Changes in this version

Section 1.3.2 correction of wording only.

Policy

This policy has been created by the Pancreas Advisory Group (PAG) on behalf of NHSBT. This policy previously received approval from the Transplant Policy Review Committee (TPRC). This committee was disbanded in 2020 and the current governance for approval of policies is now from Organ and Tissue Donation and Transplantation Clinical Audit Risk and Effectiveness Group (OTDT CARE), which will be responsible for annual review of the guidance herein.

Last updated: December 2022 Approved by OTDT CARE: October 2022

The aim of this document is to provide a policy for the allocation and acceptance of organs to adult and paediatric recipients on the UK national transplant list. These criteria apply to all proposed recipients of organs from deceased donors.

In the interests of equity and justice all centres should work to the same allocation criteria.

Non-compliance to these guidelines will be handled directly by NHSBT, in accordance with the *Non*-Compliance with Selection and Allocation Policies POL198. (http://www.odt.nhs.uk/transplantation/tools-policies-and-guidance/policies-and-guidance/)

It is acknowledged that these guidelines will require regular review and refreshment. Where they do not cover specific individual cases, mechanisms are in place for the allocation of organs in exceptional cases.

Applicable Documents

- POL188 Clinical contraindications to approaching families for possible organ donation
- POL191 Guidelines for consent for solid organ transplantation in adults
- POL185 Pancreas Transplantation: Patient Selection
- POL198 Non Compliance with Selection and Allocation Policies
- SOP5116 Kidney, Pancreas and HLA manual Hub Operations

1. Allocation policy

The National Pancreas Offering Scheme (NPOS), managed by NHSBT allocates donated pancreases to patients listed nationally for either pancreas alone, islet alone, combined pancreas and kidney and combined islet and kidney transplants.

1.1. Rationale for allocation policy

Pancreases that are offered through this scheme include those donated after brain death (DBD) and those donated after circulatory death (DCD). Pancreases that are preferentially offered and accepted for multivisceral (e.g. pancreas and small bowel) or multiple organ transplants (e.g. pancreas and liver), including those patients within the top tier of the Kidney Offering Scheme requiring combined pancreas and kidney transplants or combined islet and kidney transplant, are not offered through this scheme.

1.2. Justification for sub-groups

Donor to recipient blood group matching is restricted as part of the scheme. This is important to maintain equity of access to a transplant for patients across all blood groups. For example: while pancreases from blood group O donors could be allocated to recipients of any blood group, blood group O recipients are only able to receive organs from blood group O donors for biological reasons. If all blood group O donor organs were



allocated to recipients of any blood group, then the number of blood group O pancreases available to blood group O recipients would be much less and the blood group O recipients would be disadvantaged.

Where the recipient is very difficult to find a pancreas for and they are an unusual blood group this rule may be broken, so a blood group AB recipient may receive a blood group A pancreas, a highly sensitised blood group B patient or a very highly sensitised blood group A or AB patient may receive a blood group O pancreas and a very highly sensitised blood group AB patient may receive a blood group B pancreas.

	Potential recipient blood group			
Donor blood	0	А	В	AB
Group				
0	✓	✓ **	✓ *	✓ **
А		✓		✓
В			✓	✓ **
AB				✓

* Patients with a calculated reaction frequency of 75% or more only
 ** Patients with a calculated reaction frequency of 90% or more only

1.3. Allocation policy

Pancreases from all clinically suitable deceased donors are allocated via the NPOS. There are specific donor age limits for pancreas and islet donation from both DBD and DCD donors:

	Age of donor	
Donor type	Vascularised pancreas	Pancreas islet
DBD	< 61 years	< 61 years
DCD	< 56 years	< 51 years

In addition, there are also restrictions regarding donor body mass index (BMI) in order to initially offer organs to more clinically appropriate pancreas or islet patients. Those deceased donors aged under 25 years with a BMI under 25 will not initially be offered to islet patients and those donors with a BMI of 31 or more will not initially be offered to whole pancreas patients. These donors could be offered to all patients via the Pancreas Fast Track Scheme, described in section 2.1.

