

**NHS BLOOD AND TRANSPLANT  
DONATION AND TRANSPLANTATION DIRECTORATE  
RESEARCH, INNOVATION AND NOVEL TECHNOLOGIES ADVISORY GROUP MEETING  
WEDNESDAY 29 APRIL 2020 – MICROSOFT TEAMS MEETING  
MINUTES**

**Attending**

Gabriel Oniscu	GO	Chair, RINTAG
Liz Armstrong	LA	Head of Transplant Development
Richard Baker	RB	Joint Clinical Governance Lead
Hazel Bentall	HB	Lay Member, NHSBT
John Casey	JC	Chair, Pancreas Advisory Group
Ian Currie	IC	Chair, Retrieval Advisory Group
Clare Denison	CD	Innovation and Research Lead Specialist
Andrew Fisher	AF	NIHR BTRU Representative
John Forsythe	JF	Medical Director – OTDT, NHSBT
Peter Friend	PF	Chair, Multi-Visceral & Composite Tissue Advisory Group
Victoria Gauden	VG	National Quality Manager, OTDT, NHSBT
Dan Harvey	DH	National Innovation & Research Clinical Lead, OTDT
Jennifer Mehew	JM	Principal Statistician, NHSBT
Lisa Mumford	LM	Head of OTDT Studies, NHSBT
Elizabeth Murphy	EM	Lay Member, NHSBT
Rutger Ploeg	RP	Director of QUOD
Paul Rooney	PR	Research and Development Manager, NHSBT
Maggie Stevens	MS	Specialist Nurse, Research & Service Delivery
Michael Stokes	MSt	Head of Hub Operations
Douglas Thorburn	DT	Chair, Liver Advisory Group
Hannah Tolley	HT	Research Project Manager, NHSBT
Ines Ushiro-Lumb	IUL	Head of Transfusion Microbiology, NHSBT
Nick Watkins	NW	Assistant Director, Research & Development
Chris Watson	CW	Chair, Kidney Advisory Group
Fiona Wellington	FW	Assistant Director, Organ Donation & Nursing

**In attendance:**

Krishnaa Mahbubani	KM	Senior Study Manager, Cambridge Biorepository for Translational Medicine (CBTM) (Presenting at meeting)
Caroline Robinson	CR	Clinical and Support Services Manager (Minutes)

	<b>Agenda Item</b>	<b>Action</b>
<b>1.</b>	<b>Welcome and Apologies</b> The Chair welcomed everyone to the meeting. Apologies were received from Catherine Jordan, Jayan Parameshwar, Karen Quinn and Rommel Ramanan	
<b>2.</b>	<b>Declarations of Interest in relation to the Agenda</b> There were no declarations of interest recorded at the meeting.	
<b>3</b>	<b>Minutes of the Research, Innovation and Novel Technologies Advisory Group Meeting held on Wednesday 9 October 2019 -</b>	
<b>3.1</b>	<b>Accuracy of the Minutes - RINTAG(19)(M)2</b> The Minutes of the meeting were deemed to be a true and accurate record of the meeting with one exception. I Currie asked that his role be updated to 'Chair, Retrieval Advisory Group' (rather than 'Chair, National Retrieval Group' as stated).	<b>CR</b>
<b>3.2</b>	<b>Action Points from the Meeting of 9 October 2019 – RINTAG(19)(AP)2</b>	

