Rees, Helen Spencer, Sarah Watson, Craig Wheelans

No.	Item	Action
	Welcome and Apologies	
	In his first meeting as Chair, R Venkateswaran welcomed everyone to the meeting and details of apologies were given (see 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 22 March 2021 CTAGH(M)(21)01 and CTAGH(AP)(21)01**	
2.1	The Minutes of the CTAG Hearts Meeting held on 22 March 2021 were accepted as a true record.	
2.2	The following Action Points were discussed:	
2.2.1	AP1: Heart Allocation Sub-Group	*See Item 7.1*
2.2.2	AP2: Organ Offering and Fast Track	*See Item 5.2*
2.2.3	AP3: Non-compliance with Heart Allocation: It was previously agreed to form a fixed term working group to discuss issues relating to urgent Heart-Lung listings. As these transplants are relatively rare, no working group has been formed yet, but this item will remain on the agenda.	To remain on agenda for Spring CTAG meeting
2.2.4	AP4: S Rushton previously agreed to explore using 90-day outcomes in heart CUSUMs, include re-transplant as a "failure" and include DCD heart in the baseline mortality rates. All except including re-transplant as a failure have been accepted, but not yet been actioned. An update will come to the Spring CTAG Heart meeting.	*See Item 4.3*
2.2.5	AP5: Trigger for updating allocation zones: It was previously agreed that the Bonferroni correction will be removed. S Rushton has discussed and agreed the issue of removing the effect of COVID from the analysis with the new chairs of CTAG Heart and Lungs. An updated analysis will come to the Spring CTAG meetings.	**COMPLETE**
2.2.6	AP6: Summary from Statistics and Clinical Studies: Spring 2021: The particular issue of outstanding forms has now been addressed.	**COMPLETE**
2.2.7	AP7: Workplan	*See Item 9.4*
2.2.8	AP8: CTAG Audit Group: The high workload of the NHSBT Statistics team and the need to focus work on the right issues was highlighted.	*See Item 10.4*
2.2.9	AP9: JIF Board Meeting Update: COVID has had an impact on the project to boost DCD transplantation and particularly Manchester's decision not to be on the rota for DCD retrievals at present. The rota continues without Manchester's involvement.	**COMPLETE**
2.2.10	AP10: Long waiting patients on urgent list: D Kallan reported that there has been a meeting with all heads of labs to discuss CTAG guidelines and this will be presented in the Spring meeting. CTAG members and centres are invited to join the review group to help update the guidelines over the coming months. D Kallan to send an invitation via the CTAG group.	Update to follow at the Spring 2022 CTAG meeting
2.2.11	AP11: CTAG Patient Group (18/11/20): M Harrison and L Burnapp have now completed a Q&A for patients following the views expressed in the group of the impact of COVID on transplantation, prospects for vaccination and the experiences the patient group have had of shielding, vaccine efficacy after a single dose, the lack of routine antibody testing and face-to-face clinics and the withdrawal of the financial net for those who need to work.	**COMPLETE**
3.	**Medical Director's Report**	
3.1	Developments in NHSBT	
	D Gardiner represented J Forsythe at the meeting. • COVID remains a challenging factor affecting the numbers of donors and transplantations taking place. Compared with cancer waits, 4-hour targets and ambulance call outs, donor and transplantation work is doing well and currently stands at 90%. Serious staffing problems in ICUs are an area of concern at present. • An OUG stakeholder meeting will take place this week and CTAG members are asked to provide evidence to this group. • The new Risk Communication Tool for lungs is now on the website and is publicly available. This is a great communication tool to use with patients to help decision making and has taken a long time to develop. A similar tool is now planned for hearts *(See Item 8.5)*	
3.2	New Appointments	
	There were no new appointments discussed	

4.	**Governance Issues**	
4.1	Non-Compliance with Heart Allocation	
	There were no issues of non-compliance reported.	
