

NHS BLOOD & TRANSPLANT

PANCREAS ADVISORY GROUP

NATIONAL PANCREAS OFFERING SCHEME

**12 MONTH ACTIVITY SUMMARY -
11 SEPTEMBER 2019 TO 10 SEPTEMBER 2020**

INTRODUCTION

1. The National Pancreas Offering Scheme was revised on 11 September 2019 to introduce a new top tier for patients. A review of the first 6-months was presented at PAG in April 2020. The second 6-months of the scheme have been severely affected by the COVID-19 pandemic.
2. Pancreas transplantation was suspended for a period of time and as centres began reopening with selected patients, it was agreed to have a deviation from the offering scheme. Tier A patients were still given patient specific offers but organs were then fast tracked to centres for use in any of their listed patients. The deviation came to an end on 10 August 2020, when five centres were re-opened.
3. Transplant list information is reported as at 1 September 2020 and this was when five centres were open with a reduced number of patients active on the list. The remaining three centres reopened during September 2020.
4. This paper summarises activity in the first 12-months of the scheme and is not a review of how the scheme is performing, due to the issues mentioned above.

NATIONAL PANCREAS OFFERING SCHEME (2019)

CONTENTS

PANCREAS TRANSPLANTATION		PAGE
Table 1.1	Overview of transplant activity	4
Table 1.2	Centre-specific transplant activity	4
Table 1.3	Transplant demographics	5
Table 1.4	Blood group matching	6
Table 1.5	Donor BMI by transplant type	6
Table 1.6	Donor age by transplant type	6
PANCREAS TRANSPLANT LIST & WAITING TIMES		
Table 2.1	Overview of the national & centre specific transplant list	8
Table 2.2	Transplant list demographics	9
OFFERING, RETRIEVAL & ORGAN USE		
Table 3.1	Use of pancreases from solid organ donors	11
Table 3.2	Use of pancreases from solid organ donors, split by whole pancreas and pancreas islets	11
Figure 3.3	Review of islet isolations performed	12

PANCREAS TRANSPLANTATION

Table 1.1 Overview of transplant activity, 11 September 2019 - 10 September 2020

Transplant type		Donor type		Total
		DBD	DCD	
Vascularised pancreas	SPK	87	32	119
	PAK	5	2	7
	PTA	1	0	1
	Total	93	34	127
Pancreatic islet	Routine	6	3	9
	Priority	6	1	7
	SIK	1	1	2
	Islet total	13	5	18
TOTAL		106	39	145

Table 1.2 Centre-specific transplant activity, 11 September 2018 - 10 September 2020

Transplant centre	Previous year		NPOS 2019 (1 Year)					Donor type	
	N	(%)	N	(%)	Transplant type			DBD	DCD
					SPK	PAK	PTA		
Vascularised pancreas									
Cambridge	20	(12)	27	(21)	26	1	0	17	10
Cardiff	8	(5)	12	(9)	12	0	0	8	4
Edinburgh	16	(10)	18	(14)	18	0	0	16	2
Guy's	27	(16)	14	(11)	14	0	0	12	2
Manchester	34	(21)	10	(8)	8	2	0	5	5
Newcastle	7	(4)	3	(2)	3	0	0	3	0
Oxford	46	(28)	37	(29)	32	4	1	26	11
WLRTC	7	(4)	6	(5)	6	0	0	6	0
Total	165	(100)	127	(100)	119	7	1	93	34
Pancreatic islet									
	N	(%)	N	(%)	Routine	Priority	SIK	DBD	DCD
Bristol	0	-	0	-	0	0	0	0	0
Edinburgh	11	(38)	10	(56)	4	5	1	6	4
King's College	2	(7)	3	(17)	2	1	0	2	1
Manchester	9	(31)	1	(6)	0	0	1	1	0
Newcastle	4	(14)	2	(11)	2	0	0	2	0
Oxford	3	(10)	2	(11)	1	1	0	2	0
Royal Free	0	-	0	-	0	0	0	0	0
Total	29	(100)	18	(100)	9	7	2	13	5