	<p>All items have been addressed or implemented except for:  <b>AP6 - Non-Transplant Related research retrievals</b> – This was considered in the context of INOAR and research restrictions and how these will affect research proposals in future.  <b>ACTION: D Harvey will re-visit this issue by setting up of a working group to discuss the brief and relevant issues with J Casey, I Currie and P Friend and this will be discussed again at the RINTAG meeting in October 2020.</b></p>	DH/JC/IC/PF
<b>4.</b>	<b>Research Activity</b>	
4.1	<p><b>Consent - RINTAG(20)01</b>  L Mumford summarised this paper which highlights the figures where research consent/authorisation was requested as well as obtained as follows:</p> <ul style="list-style-type: none"> <li>• The overall UK research consent/authorisation rate for solid organ donors has risen from 83% in 2010 to 92% in 2019.</li> <li>• The breakdown by nation indicates increased consent rates in all UK nations. The majority increase is in N Ireland where the consent rate has risen from 60% to 87%. Scotland has the highest rate of authorisation at 98%.</li> <li>• The consent/authorisation rate by actual individual solid organ donors obtained by the SNOD for donation shows that fewer hearts, lungs, pancreases, bowels and islets have had consent approved and therefore these have not been taken for research.</li> <li>• For tissues there are low rates for meniscus and for tendons. Blood vessels have the highest rates for consent/authorisation at 74%.</li> </ul> <p>(It was clarified that the terminology in England, Wales and Northern Ireland is the word 'consent' and in Scotland this is 'authorisation'). It was agreed that it would be useful to know why consent/authorisation had not been obtained so easily for organs such as the pancreas when consideration of donation of this and other abdominal organs is not usually such an emotive subject for families. It was noted that there was a low consent rate when the pancreas programme began, and families are not asked for consent for individual organs for research. The numbers therefore probably reflect the consent/authorisation that has been given for transplantation rather than research over this period. Reasons for lack of consent/authorisation will be considered for the next report.</p>	
4.2	<p><b>Availability of Organs for Research - RINTAG(20)02</b>  This paper looks at the outcome of organs that were retrieved but not transplanted and examines their availability for and use in research. The results indicate that while there has been an increase in the availability of organs retrieved, there has been a drop in those used for research, falling to 44% in the last year:</p> <ul style="list-style-type: none"> <li>• Hearts – 6 organs were used. This figure is stable compared to previous year and an increase from 2018</li> <li>• Lungs and lung lobes – This figure fell to 17 last year from 24 in 2018</li> <li>• Liver/liver segments – almost half of those available for research were used which is a drop from 2018 figures.</li> <li>• Kidney – The figure increased to 164 in 2017/18, but a large number are not being used</li> <li>• Pancreas/ islets – The figure has fallen to 108 which is less than half those available (199 = peak)</li> </ul> <p>In summary, while there is an increase in organs available for research, results indicate that there is a larger number of organs that are being discarded.</p>	

	<p>The meeting considered whether figures were affected by the allocation system for organs possibly favouring high priority research studies that may get sequential offers until they can take no more resulting in other studies not receiving offers at all. However, it was emphasised that the study using the most organs ranked 6<sup>th</sup> in the list and this appears to vindicate the allocation system. A piece of work by the Research and the Stats teams has been ongoing to look at the acceptance criteria for different studies to understand why organs are not being accepted to see if there are ways of improving outcomes of availability of organs for research, eg is ischaemic time important in considering whether organs can be re-offered elsewhere if not accepted initially.</p> <p>It was queried whether in future the percentage of islets preps that were offered but not used for clinical transplantation and then used instead in research could be reported. J Casey stated that islets will be discarded if there is no consent for research. It was noted that there has previously been agreement to bring together what RINTAG has been doing to rank studies and what the Islet Consortium is doing to offer clinical grade islet preps for research. RINTAG receives applications for individual studies and organs have been offered according to ranking. If the organ has been accepted for clinical use, it undergoes isolation and the resulting preps go under the regulations for each lab and MHRA. If the prep is insufficient for clinical use, the labs can distribute them to the network of studies they support. RINTAG needs a list of projects that are supported in this way and how many preps are allocated to each study to understand the full picture of organ utilisation for research and minimise the loss of potential islets for research use.</p> <p><b>ACTION: J Casey to take this issue to the Islet Consortium and Islet Steering Group.</b></p>	JC
4.3	<p><b>Allocation of Research Organs - OCTOBER 2019–APRIL 2020 – RINTAG(20)03</b></p> <p>H Tolley explained that the scheme outlined in this paper seeks to allocate organs preferentially to studies that will deliver the biggest benefits to transplantation. It is reviewed annually, and studies are re-ranked twice during the year. The last re-ranking went live in October 2019 following the last RINTAG meeting. Organs are offered by text/email to researchers who have 45 minutes to respond to OTDT Hub Operations if they are interested. The highest-ranked responder is allocated the organ. The current COVID-19 pandemic has led to lower numbers offered from March 2020 onwards and many studies are now suspended. All data presented comes from the ODT Research Team’s work updating a spreadsheet to show where organs have been allocated. Any organs allocated directly to studies without an offer message being sent out are not included in the paper presented.</p> <p>The information presented indicates that there were some organs that were not accepted for research and were not discarded and these were used for either education or training purposes, one liver was used for transplantation when the recipient centre changed its mind, some other livers were returned to the donors’ bodies and some hearts were used for training purposes or valves. Most organs are offered out of hours. The paper summarises the study number, the number of offers each study has received and the number of organs used for each one.</p> <p>L Mumford stated that there is now some encoding on the Stats database that will add to the information included in the paper to use once INOAR starts without the need to go through the notes and this will show those</p>	