4.2	Clinical Governance Report - **CTAGH(21)19**	
	This report was circulated prior to the meeting. One incident around a coronary angiogram that was facilitated as part of exploring the possibility for DCD heart donation was highlighted. Although on this occasion the transplant was successful, a review was completed with key stakeholders from across the pathway as this was outside current practice. Whilst all were supportive of innovation to increase the number of organs available for transplant, it was agreed that it is vital to act within the framework of current professional, ethical and legal guidance. It was noted that a procedure like this should be performed following planning and education. A joint guidance letter was circulated to all Organ Donation Services Teams, RCLODs and CLODs, NORS teams and all Cardiothoracic Transplant Centres on the 23rd July 2021. CTAG Heart members agreed that it would be beneficial to push for coronary angiogram in the UK as this is now done successfully elsewhere in the world. This will be included on the Actions Framework and all were encouraged to submit evidence on this issue to the OUG.	
4.3	CUSUM Monitoring of 30-day outcomes following heart transplantation - **CTAGH(21)20**	
	CUSUM monitoring reports on 30-day mortality following heart transplantation are circulated every month and sent to each centre. The baseline period was recently updated to 2015-2018 and monitoring is from 1 January 2019. In the 6-month period since the last CTAG meeting there have been no new signals to report for heart. It is planned to change CUSUM monitoring to 90-days mortality and to include DCD transplantation in the baseline as well as the monitoring period by the next CTAG Hearts meeting *(See Item 2.2.4).*	
4.4	Group 2 Transplants	
	There were no recent transplants to discuss.	
5.	**OTDT Hub Update**	
5.1	HTA B completion & follow up – **CTAGH(21)35**	
	This report indicating centre specific HTA B form return rates was circulated. Overall, the return rates are improving, but J Whitney stated that the HTA is showing interest in the return rates of HTA B forms and will use poor compliance as a guide on who to audit and inspect first, so all centres are strongly encouraged to send in any outstanding forms. It has been identified that previously the licence holder was contacted if forms were not returned, and this may have meant those in transplant centres were unaware of the problem so the chase system will be revised from 1 November as follows: • Within 5 working days an email will go to all users in transplant centres with an HTA account • After 14 days, the clinical director will receive a reminder • A further reminder will include the licence holder • On Day 26 J Whitney will call the centres to check on outstanding forms. • On Day 60 the issue will be reported to Information Governance and then the HTA.	
5.2	Offering processes – SpoC, Deep dives	
	• Since the start of a new back-up system, 1 heart has been offered as a back up. Following the debrief on this, some changes will take place, and these will be circulated to centres. • A letter from the Chairs of the Advisory Groups and Retrieval Leads highlighted incidents of declining hearts on inspection by NORS teams. It was reiterated that hearts should not be deemed untransplantable by NORS teams at the time of retrieval. Organs should be fast tracked out and NORS teams should wait until offering is complete before standing down. If on visualisation, the accepting centre and NORS team can agree on whether the heart is untransplantable then the team can stand down. CTAG members agreed that guidance on this is important to ensure consistency and minimise loss of hearts,	

	• Following the pilot of the Super Urgent Liver pathway it has been agreed to fast track CT organs when the liver has been accepted for a super-urgent patient. As the pathway hasn't been utilised as successfully as hoped, every super urgent liver will instigate the pathway from 1 November. • There has been positive feedback regarding the single point of contact system started a year ago. This was piloted with CT and will now be introduced for liver and renal contact. • CTAG members were reminded that Sadie von Joel holds a monthly meeting with recipient co-ordinators which have proved very useful in addressing operational issues. Clinical leads are asked to encourage their co-ordinators to attend as the meetings allow operational issues to be sorted out and improvements to be made, rather than having to discuss them at CTAG. • In November an 'interested' button will be introduced in the Hub for those centres who would like to express an interest in an unnamed offer. This will then be recorded in the system and should reduce the number of offers going to centres who have already indicated they are not interested in a specific organ.	