There are three ranked tiers of patients who are eligible to receive a particular donor's organs:



Tier	Inclusion criteria
A	 Patients with a matchability points score of 10 100% sensitised patients Patients waiting over 3 years for a pancreas or islet transplant
В	 Blood group identical or highly sensitised blood group compatible patients (as defined in 1.2.1 above)
С	All other eligible patients

Within Tier A patients are prioritised by matchability points score and waiting time (highest matchability points score and longest waiting time first). Matchability points score is a score between 1 and 10 reflecting the difficulty with which a well-matched HLA compatible organ can be found and takes into account sensitisation and rareness of HLA type. Scores are updated annually such that 10% of waiting list patients who are easiest to match have score=1 and 10% who are most difficult to match have a score=10.

Within Tiers B and C patients are prioritised according to a points-based system. Patients are awarded individual points based on a number of clinically relevant donor-, patient-, and transplant-related factors. For each patient, these points are accumulated to give an individual Total Points Score (TPS). The patient with the highest TPS is ranked first in the offering sequence. All eligible patients appear on the Pancreas Matching Run (PMR) and are ranked according to the highest to lowest TPS.

The scoring system is based on a combination of donor, recipient and transplant factors. Patient scores and ranking positions will therefore differ over time and for each given donor. The algorithm that calculates the TPS is detailed in 1.3.2. An example of how the scoring system is used to prioritise patients is shown in 1.3.3.

1.3.1. Details of policy

The seven elements that are taken into account to calculate the TPS are:

- Total HLA mismatch
- Waiting time
- Sensitisation
- Travel time
- Donor body mass index
- Dialysis status
- Donor to recipient age matching

Total HLA mismatch points

The HLA type ("tissue type") in terms of HLA-A, B and DR antigens of both the donor and patient are recorded. Within each locus (e.g. HLA-A) there are many specific HLA antigens (e.g. A1, A2, A3 etc.) and most donors/recipients will have two HLA antigens for each locus. Some patients are what is known as homozygous and may only have one common antigen within a locus.

These HLA antigens are compared between the donor and potential recipient and the numbers of antigens present in the donor that are not present in the recipient are

counted. A patient can therefore have either 0, 1 or 2 mismatches at each locus. Across the HLA-A, B and DR loci the total mismatch count can therefore range between 0 and 6.

There is evidence to suggest that transplants with a very poor HLA match (total mismatch count of 5 or 6) may lead to poorer longer-term post-transplant outcomes compared with transplants with lower numbers of HLA mismatches. It is important to note that in some circumstances a poorly matched transplant may be a good option for the patient and may proceed. The HLA mismatch score aims to minimise the number of transplants with very poor HLA matching without excluding them as an option for some patients.

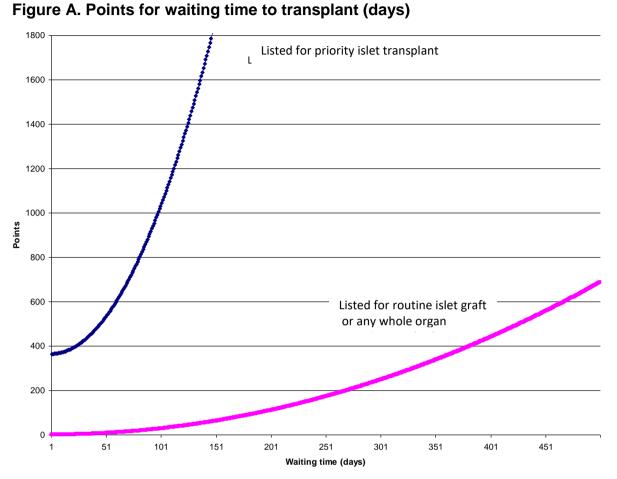
It is also known that the majority of routine pancreatic islet transplant recipients are likely to require a second or subsequent transplant as a priority. To increase the chance of finding an appropriate donor HLA match for the second or subsequent priority islet transplant, an additional HLA points system is applied to patients receiving a routine islet transplant.