	organs taken solely for research and those used for research after being offered for transplantation.	
<b>4.4</b>	<b>Research Team KPIs – RINTAG(20)04</b> This paper was circulated for information and was not discussed at the meeting.	
<b>4.5</b>	<p><b>Annual report – RINTAG(20)05</b></p> <p>This paper summarises activity over the last year for the National Research Organ Offering Scheme looking at organs that are removed, assessed and deemed unsuitable for transplantation. The number of research organs available has increased for every organ type apart from lungs. It was noted however, that the number of lungs available usually is very small, although it is hoped this will increase once INOAR goes live. Offers are mostly donated in hospitals suitable for INOAR (i.e. hospitals in Scotland and those working under the NHSBT HTA licence in England, Wales and Northern Ireland) and it is known that ischaemic time is important. The month with the lowest acceptance rate is December perhaps due to universities closing suggesting there is no access for researchers and a greater number of bank holidays. Organs offered in core hours is ideal, although there are offers at other times. As stated earlier in the meeting it is hoped that re-offering organs at better times for researchers can be considered as a small pilot for some studies.</p> <p>Restrictions are also a big focus – animal, commercial and genetic - and any offer could have a combination of those or none. (See also Item 7 below).</p> <p>Heart acceptances show the biggest increase in availability for research during the last year. Pancreas results show the lowest acceptance rate. Ischaemic time needs to be low and restrictions are also an important factor here, suggesting that any organ used needs to be close to the relevant study centre when it is offered. If there are restrictions it appears more likely that an organ will be declined.</p> <p>It was noted that most studies are currently paused due to COVID-19. Some studies, particularly lung studies, will transfer to be part of the national allocation scheme once INOAR goes live. Others will all remain specifically consented studies.</p> <p>The Chair thanked H Tolley for an impressive piece of work and the meeting noted that the data presented gives a good insight into what is happening with research activity.</p>	
<b>4.6</b>	<p><b>Impact of COVID-19 on Research Activity – RINTAG(20)06</b></p> <p>The COVID-19 pandemic began to have an impact on OTDT research in early March 2020. In response to suspension of some studies due to lack of access to labs (particularly in universities that are currently closed) and the delay in starting INOAR, the paper circulated illustrates the current impact of COVID-19 on research studies and considers how RINTAG can contribute to the process for understanding this. While there are still some organs being offered and tissue banks are still operating, most organs that are offered are discarded as hospital research is likely to focus on COVID-19 for the foreseeable future. Several studies are unlikely to finish within the current timelines agreed; smaller PhD studies will likely request extensions to funding.</p> <p>J Forsythe stated that decisions regarding research were made after multiple meetings involving many bodies including NHS England and the wider NHSBT medical team. G Oniscu was thanked for continuing to lead</p>	