6.	**DCD Hearts**	
6.1	JIF Board meeting update - **CTAGH(21)39**	
	In A Ali's absence, S Beale presented this update on activity from the JIF Board meeting that was held on 30 September. The activity feedback shows that since the pilot started in Sept 2020 there has been a significant increase in DCD retrievals and transplantation across all centres, despite the pandemic, with 32 successful transplants reported. S Beale reminded all to return data forms - The DCD Heart Passport (FRM6356) - to NHSBT as some are still missing. M Berman, on behalf of the JIF Board, is submitting an abstract to ISHLT on its initial experiences regarding a national DCD heart programme. Based on the forms received, 30 day survival is 96% in the JIF period, but it was emphasised that non-return of forms makes the overall assessment and writing of the abstract very difficult. NHSBT has put in a bid with DHSC for funding to continue for DCD transplants after the pilot ends. In the meantime, NHSBT and NHSE are investigating potential funding sources that could bridge any funding gap post pilot. It was noted that Manchester's DCD retrieval and transplantation on 22 May has not been included in the report. The issue of reliance on mechanical support post transplantation was also highlighted as an area of concern, although it was noted that many eligible patients have been on the urgent or super urgent waiting lists making this more likely. Analysis of data on factors leading to recipients needing mechanical support post operatively is essential to assess the success of the programme. S Pettit mentioned analysis done in Papworth of the impact of the DCD programme on their centre and how this can help support the business case.	
6.2	DCD hearts regular report – **CTAGH(21)21**	
	S Rushton presented this report which contains information on DCD heart retrieval and transplant activity from 1 February 2015 – 7 September 2021. She also reported that work has been done to look at data for the abstract for ISHLT and for the annual review of the JIF period and that since the report was completed, many forms have been returned. Information from the GOSH DCD heart transplant is still awaited, and the deadline is 8 October. In addition, 13 instances have been identified where teams attended but did not retrieve DCD hearts and forms have not yet been returned. A more in-depth review will now take place for the pilot review and for the business case that is being developed. It was encouraging to see widespread offering of DCD hearts and 100% attendance of all offers. S Messer asked whether functional warm ischaemic times are being reported and it was noted that the form FRM6356 has many data and time stamps so it should be able to calculate this if the form is fully complete. The value of hybrid working (Papworth and Harefield) and the importance of this kind of collaborative work for the future was also highlighted.	
7.	**Heart Allocation**	
7.1	Heart Allocation Sub-group (22/09/21) – **CTAGH(21)22**	

	The Minutes were attached for the Heart Allocation Sub-group meeting held in June. In this meeting it was agreed that the 6-tier system is possible due to the complicated IT requirements involved. S Lim has agreed to chair the group to move forward to a simpler and national system so that urgently listed patients in all centres are treated consistently. Since the meeting S Lim has circulated a number of cases for comment and responses are still awaited from some centres. It was agreed that prospective data collection and decisions on how to evaluate this may be needed before a national system can be implemented. It was also agreed to invite a patient rep and lay member to future meetings once it is clear what system is to be considered as well as NHSBT IT to ensure the system being developed is feasible.	
7.2	Summary of Adjudication Panel Appeals – **CTAGH(21)23**	
	S Rushton highlighted the results in this 6-monthly report circulated prior to the meeting for patients referred to the adjudication panel between 26 October 2016 and 31 July 2021. There were 106 urgent adult appeals with an approval rate of 84%, 19 super-urgent adult appeals with an approval rate of 47%, 26 urgent paediatric appeals with an approval rate of 96% and 28 urgent heart-lung appeals with an approval rate of 71%. The next report will consider super-urgent paediatric appeals.	