Waiting time points

For patients listed for a priority islet transplant, waiting times are calculated from the date of their previous islet transplant. All other waiting times are calculated from the date the patient was first registered on the active national pancreas transplant list. Both waiting time calculations include all days that a patient may have been temporarily suspended from the list (for example, if they go on holiday, or develop a medical complication).

For the majority of patients, waiting time starts at 0 on the day they are established as 'active' on the pancreas transplant list. However, in line with kidney alone listing policy, any patient receiving a simultaneous pancreas and kidney (SPK) graft or a simultaneous islet and kidney (SIK) graft whose kidney fails within the first 180 days post-transplant starts with a waiting time on the kidney transplant list as it was on the day of that (failed) transplant. The failure must be reported to NHSBT through a follow-up return to enable the waiting time to be calculated accurately. Patients with pancreas or islet graft failure within 180 days of a SPK, SIK, pancreas-only or islet-only transplant should not receive priority over existing SPK or SIK waiting list patients and would lose their previous waiting time points.

Patients that require a priority islet transplant are awarded points using a different scoring system to all other patients listed for a routine islet or vascularised pancreas transplant. It is clinically preferable that priority islet patients receive their second or subsequent islet transplant within a short time of their first graft. Patients listed for a priority islet graft therefore accrue waiting time points considerably quicker than all other patients. The two points systems are shown in Figure A.



Sensitisation points

Potential recipients can develop a number of different HLA antibodies as a result of exposure to the different HLA antigens through blood transfusion, previous transplants and pregnancy. Many patients, however, have no detectable HLA antibodies. If a potential recipient has an antibody to an HLA antigen then they cannot receive a transplant from a donor with that HLA antigen, thus restricting the pool of potential donors. Patients who are clinically incompatible with the donor are excluded from the Pancreas Matching Run. For a patient changing transplant centre, any incoming registration that does not contain one or more of the unacceptable antigens already recorded for a patient will be checked with the tissue typing laboratory to ensure a patient isn't disadvantaged.

For a given patient with detectable HLA antibodies, the proportion blood group identical donors from a pool of 10,000 against which the recipient has HLA specific antibodies is calculated. This percentage of donors is termed the 'calculated Reaction Frequency' (cRF), more commonly referred to as the sensitisation level. Patients with no detectable HLA antibodies will have 0 sensitisation (0% cRF).

The allocation scheme prioritises patients according to their varying levels of sensitisation. The aim is to maximise the chance of patients with high levels of sensitisation receiving an offer when a pancreas from an HLA compatible donor becomes available. This is particularly important for patients with high levels of sensitisation and



does not unduly affect patients with low levels because they are HLA compatible with a much larger pool of donors. The scoring system used is shown in Figure B.

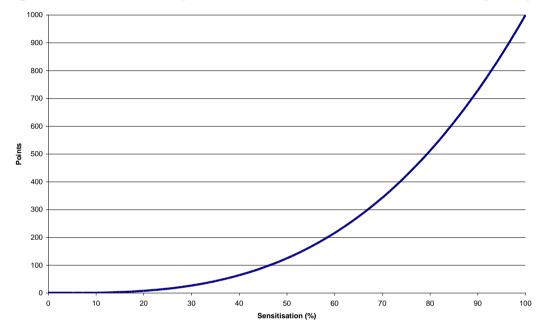


Figure B. Sensitisation points based on calculated reaction frequency

Travel time points

Once the pancreas has been recovered at the donor hospital, it is important to implant the organ as soon as possible. Although the intervening time is determined by a number of factors, the allocation scheme can help minimise this by minimising the transport time between the donor hospital and transplant centre where the surgery will occur. There are eight designated vascularised pancreas and seven islet transplant centres throughout the UK. Travel time points work differently for each type of donor and for patients listed for vascularised pancreas transplants and islet transplants, but as a general principle, organs are not sent a long way for transplant unless necessary. Pancreases intended for islet transplant are sent to one of only three islet isolation laboratories prior to transplantation.