	<p>RINTAG after postponement of interviews for a new Chair. The focus is now on recovery and a generic document has been circulated regarding this. It is hoped that information regarding organ specific issues will follow shortly. All need to think about the triggers for re-opening studies for research, particularly how recovery should be approached given a likely second surge of COVID.</p> <p>The meeting noted that transplantation research has been hit very hard and a significant number of things need to align to return to the status quo. Universities particularly need to think of how lab research can start again while considering new ways of working, such as social distancing. NIHR is keen to support the national effort regarding COVID-19 looking at any long-term sequelae for organs, eg is there any long-lasting damage to lungs or hearts of COVID positive patients. This could provide good insight and understanding of the risk to the recipient of organs in the future, especially as the impact of COVID is likely to be a focus for many years.</p> <p>It was also noted that although QUOD has been paused, work has been ongoing to look at how negative plasma samples collected before November can help the Covid-19 research efforts and the tests for antibodies and to identify those patients who have had COVID. A second collection is also combining negative and positive samples from convalescent patients.</p> <p><b>ACTION: It was agreed that G Oniscu and I Ushiro-Lumb would consider Covid related research off-line including PMs of COVID patients to see how this can help organ acceptance and other transplant related research in future.</b></p>	GO/U-L
5.	<p><b>New Study Ranking and Studies for Approval and Information - RINTAG(20)07</b></p> <p>This document detailing new studies and re-submissions was circulated prior to the meeting.</p>	
5.1	<p><b>Study 24 – Addenbrooke’s stem cell/Human Cell Atlas – plans to become a specific consent Research Tissue Bank</b></p> <p>K Mahbubani joined the meeting to present this study for a prospective research tissue bank sharing tissue from deceased organ donors.</p> <p>Study 24 is a study that has been running in Addenbrooke’s Hospital, Cambridge for several years. The SNODs in the Eastern team take specific consent from the donor family so that the research team can take samples from the organ donor after donation of organs for transplant. The ‘study’ supports many different projects with several collaborators.</p> <p>Due to the current need to obtain dual sets of approval from CUH and UoC for MTAs and RCAs, it is proposed that Study 24 is replaced by a Research Tissue Bank. The current process for setting up collaborations is very time-consuming and can mean research projects take up to a year to get off the ground. The Research Tissue Bank project is supported by CUH and allows collaborators to obtain their own ethics so two sets of paperwork would not be generated. There are two relevant grant objectives:</p> <ul style="list-style-type: none"> <li>• To support more studies outside the UK</li> <li>• To develop a structural model with SOPs to recreate Cambridge Biorepository for Translational Medicine (CBTM)</li> </ul> <p>The main study objectives are:</p> <ul style="list-style-type: none"> <li>• Investigate biological properties of stem cells and to develop stem cell derived cellular therapies</li> </ul>	