7.3	LVAD complications project – **CTAGH(21)24**	
	Since 26 October 2016 when the urgent listing criteria were revised, patients with LVAD-related complications require approval by the CTAG Adjudication Panel prior to listing. This project, proposed by S Lim and endorsed by CTAG in 2020, aims to review outcomes of urgent heart transplantation in patients with LVAD-related complications in the UK and to identify patients at high risk of mortality from transplantation. S Lim stated that data analysis is not straight forward as information brought to the panel is not uniform or consistent. It was found that patients transplanted with LVAD complications have poorer survival outcomes compared with the contemporaneous urgent group, with 56% surviving to 1 year compared with 88%. It was suggested that patients with pump thrombosis and infection do the least well and if transplantation takes place shortly after LVAD implant, the outcomes improve, but it remains a useful bridge to transplantation because the number of hearts is limited. A proforma going forward for all urgent appeals was suggested but it was noted that when this was circulated previously, this had not proved popular. It was agreed to circulate this again. S Lim also stated that it was hoped the data collection forms could be changed so that more information could be collected. CTAG members felt that more granular, serial data was needed before this project could be published in the public domain but that the aim should be to share the data in future. **ACTION: a) S Lim to re-circulate the proforma** **b) S Lim and S Rushton to work on extra data analysis to provide more context.**	**S Lim / S Rushton**
7.4	Selection and Allocation policy updates	
	At the last CTAG Hearts meeting some changes to selection and allocation policies were noted. These changes have now been circulated with the policies and a letter from the CTAG Chairs. Changes included discontinuing monthly urgent forms for hearts and ensuring Super Urgent Paediatric registrations are agreed between the two centres. All CTAG members are asked to align the policies with current practice in their centres.	
8.	**Statistics and Clinical Research reports**	
8.1	Summary from Statistics and Clinical Research: Autumn 2021 – **CTAGH(21)25**	
	This paper provides an update from Statistics and Clinical Research and summarises recent presentations, publications, and current and future work for cardiothoracic transplantation. S Rushton highlighted the organ and tissue activity report published in July. There has been a 25% drop in deceased donors and a 30% fall in transplantation. Lung transplantation has been severely impacted by COVID with 43% fewer lung transplants. There were 8% fewer heart transplants. The full CT report is in draft and this will be circulated shortly for CTAG members to review. Changes to the criteria for bowel donation were highlighted with the age being extended to 59 from 55 and weight to 89kg from 79 kg. M Berman reported	

	that more information on the Custodial HTK solution will come to the next CTAG Hearts meeting.	
8.2	Latest Centre activity summary – **CTAGH(21)26**	
	This report covers the last 3 years including the pandemic and shows an overall reduction of 11% in adult heart activity Heart waiting lists have remained stable for many centres perhaps because there were fewer registrations. It was noted that some suspensions are due to self-isolation. Papworth reported that referrals have picked up lately and have largely been steady throughout the pandemic. Glasgow reported that outpatient work dropped off during pandemic spikes, but this is now picking up again. Manchester has still not risen to pre-COVID levels, but more referrals are now coming through. Birmingham inpatients have not dropped, but outpatient elective appointments did decrease markedly at one point. More stable patients may have been offered alternative therapy during the pandemic.	
8.3	COVID-19 Update	
	L Mumford gave this presentation and stated that weekly donor and transplantation numbers until the beginning of March 2020 showed relatively stable numbers of donors and transplantations. This decreased during the first wave of COVID and while it returned to normal numbers in August it fell again in the 2nd and 3rd waves. Numbers are now back to levels not quite so high as pre COVID again. Heart activity remained reasonably normal throughout. Registrations fell between April and Sept 2020, but patients are now returning to the waiting list. Deaths rose in March 2020 and January 2021. The active waiting list is likely to be 7000 by the time things level out. There were waves in incidences of COVID in March 2020, August and February and then a further wave in June 2021 with increased numbers of positive patients. The estimated R number across the UK countries all encompass 1. Patients occupying either mechanically ventilated beds or other hospital beds is now falling. It was confirmed that a decision is being made regarding completion of COVID 19 registration forms that need to be completed and submitted to NHSBT and an email should come out shortly confirming that this is no longer necessary. S Pettit also commented that Ronapreve treatment for Transplant patients with COVID-19 who are sero-negative is now available for use in UK. However, COVID-19 sero-status of Transplant patients is not routinely measured and this may result in delays to administration of Ronapreve in the event that patients contract COVID-19. **ACTION: a) L Mumford to circulate presentation shown in the meeting.** **b) U Stock to investigate why Harefield data is not populated for hospital bed occupancy data.**	**L Mumford / U Stock**
8.3.1	Weekly Report - https://www.odt.nhs.uk/covid-19-advice-for-clinicians/	
	This link reports on all positive cases and deaths by characteristics and organ. This is shortly to become a monthly report.	