• Donors after brain death

For potential recipients listed for a vascularised pancreas transplant, a computer programme automatically identifies the closest three transplant centres in relation to the donor hospital. Points are then awarded to all patients listed at any of those three closest centres. Potential recipients listed at any of the other five transplant centres are awarded 0 travel time points. All patients listed for a routine islet transplant receive travel time points.

• Donors after circulatory death

Organs retrieved from donors after circulatory death are very sensitive to ischaemia (the time they are out of the body before being transplanted). It is therefore even more imperative to reduce the travel time for such pancreases. A considerably higher weighting is given to patients listed at the closest transplant centre to minimise the time these organs spend in transit. All patients listed for an

islet transplant will only receive travel time points if one of the on-call isolation centres is within 150 minutes of the donor hospital.

Donor body mass index (BMI) points

The NPOS incorporates patients listed for both vascularised pancreas and islet transplantation. It is clinically desirable that pancreases from donors with a low BMI are used for vascularised pancreas transplantation and often a higher yield of pancreas islets can be extracted from pancreases recovered from a donor with a high BMI. There is also a range of donor BMIs that are considered clinically desirable for both types of transplant. The donor BMI scoring system is in place to account for each of these three considerations. The scoring system is shown in Figure C.

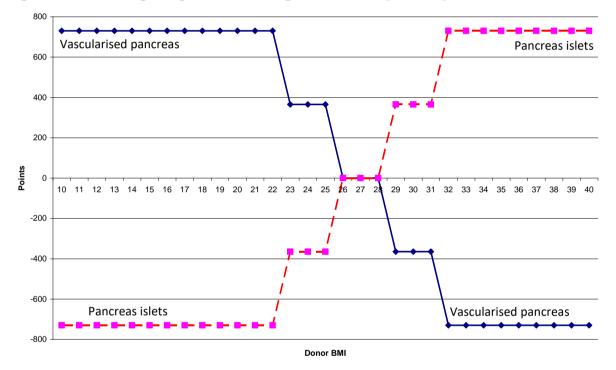


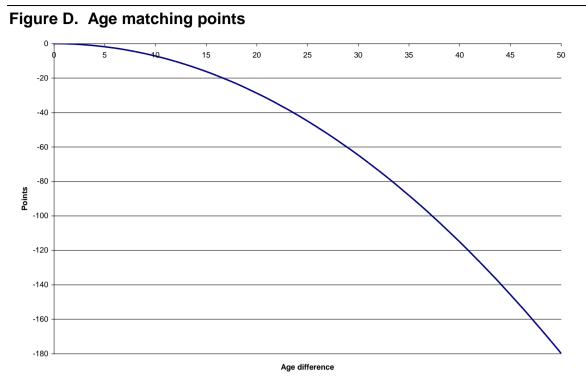
Figure C. BMI weighting for whole organ and islet patient points

Dialysis status points

Diabetes is often associated with chronic kidney disease (CKD) which can lead to kidney failure. The severity of CKD can be estimated and in the most severe cases will be treated with dialysis. Around 40% of pancreas transplantation patients are listed approximately six months before they are expected to require dialysis. This is usually referred to as pre-emptive listing. Other patients may have been on dialysis for some time before being listed for transplantation and these patients receive some degree of priority over those who are not yet on dialysis.

Donor to recipient age matching points

Although not clinically necessary, donor and recipient age matching has been included in the scheme as a tie breaker between patients with very similar scores. This factor is the least influential on the overall scores. The scoring system is shown in Figure D.