<ul style="list-style-type: none"> <li>• Study the immune response to adult cells, stem cell derived cellular therapies and to develop new immunomodulatory approaches</li> <li>• Study cellular and organ function, physiology and pathology</li> <li>• Study embryonic development of organs</li> </ul> <p>It was emphasised that the project aims to do prospective and not indiscriminate sampling by taking tissue only for specific projects based on donor demographic, the requirements of the research studies and the availability of lab staff and to use the tissues for studies that cannot get samples in any other way. The aim is that:</p> <ul style="list-style-type: none"> <li>• Families will be able to denote restrictions clearly on consent form</li> <li>• Named collaborators will have MTAs in place</li> <li>• New collaborators will be able to obtain ethics easily and generate an MTA for tissues</li> <li>• Allows CBTM to open multiple sites in the future (including outside the Cambridge area)</li> </ul> <p>It was emphasised that the team at Cambridge have been collecting tissues for the last 4 years and it is policy to ensure samples are taken for QUOD first and not to be a competing body. The meeting queried what the implications would be for SNODs and donor families. K Mahbubani stated that there are also regular training days with SNODs who will be taking consent for tissue retrieval. The Cambridge team is only alerted to retrieve tissue when consent has been received. While it is not anticipated that the project will be expanded to every hospital in the UK and that progress to inclusion of a second site will be slow, it was noted that if this study is to expand beyond the current region, there are implications for training of SNODs and also for actively informing families of different research programmes. It was noted that SNODs do not currently go through a list of different research studies with families and consent is based on a pre-requisite list of restrictions only. It was noted that tissue collection for the RTB will take place under the Addenbrooke's HTA licence as is the case with Study 24.</p> <p>The meeting asked how the proposal benefits donation, retrieval and transplantation and it was emphasised that retrieval surgeons would not be expected to retrieve tissue for this project or to be involved. Most of the research studies using the tissue from the project are considered relevant to transplantation.</p> <p>Following the presentation concerns were expressed that this could be considered an alternative way of launching research studies without the rigour of going through RINTAG first. It was noted that the current study does not intend to be a tissue bank but to use and offer fresh rather than frozen tissue that is dispatched to research teams in real time post retrieval. However, it needs to be clear that any tissue retrieval would need to be done under the hospital's licence and it would be necessary to guarantee relevant training competency. Despite the removal of tissue taking place under the hospital's HTA licence (and not NHSBT's), NHSBT employees are still involved.</p> <p>It was agreed that only a change in the remit of the existing study will be considered currently. Should the study start to move outside the Cambridge region, a new proposal should be submitted for approval by RINTAG to ensure all relevant processes, guidelines and regulations are observed.</p> <p><b>ACTION: H Tolley to take comments back to the Cambridge team.</b></p>	<p>HT</p>
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5.2	<p><b>QUOD whole organs (lung) - RINTAG(20)08 and RINTAG(20)09</b></p> <p>It was noted that this paper (RINTAG(20)08 should not state that this is a QUOD biobank request for lungs as it is part of the QUOD Expand initiative. The purpose is to understand acceptability of lungs and the reasons why donor organs are turned down for transplantation as lung utilisation is the lowest of all organs. It comes under the banner of QUOD expand and any remaining tissue left after retrieval for this study may be offered to the biobank for use in other studies, although this is secondary to the main project. The issue of the impact on CT retrieval surgeons who need to wait until tissue is collected before they can leave the site was discussed. If CT retrieval surgeons are not attending, the lungs cannot be retrieved, but the possibility of abdominal teams removing a portion of the lungs to help with this project is being considered. It was agreed to bring any further concerns back to the next meeting.</p>	
5.3	<p><b>Study 96 – plans to share relevant material with FibroFind – RINTAG10</b></p> <p>Study 96 is to be withdrawn and will be submitted as a new application.</p>	
5.4	<p><b>Study 2/3 – separation of study regarding acceptance as per research restrictions RINTAG(20)11 and RINTAG(20)12</b></p> <p>No comments – approved.</p>	
5.5	<p><b>Study 56 – plans to start DNA/RNA analysis - RINTAG(20)13</b></p> <p>No comments – approved.</p>	
6.	<p><b>Innovation</b></p>	
6.1	<p><b>DCD Heart Activity - RINTAG(20)14</b></p> <p>L Mumford presented this report of information on DCD heart activity from 1 February 2015 - 31 January 2020 focussing on the last complete quarter from October to December 2019. There were 8 heart transplants during this period. The centres with the highest numbers of attendances were Harefield and Papworth with the latter recording the highest number of retrievals. DCD heart patient outcomes at 30 days post-transplant, by centre for transplants performed, 1 February 2015 - 31 January 2020 total 111, of which 106 were still alive at 30 days with one unknown outcome. Acceptance rate has fallen to 5% from 11% excluding COVID activity and while there has been an increased number of offers, 85% have been declined. The meeting queried how long this activity is going to be regarded as experimental given that this is now routine practice at most centres and devices used are now being reimbursed. It was noted that the responsibility for this activity now falls under the Joint Innovation Fund which has 2 years funding chaired by Ayesha Ali at NHSE and this information comes to RINTAG for information.</p>	
6.2	<p><b>NRP</b></p> <p>The Chair stated that progress with NRP has been slow and protracted. While it appeared that NHSE were close to giving an answer before COVID, further development is now on the back burner. Wales and Scotland have committed to funding the service so there is still a desire to support Cambridge and Edinburgh in this. Wales is also keen to develop its own team. There is now a need to re-consider opening locally.</p> <p>I Currie explained that he and M Berman had sent a letter regarding retrieval and the use of Organox and OCS looking for assurance that there will not be a surplus number of people or teams attending a donor. For OCS the NORS team retrieves and the recipient centre puts the heart on the machine to go back to their centre. For Organox, very few recipient centres send a machine to the donor hospital and the abdominal retrieval and Organox teams are in same theatre. If warm blood technology and attendance at the donor hospital is advantageous, those individuals should retrieve the organs to avoid having two teams present in the operating</p>	