8.3.2	Vaccine Data – **CTAGH(21)27**	
	This paper illustrates a proposed study of vaccine efficacy in waiting list and transplant patients and is a complex analysis due to the different exposure times patients face. Early analysis indicates that liver patients have good protection when vaccinated against COVID, but lung patients have a much higher risk. The methodology will consider: • Does the vaccine protect patients against COVID? • Does the vaccine protect patients from death after testing positive? The dataset of cases has been cut at 31 August 2021 waiting for 30-day outcomes. Early analysis indicates some protection against death following the 2nd dose, but not as high as in the general population. The issue of antibody level testing for recipients was raised to confirm whether a 3rd dose of vaccination is needed as this is not routinely considered currently. J Parmar stated while the value appears questionable at present, more data is needed but it should be considered. He also mentioned use of finger prick testing at home to alleviate concern of exposure to COVID in hospitals. Once the analysis is complete a second publication will be prepared and FAQs online for patients will be updated.	
8.4	Transplant Risk Communication Tool – **CTAGH(21)28**	
	As stated in *Item 3.1*, the lung risk communication tool is now live on the website.	
8.5	Heart Modelling Waiting List – **CTAGH(21)37**	

	This report which shows the work involved in creating a heart risk communication tool has included some cardiologist input and covers urgent and non-urgent patients aged ≥16 years at any of the 6 UK adult centres, registered between 1 January 2012 and 31 December 2018. For non-urgent patients the chances of each of the following possible outcomes occurring within 3 years were modelled: • Transplanted • Died OR removed from list • Moved to a higher-urgency list (urgent or super-urgent) • Remained on non-urgent list For urgent patients, the following outcomes were considered within 1 year of urgent registration: • Transplanted • Died OR removed from list with condition deteriorated/unknown OR moved to the super-urgent list • Remained on urgent list OR removed from list with condition improved OR moved to the non-urgent list. Following S Rushton's explanation of the modelling shown in the paper, it was explained that this work will aid creation of a risk communication tool for hearts. S Pettit asked why ethnicity is included as a factor but is not significant in any of the urgent models, and S Rushton agreed to look into this and probably remove ethnicity as a factor. M Harrison asked whether a certain predictive ability has to be reached in order to publish the model and that some care is needed about the message that goes out to patients. It was also noted that some caveats were put into the lung tool regarding sensitisation. The inclusion of DCD hearts should also be considered as this is now a major part of heart transplantation and patient decisions about whether to accept a DCD or DBD heart can affect their waiting time. It was agreed that registrations ending in DCD heart transplant should be considered in a future iteration of the models. The aim is to get all organs communication tools completed by the end of the calendar year so CTAG members may be asked to test out the tool and provide feedback.	
9.	**Reports and Discussion Points from the Chair**	
9.1	RAG Update	
	RAG was held at the end of September. Two main issues – DCD and NORS resilience – were discussed. It was agreed that CT teams have been very resilient during the pandemic, but a letter has been sent asking if NORS team members can be risk assessed rather than being placed in self-isolation when a family member is positive, but there is no response to this yet as this can affect the ability to function both for retrieval and in hospital. CTAG members highlighted that contact by NORS team members with immune-suppressed patients could be an issue.	
9.2	Use of Sherpapak – **CTAGH(21)29**	
	This paper was circulated before the meeting showing data from 22 transplants that used Sherpapak rather than traditional ice boxes to transport an organ. Summary statistics were provided for this very small sample, but it was difficult to draw conclusions. There was enthusiasm from some CTAG members to increase the amount of data available in order to submit an abstract to ISHLT. It was agreed that a national observational study and small randomised trial is necessary, although some caution was expressed that it is not easy to do a small trial and it will be important to define the primary outcomes. **ACTION: R Venkateswaran to collect donor numbers from Sherpa transplants from Papworth, Manchester, Harefield to complete abstract for ISHLT.**	**R Venkateswaran**
9.3	QUOD Update – **CTAGH(21)36**	
	This paper was circulated prior to the meeting. M Berman stated that CT samples are available for research but so far, there have been no CT projects submitted for a long time. INOAR for hearts is also promoting the availability of hearts for research.	