1.3.2. Calculating the total points score (TPS) algorithm

TPS =

Total HLA-A, B & DR mismatch count points: 0 to 4 HLA mismatches = 730 points

5 to 6 HLA mismatches = 0 points

+ for patients listed for routine islet graft:

0 mismatches = 0 1 to 2 mismatches = -1503 to 4 mismatches = -3505 to 6 mismatches = -700

+ waiting time points (see Figure A):

For all vascularised and routine islet grafts:

Waiting time (days)² 365

For patients listed for a priority islet graft:

365 + <u>Waiting time (days)</u>² 15

+ sensitisation points: (see Figure B)

Sensitisation (%)³ 1000

(see Figure B)

+ dialysis points: On dialysis = 180 points Not on dialysis = 0 points

For donors after brain death:		
Closest three centres	=	365 points
Centres outside closest three	=	0 points
Routine islet patient by default	=	365 points
Priority islet patient	=	0 points
For donors after circulatory death:		
Closest centre		= 10,000 points
Closest three centres (excluding	closest)	= 5,000 points
Centres outside closest three = 0 points		
Within 150 minutes of isolation la	ab*	= 10,000 points

+ travel time points (donor hospital to transplant centre)

* NB All patients listed for islet transplantation will receive points if an isolation lab is within a 150-minute radius of the donor hospital. Oxford and the London isolation labs share an on-call rota; therefore the 150-minute radius is calculated based on a hospital halfway between the two (High Wycombe).

T donor bivir points (see rigure c).			
Vascularised	Islet		
+730	-730		
+365	-365		
0	0		
-365	+365		
-730	+730		
	Vascularised +730 +365 0 -365		

+ donor BMI points (see Figure C):

- donor to recipient age matching: (See Figure D): Age difference (years)²

13.9

See Appendix I for calculated examples.

2. Acceptance of offered organs

2.1. The Pancreas Fast Track Scheme

To optimise the utilisation rate of pancreases available for transplantation a Pancreas Fast Track Scheme (PFTS) was introduced.

2.1.1. Pancreas Fast Track Scheme offering criteria for deceased donor pancreases

Pancreases from deceased donors will be offered through the Fast Track Scheme to both pancreas and islet centres if the cold ischaemic time (CIT) is not over 4 hours and to islet centres only if the CIT is over 4 hours and not over 8 hours (due to the decline in organ quality and the very small chance of transplant combined with the workload involved for centres receiving these offers) and any of the following criteria are met:

- If, at any point, the pancreas is deemed to be unsuitable by a SNOD or a member of the retrieving or transplanting team.
- Four (three for DCD donors) pancreas transplant centres decline a pancreas or islet offer for either donor or organ quality reasons. The reasons given may differ between centres but must relate specifically to the donor or organ quality.
- Where the pancreas has not been accepted at the point of knife to skin.
- If there are no patients identified on the matching run due to donor BMI or age restrictions, but there are compatible patients at centres.

2.1.2. Offering via the Pancreas Fast Track Scheme

Centres must 'opt-in' to receive offers of pancreases through the PFTS. To qualify, centres must provide NHSBT with a 24-hour fax or single SMS number and have access to the Electronic Offering System.

When a pancreas from a deceased donor meets the Fast Track Scheme criteria, the organ will be offered simultaneously to each of the pancreas and islet transplant centres that have opted-in to the scheme. Each centre has 45 minutes, from the time of offer, to confirm whether or not they would like to accept the pancreas. Failure to respond within the 45-minute window is equivalent to a declined offer. The fast-tracked pancreas will be allocated to the accepting centre with the highest priority patient listed although that centre may transplant the pancreas into any locally listed patient. Upon inspection, if the accepting centre decides the pancreas is unusable, it will be offered to the accepting centre with the second highest priority patient listed and so on, until either the pancreas has been transplanted or all accepting PFTS centres have declined the offer of the organ.

Organs from deceased donors in Gibraltar will facilitated using the same donor characterisation process as a UK donor with all information able to be viewed on EOS. Due to the logistical issues encountered with a 3-hour flight time these organs will be offered simultaneously to every centre who has registered to receive fast track offers. At the end of 45 minutes organs will be allocated using previously agreed policy.