	theatre. For NRP there is a standard retrieving team (plus one practitioner) so there is no issue with over-crowding in theatres.	
<b>7.</b>	<b>INOAR Update</b>	
7.1	<p><b>Increasing the Number of Organs available for Research - RINTAG(20)15</b></p> <p>INOAR planned to go live on 18 March. However, a decision was made to pause its launch on 16 March due to the current COVID environment. L Armstrong stated that several actions were needed to ensure INOAR was able to go live. Putting these into place has only been delayed due to COVID and there should be no issues when a new start date is agreed. The paper circulated for this meeting gives detail on how INOAR will be evaluated. However, some studies have been suspended and it will not be possible to start until these are feasible and researchers are in place. INOAR has project management support and a recovery programme board is due to meet for the first time on 5 May. Re-launch of INOAR will be discussed in these meetings. It is likely that some refresher training for SNODs and Hub Operations will be necessary. It was agreed that P Friend, D Harvey, J Casey and I Currie will consider how CT organs can be retrieved for research if no CT retrieval team is present.</p> <p><b>ACTION: Paper to be presented at the next RINTAG meeting on this issue.</b></p>	PF/JC/DH/IC
<b>8.</b>	<b>QUOD Update</b>	
8.1	<p><b>QUOD Report RINTAG(20)16</b></p> <p>The latest QUOD statistics were circulated prior to the meeting. R Ploeg reported that QUOD is currently paused. Up to the moment of pausing there had been nearly 5000 donors. Following reduction of the biopsy punch down to 2mm there have been no major issues and the PITHIA biopsy has also reduced from 5mm to 4mm. However, there have been some comments that it can be difficult to get the biopsy out of the kidney due to the size of the biopsy so the quality will be monitored and reported back to RINTAG if necessary. Both SNOD teams and consent issues are stable. It was also noted that several larger groups have requested large numbers of samples with new grant applications and there have been 27 publications mentioning QUOD related material. Several grants have included the QUOD bioresource in their applications and out of £9M grant applications, £5M have been awarded. Although QUOD is currently paused, discussions are now ongoing regarding how the programme will re-start again quickly once this is feasible without too many issues. The meeting noted that as COVID is likely to be around for some time, there may be anxieties around aerosol generated procedures such as BAL in the CT community as opposed to bronchoscopy and that this should be considered in any future communications regarding this programme.</p>	
8.2	<p><b>QUOD Prioritisation</b></p> <p>This paper was circulated prior to the meeting. Since the initial proposal from QUOD to NHSBT in 2011, the project has expanded to include the collection of Blood, Urine and Tissue samples from organ donors. A Medical Research Centre (MRC) grant was awarded to QUOD in 2017 to enable the collection of whole organs. RINTAG is asked to consider the 3 options to allocate research organs to QUOD and agree to the preferred option:</p> <ul style="list-style-type: none"> <li>A) Studies with the intention to transplant offered research organs are given the highest priority, followed by QUOD.</li> <li>B) Individual research applications (part of QUOD Expand) to be individually ranked in accordance with the Allocation of research organs (POL 263), Prioritisation matrix.</li> </ul>	