9.4	Workplan - **CTAGH(21)38**	

	This workplan with two priorities – implementation of urgent heart allocation and heart utilisation - put together by R Venkateswaran was circulated prior to the meeting. This is a 3-year plan.	
9.5	Donor Swan-Ganz catheter for cardiac transplantation – **CTAGH(21)30**	
	This communication from Professor Jim Egan, Director of Organ Transplant Ireland (ODTI) was circulated to the group to make CTAG members aware of missed opportunities to convert heart donations to the UK. The letter points out that Swan-Ganz catheterisation is not part of ODTI retrieval processes. CTAG members were asked to consider that a retrieval without echo or Swan-Ganz could incur travel costs implications if the organ is accepted without clear indications of its potential utilisation. **ACTION: R Venkateswaran to respond to J Egan post meeting.**	**R Venkateswaran**
10.	**Reports from sub-groups**	
10.1	CLU Update	
	The new CLU representative for Hearts, Aaron Ranasinghe was unfortunately unable to attend the meeting but sent an update. The first update meeting for CLUs was held in September. CTAG members and colleagues are asked to enable local CLUs to attend future update meetings. The first meeting had a good discussion regarding organ declines and A Ranasinghe will have a meeting shortly with R Venkateswaran on the ideal heart donor.	
10.2	CTAG Patient Group – (12/5/21) – **CTAGH(21)31**	
	J Parmar stated that after 7 years R Graham has stated his intention to step down as co-chair after the next meeting on 17 November so expressions of interest to take over this role are now requested. Following this, interviews will take place and the co-chair will be appointed for a period of 3 years. All CTAG members are asked to consider whether patients at their centres would like to take on this role. Currently, the group meets remotely twice a year, usually two months after the CTAG Hearts and Lungs meetings.	
10.3	CT Centre Directors' meeting Minutes (18/06/21) – **CTAGH(21)32**	
	The Minutes of the meeting held in June were circulated. A further meeting was held on 1 October chaired by S Watson and ongoing meetings are currently scheduled for 19 November and 7 January. The intention is to hold meetings every 6 weeks.	
10.4	CTAG Audit Group	
	J Parmar joined the meeting to discuss the future of the Audit Group. As this group has been largely inactive over the last few years with its work subsumed into other committees it is now planned that this will become more of a research and innovation group. The hope is that this will capture future important cardiothoracic issues that need more scrutiny and oversight in a cohesive and collaborative way. J Parmar will chair the group initially but offers to chair future meetings are welcomed and CTAG members are encouraged to join the group. **ACTION: J Parmar to write Terms of Reference for the group and these will be circulated to CTAG members**	**J Parmar**
10.5	CTAG Clinical Fellow update – **CTAGH(21)33**	
	G Hardman presented this update on the work she is carrying out as NHSBT Clinical Research and Clinical Audit Fellow in Cardiothoracic Transplantation, within the project entitled Developing strategies to increase donor lung utilisation in UK. Section 3 of the report was highlighted which focuses on CT organ utilisation and specific study for which she is recruiting. Centre directors will receive invitations to disseminate information about this study and CTAG members are asked to encourage colleagues to participate in a 1-hour semi structured interview over zoom to discuss how decisions on organ utilisation are made.	
11.	**For Information**	
11.1	Transplant Activity Report	
	Go to the following page for information: https://www.odt.nhs.uk/statistics-and-reports/annual-activity-report/	
11.2	NHSBT ICT Update for Advisory Groups – **CTAGH(21)34**	
	This paper was circulated for information.	

12.	**Any other business**	
12.1	Date of next meeting	
	This will be scheduled for Spring 2022 and further information will be circulated in due course.	