2.2. Reallocation of pancreas

If a pancreas needs to be reallocated because the patient for whom the pancreas has been accepted cannot subsequently receive the transplant, the following rules apply:

- If the pancreas has not been dispatched to the transplant centre it will continue to be offered for prioritised patients in the usual way.
- If the pancreas has been dispatched to the transplant centre, the pancreas can be kept by that centre. The centre will select the most appropriate patient from their local list.
- If the pancreas is on route to an isolation laboratory and isolation has not yet begun, the declining centre can keep the offer for any of their recipients. If they do not wish to accept, this will be offered on.
- If the pancreas is at an islet isolation laboratory and isolation has already begun, the declining centre may keep the offer for any of their islet recipients. If they do not wish to keep the islets, they must be offered out to all centres via the fast-track scheme.

2.3. Blood-borne Positive Donor Virology Scheme

To reduce the length of the donation, process the positive donor virology scheme was introduced.

2.3.1. Positive donor virology scheme offering criteria for deceased donor pancreases

The positive donor virology scheme is initiated when NHSBT is notified that a donor has an initial positive result for any of the markers listed below:

- Hepatitis B surface antigen (**not Hepatitis B** core antibody positive alone, with negative HBsAG)
- Hepatitis C antibody
- HIV 1 and 2 antibody
- HTLV 1 and 2 antibody

2.3.2. Offering via the positive donor virology scheme

Centres must 'opt-in' to receive offers of pancreases through the positive donor virology scheme. Islet centres are excluded from the positive donor virology scheme as the isolation laboratories are not able to isolate these pancreases.

When a pancreas from a deceased donor meets the positive donor virology criteria, the organ will be offered simultaneously to each of the pancreas transplant centres that have opted-in to the scheme. Each centre has 45 minutes, from the time of offer, to confirm whether or not they would like to accept the pancreas. Failure to respond within the 45 minutes window is equivalent to a declined offer. The pancreas will be allocated to the accepting centre with the highest priority patient listed although that centre may transplant the pancreas into any locally listed patient. Upon inspection, if the accepting centre with the second highest priority patient listed and so on, until either the pancreas has been transplanted or all accepting centres have declined the offer of the organ.

3. Allocation policies for multiple organs

3.1. Prioritising liver and pancreas patients

A patient listed for a combined liver and pancreas transplant will receive priority over all patients listed for a vascularised pancreas or pancreas islet transplant so that when the liver is allocated to such a patient, the pancreas (where offered for donation) will also be allocated.

3.2. Prioritising kidneys from deceased donors between SPK / SIK and kidney only patients

Kidneys from deceased donors are allocated through the National Kidney Offering Scheme (NKOS) with the exception of multi-visceral and multiple organ transplants (including combined pancreas and kidney and combined islet and kidney patients not in Tier A of NKOS).

When donor kidneys become available for transplantation, they are first offered for transplantation through the NKOS. This scheme prioritises patients within two predefined tiers (A and B). Patients actively listed for kidney only or combined pancreas and kidney or combined islet and kidney transplantation ranked in Tier A on the Kidney Matching Run will receive priority over all other patients listed for a vascularised pancreas or pancreas islet transplant.

Combined pancreas and kidney and combined islet and kidney patients in Tier A of the NKOS are entitled to accept just the kidney when it is offered with the pancreas and in such cases the pancreas will be offered in isolation through the NPOS to patients listed for an isolated pancreas or islet transplant if it was suitable.

If there is no more than one suitable patient listed within Tiers A of the NKOS and the pancreas is still available, then one kidney may be offered with the pancreas within the NPOS for patients listed for a combined pancreas and kidney or combined islet and kidney transplant. Should the kidney not be allocated through NPOS, it will then be offered back through the NKOS to kidney only patients listed in Tier B.

If both kidneys are allocated to patients listed within Tier A of the NKOS, the pancreas will be offered in isolation through the NPOS, but only patients listed for an isolated pancreas transplant or a pancreatic islet transplant will be considered.