	<p>C) QUOD Biobank to be offered organs if no ranked studies respond to organs offered for research, prior to offering to other tissue banks. After some discussion, it was noted that several steps can be taken now and in the future. While it is considered that Option A would work in the future if an organ's single call after transplant consideration is placed and managed by QUOD, Option C was proposed as the best option for the the time being aiming to define the optimal strategy for Option A as a long term plan.</p> <p>It is therefore proposed that Individual studies coming from QUOD Expand will be ranked in line with other studies considered by RINTAG. In addition, QUOD will take any tissue that is left and the Biobank part of QUOD should be offered the other organs not placed in the ranked studies. QUOD needs to organise logistical support to ensure this storage happens. The proposal is that QUOD biobanking when feasible again is the only biobank that we support for organs considered for transplant and therefore will distribute tissue to other researchers to allow QUOD to recoup some of the costs involved in its maintenance and development. It was noted that it is Important that the basic principle of ensuring organs are available for transplant is paramount.</p> <p><b>ACTION: A paper will come to the next RINTAG meeting highlighting how QUOD could be used to facilitate research.</b></p>	GO
9.	<b>Interpreting Research Restrictions</b>	
9.1	<p><b>Research Definitions RINTAG(20)18 and RINTAG(20)19</b></p> <p>Two papers were circulated concerning challenges faced regarding what restrictions placed on families when considering donation of organs for research. C Denison explained that the papers have been written in collaboration with N Watkins and colleagues in Blood side of NHSBT to come up with definitions that will apply to all areas for research supported by the NHSBT. Stakeholders, lay members and operational teams have been asked for feedback which is included in one of the papers circulated (RINTAG(20)19). It was emphasised that the document tabled here (RINTAG(20)18) is not given to donor families, but is rather to support the conversation that the SNODs have with them as it appears that the majority of times a restriction is placed on an organ for research there is a lack of understanding about what that research will entail. It was noted that this explanation to donor families is crucial as results from research, albeit as anonymised data, is likely to be published and available more widely than they perhaps realise. Hopefully by training SNODs to these definitions, the potential fears that donor families have about the use of a donor organ will be alleviated while they still retain the ability to restrict consent if they so wish.</p> <p>C Denison and N Watkins were thanked for the valuable work done on what has been a complicated process. It is hoped that the methodology used here can be incorporated when considering other research issues in the future.</p> <p>Some queries were expressed regarding the commercial definitions within the document and it was agreed that the wording would be changed to reflect that cost recovery by publicly funding bodies would not count as commercial research. A correction will also be made to DNA and RNA labelling in the FAQs section. It was agreed that once these changes have been made, the document will be taken for internal NHSBT CARE sign off without the need to come back to a RINTAG meeting.</p> <p><b>ACTION: C Denison to make these necessary changes</b></p>	GD