If only one kidney from a donor is available for transplant, the kidney will not be offered with the pancreas and will instead be offered for kidney only transplantation and allocated through the NKOS.

If a donor is identified as having a "horseshoe kidney" at registration it will be offered as one kidney. If this is identified at retrieval, then the decision to split or remain as one kidney will be made by the retrieval surgeon and the implanting surgeon at the centre with the highest ranking recipient.

The left kidney is allocated to the highest ranked patient on the kidney matching run.

If the donor HLA-type is not known at the time of offering

This is likely to be extremely rare for DBD donors but may be more common for DCD donors. If the donor HLA-type is not known at the time of offering, one kidney will be offered via the NKOS to the local centre and then centres with the highest ranked patients listed, although the centre may transplant the kidney into any locally listed patient. One kidney will be offered with the pancreas via the Pancreas Fast Track Scheme. If no offer is accepted within 45 minutes OR if at any stage the pancreas is accepted for pancreas only or pancreatic islet transplantation, the kidney will be offered back to centres via the NKOS.

3.3. Prioritisation of intestinal patients

Intestinal patients are given prioritisation of additional organs required for their bowel transplant ahead of non super-urgent liver recipients, pancreas and kidney patients, and islet and kidney patients. This is to allow the small numbers of vulnerable bowel patients (with historically the highest transplant list mortality, and severely limited donor pool options) to have UK-wide access to the small numbers of paediatric and small adult DBD donors.

3.3.1. Group 2 intestinal patients

Patients who are ordinarily resident but not necessarily a UK citizen, or someone entitled under reciprocal arrangements, can receive treatment in the UK as a Group 1 patient. All other patients are Group 2 (as defined by the NHS Blood and Transplant (Gwaed a Thrawsbkniadau'r GIG) (England) Directions 2005 - Guidance). (https://nhsbtdbe.blob.core.windows.net/umbraco-assets-corp/1864/nhsbt_directions_2005.pdf)

Group 2 patients for pancreas and bowel donor organs will be offered these two organs only if there are no suitable Group 1 pancreas or islet patients. Thus, the order will be:

- 1. Group 1 pancreas and bowel patients
- 2. Group 1 pancreas/islet patients and Group 1 bowel patients
- 3. Group 2 pancreas and bowel patients
- 4. Group 2 pancreas/islet patients and Group 2 bowel patients.

4. Special prioritisation

4.1. Protocol for prioritisation of pancreas patients following identification of an error affecting allocation

A recipient who is identified as having missed out on an offer of a pancreas, due to a data error (e.g. delayed reactivation following a period of suspension), may be awarded

prioritisation in subsequent pancreas matching runs for suitable donors, until they receive an offer of a pancreas. Where a recipient is awarded pancreas matching run prioritisation, they will be ranked above all other non-prioritised recipients in the pancreas matching run.

Where two or more recipients are awarded special prioritisation within the same matching run, they will be ordered using their matching run points total. Matching runs for pancreases from overseas donors will **not** award special prioritisation when ranking patients. Matching runs for pancreases from DCD donors will **not** award special prioritisation when ranking patients.

Recipient prioritisation will cease when one of the following events occurs:

- The recipient receives an offer of a pancreas (for a pancreas or islet transplant) regardless of whom receives the transplant – i.e. even if the offer does not result in the prioritised recipient being transplanted
- 2. The recipient is transplanted with a pancreas or islets
- 3. The recipient is removed from the pancreas or islet waiting list
- 4. The recipient dies

A prioritised recipient who receives an organ offer which is declined will have their special prioritisation immediately suspended. Once confirmation of the final offer outcome has been received, the recipient's prioritisation status will be permanently ended if the organ offer results in a transplant or reactivated if the organ offered does not result in a transplant.

All patients affected by a transcription error will automatically be prioritised and cases of administrative error will be reviewed by the Chair of the Pancreas Advisory Group.

4.2. Protocol for awarding additional waiting time points to pancreas patients following an error

A recipient who is identified as having less pancreas or islet waiting time than they ought to (e.g. through late registration following transplant centre admin error) may be awarded extra pancreas or islet waiting time to compensate for the difference.

4.3. Process for requesting special prioritisation

If a clinician considers that a transplant candidate has been unfairly disadvantaged by the one of the scenarios described above in sections 4.1 to 4.2, he/she should raise a request for special prioritisation with the Chair of the Pancreas Advisory Group. The request should be sent electronically to the Chair, the Statistical Lead and the ODT Information Services Project Co-ordinator.

4.4. Patient transfer between centres or transplant lists

The time spent on the pancreas or islet transplant list contributes to a patient's prioritisation within the pancreas allocation scheme. For this reason, waiting time accrued for prior, associated registrations can be transferred in the four scenarios described below.

In all four scenarios described below, the centre must contact ODT Information Services on **0117 975 7523** to notify them of the change in circumstances and ensure accrued waiting time is also transferred. Following the telephone notification, the centre must then confirm changes in writing by sending an email to <u>ODTRegistrationTeamManagers@nhsbt.nhs.uk</u>.

- 1. Any pancreas or islet patient who transfers from one UK pancreas or islet transplant centre to another.
- 2. Any patient registered for a pancreatic transplant (pancreas alone, simultaneous pancreas and kidney, simultaneous islet and kidney or islet transplant) who requires a transfer to another pancreatic transplant list.
- 3. Any patient registered for a kidney alone transplant who requires a transfer to simultaneous pancreas and kidney or simultaneous islet and kidney transplant. Waiting time accrued on the kidney transplant list can be transferred.
- 4. Any islet patient whose priority status is removed due to the failure of their routine graft or whose priority status is no longer deemed appropriate, e.g. if over 12 months since their routine graft. The patient must be removed from the priority list before activating on the routine islet list.

Any patient transfers which differ from those described above will require the approval from the Chair of the Pancreas Advisory Group. The process for requesting approval is outlined in section 4.3.

4.5. Exemption request process

If the Multi-Disciplinary Team (MDT) caring for the patient forms the view that the patient should be listed even though they do not meet agreed criteria then the MDT may seek approval for listing from the Pancreas Advisory Group Exemptions Panel, as outlined in section 4.0 of the Pancreas Selection Policy (**POL185**) (<u>http://www.odt.nhs.uk/transplantation/tools-policies-and-guidance/policies-and-guidance/</u>)

A patient not accepted for transplantation in a centre has the right to request and obtain a second opinion from another UK centre.

Appendix I

Example: Total points score

Donor details: Aged 45 years, BMI 28, Churchill Hospital, Oxford, donor after brain death

Patient A details*

- Requires a vascularised pancreas
- Listed at Oxford for 200 days
- cRF 85%
- On dialysis
- Aged 40 years

Patient B details*

- Requires a priority islet graft
- Listed at Newcastle for 50 days
- cRF 0%
- Not on dialysis
- Aged 35 years

Patient C details*

- Requires a routine islet graft
- Listed at Oxford for 300 days
- cRF 10%
- Not on dialysis
- Aged 55 years
- * Assuming all have less than 5 HLA mismatch counts with the donor

Total Points Score Calculation Examples

	Points Score	;	
Factor	Patient A	Patient B	Patient C
HLA MM score	730	730	730
First islet MM score	N/A	N/A	-350
Waiting time	110	532	247
Sensitisation	614	0	1
Dialysis status	180	0	0
Travel time points	365	365	365
Donor BMI index	-365	365	365
Age match	-2	-7	-7
TPS	1632	1985	1351

Pancreas Matching Run Result Example

Patient	TPS	Rank
В	1985	1 (First offer)
А	1632	2 (Second offer)
С	1351	3 (Third offer)

In this example, the pancreas would be offered first to the transplant team responsible for Patient B. They may choose to accept or reject the offer on behalf of that patient. If declined, the transplant team responsible for Patient A will receive the next offer and so on.