10.	<p><b>Heart Perfusion Studies</b></p> <p>M Stevens presented an update to 2 studies from John Dark, Simon Messer and Stephen Large. Following the last RINTAG meeting the first study led by John Dark was on hold following REC approval due to delays getting the research team in place. Consent in the Northern team was good and the SNODs were happy with the process used. However further development is now on hold due to some logistical issues and COVID. For Simon's ES-NMP study there was good consent in the Eastern region, but logistical issues, clinical commitments and now COVID have hampered progress. 3 DBD hearts have been taken and the study now needs only two DCD hearts, although none have been available yet.</p>	
11.	<p><b>Adrenal glands studies</b></p> <p>C Denison explained that NHSBT has been approached by a couple of research studies requesting surplus tissue e.g. adrenal glands and spleens taken at the time of retrieval of an organ for transplantation to use in at their centres. Concern was expressed that donor families do not give specific informed consent for the use of these tissues (which would otherwise be discarded) when they give consent for transplantation and that this could cause issues subsequently when they receive an outcome letter regarding the use of an organ. The option to take consent in a specific region involved in this research is not considered feasible given the requirements of the kidney allocation scheme and if a national scheme is considered so that all donor families are asked for specific informed consent, this would be very resource heavy involving training and involvement of several areas of NHSBT. The option to include use of this surplus tissue in generic consent stating that retrieval of an organ also includes necessary removal of tissue or fluids that may later be used for research or other therapeutic reasons was discussed by the meeting to simplify the process. It was noted that ensuring donor families give informed consent as well as ensuring traceability of tissue used is essential. It was agreed that keeping the process as simple as possible is preferred to ensure that research studies go ahead in future. Following discussion with HTA and lay members, a paper will be circulated to RINTAG members setting out the implications of requesting and using this tissue and the researchers concerned will then be given the requirements that they will need to have in place in order to progress.</p> <p><b>ACTION: C Denison to circulate this paper to RINTAG members</b></p>	CD
12.	<p><b>Selection of Red Cells for Organ Perfusion RINTAG(20)20</b></p> <p>With the use of machines for perfusing donors and organs increasing, issues with the provision of appropriate blood have occurred highlighting need for standardisation of practice. A draft document (circulated prior to this meeting) was produced by C Watson in consultation with the Cambridge Transfusion laboratory users of blood-based organ perfusion equipment. This document was then revised and sent out for comment again. COVID has however, intervened and there remain issues which need to be resolved, as can be seen in the comments included in the document. It was agreed that the process of talking to local blood transfusion laboratories was the right one and it is hoped that they will be able to agree a standard practice, compatible with processes in every laboratory. The Chair thanked C Watson for his hard work to date on this topic and encouraged all to submit further comments to him via email. It was also agreed that it would be useful to contact NBTC transfusion lab managers' group for further input.</p> <p><b>ACTION: C Denison to email C Watson the name of a contact for the NBTC Transfusion Lab Managers' meeting</b></p>	CD

<b>13.</b>	<b>Clinical Governance</b>	
<b>13.1</b>	<b>Clinical Governance Update</b> There was no update at the meeting and no significant issues to raise.	
<b>13.2</b>	<b>Shipment of Organox devices between centres</b> The Chair stated that Organox machines are being used more frequently for transport of organs and for assessment for transplantation. As experience with Organox becomes wider, it is likely that centres will consider sharing perfused organs, but only if they are on the machine. It was noted that Organox loans machines to centres cost free and undertakes to ensure that they all have working devices. Nevertheless, there are some challenges to resolve regarding facilitation of the use of the Organox machines between recipient centres and who has responsibility for transport of the organ. <b>ACTION: those present at the meeting would consider the challenges faced and C Watson will co-ordinate a response and incorporate this into the work that he has already completed on blood utilisation. Issue to be tabled at LAG and RINTAG once draft completed</b>	CJW
<b>14.</b>	<b>Any Other Business</b>	
14.1	The Chair stated that appointment of a new Chair for RINTAG had been delayed due to the onset of the COVID-19 emergency measures. However, it is hoped that he will be able to hand over the baton as Chair to a new person by the time of the autumn meeting in London. He thanked all present for their enthusiasm, support and diligence in developing research in organ donation and transplantation at NHSBT. All those at the meeting thanked the Chair for his hard work and excellent leadership in establishing and promoting research over the last 5 years within NHSBT.	
	<b>Date of next meeting: 27 October 2020 - 10:30-15:30 – Westmacott Room, Marriott Hotel, Marble Arch, London, W1H 5DN</b>	