Factor		Previous Year		NPOS 2019 (1 Year)	
		N	(%)	N	(%)
Number of transplants		194	(100)	145	(100)
Waiting time (months)	0 to <3	34	(18)	27	(19)
	3 to <6	22	(11)	16	(11)
	6 to <12	39	(20)	29	(20)
	12 to <24	73	(38)	59	(41)
	24 to <36	17	(9)	10	(7)
	36 or more	9	(5)	4	(3)
Sensitisation (cRF%)	0 to <10	122	(63)	85	(59)
	10 to <30	17	(9)	14	(10)
	30 to <75	34	(18)	30	(21)
	75 to <95	17	(9)	13	(9)
	95 to <100	3	(2)	2	(1)
	100	1	(1)	1	(1)
Matchability Score	1-3	40	(21)	69	(48)
	4-7	111	(57)	67	(46)
	8-9	40	(21)	8	(6)
	10	3	(2)	1	(1)
Total HLA mismatch (A, B, DR)	0 to 4	162	(84)	114	(79)
	5 or 6	32	(16)	31	(21)
Centre location	Closest three	128	(66)	79	(54)
	Other	66	(34)	66	(46)
On dialysis	No	79	(41)	81	(56)
	Yes	115	(59)	64	(44)
Transplant type	SPK	150	(77)	119	(82)
	PAK, PTA	15	(8)	8	(6)
	Routine islet	8	(4)	9	(6)
	Priority islet	12	(6)	7	(5)
	SIK	9	(5)	2	(1)
Recipient sex	Male	116	(60)	67	(46)
	Female	78	(40)	78	(54)
Recipient blood group	O	87	(45)	63	(43)
	A	81	(42)	55	(38)
	B	18	(9)	22	(15)
	AB	8	(4)	5	(3)
Recipient age (years)	Less than 30	13	(7)	8	(6)
	30 to <40	51	(26)	54	(37)
	40 to <50	68	(35)	47	(32)
	50 to <60	56	(29)	29	(20)
	60 or older	6	(3)	7	(5)
Recipient ethnicity	White	165	(85)	123	(85)
	Non-white	28	(14)	22	(15)
	Not known	1	(1)	0	
Offer Tier	New KOS Tier A	3	(2)	2	(1)
	New POS Tier A	10	(5)	4	(3)
	New POS Tier B	180	(93)	136	(94)
	Other	1	(1)	3	(2)

Table 1.4 Blood group matching, 11 September 2019 - 10 September 2020

Donor blood group	Recipient blood group								TOTAL	
	O		A		B		AB		N	(%)
O	63	(89)	1	(1)	6	(8)	1	(1)	71	(49)
A	0		54	(100)	0		0		54	(37)
B	0		0		16	(100)	0		16	(11)
AB	0		0		0		4	(100)	4	(3)
TOTAL	63	(43)	55	(38)	22	(15)	5	(3)	145	(100)

Of the eight non-identical transplants, six were patients in Tier A of KOS and POS

Table 1.5 Donor BMI by transplant type, 11 September 2019 - 10 September 2020

Donor BMI (kg/m ²)	Transplant type				TOTAL N
	Vascularised pancreas		Pancreatic islet		
Less than 23	59	(46)	2	(11)	61
23 to <26	40	(31)	4	(22)	44
26 to <29	21	(17)	6	(33)	27
29 to <31	7	(6)	1	(6)	8
31 or over	0	(0)	5	(28)	5
TOTAL	127	(100)	18	(100)	145

For three islet transplants where donor BMI <25kg/m², the donor age was ≥25 years

Table 1.6 Donor age by transplant type, 11 September 2019 - 10 September 2020

Donor age (years)	Transplant type				TOTAL N
	Vascularised pancreas		Pancreatic islet		
Less than 25	51	(40)	1	(6)	52
25 to <30	13	(10)	2	(11)	15
30 to <40	20	(16)	4	(22)	24
40 to <50	33	(26)	3	(17)	36
50 to <60	9	(7)	8	(44)	17
60 or older	1	(1)	0	(0)	1
TOTAL	127	(100)	18	(100)	145

The one islet transplant where donor age was <25 years, the donor BMI ≥25kg/m²

PANCREAS TRANSPLANT LIST & WAITING TIMES

Table 2.1 Overview of the national and centre specific transplant list, as at 1 September 2019 and 1 September 2020

Transplant centre	1 Sep 2019		1 Sep 2020		Transplant type		
	N	(%)	N	(%)	SPK	PAK	PTA
Vascularised pancreas							
Cambridge	12	(6)	4	(5)	4	0	0
Cardiff	13	(6)	2	(3)	2	0	0
Edinburgh	33	(15)	21	(27)	21	0	0
Guy's	25	(12)	0	(0)	0	0	0
Manchester	29	(13)	0	(0)	0	0	0
Newcastle	6	(3)	6	(8)	6	0	0
Oxford	86	(40)	45	(58)	39	0	6
WLRTC	12	(6)	0	(0)	0	0	0
Total	216	(100)	78	(100)	72	0	6
Pancreatic islet	N	(%)	N	(%)	Routine	Priority	SIK
Bristol	0	-	0	-	0	0	0
Edinburgh	9	(21)	4	(57)	2	0	2
King's College	3	(7)	0	(0)	0	0	0
Manchester	19	(44)	0	(0)	0	0	0
Newcastle	6	(14)	3	(43)	2	1	0
Oxford	4	(9)	0	(0)	0	0	0
Royal Free	2	(5)	0	(0)	0	0	0
Total	43	(100)	7	(100)	4	1	2

Table 2.2 Transplant list demographics, 1 September 2019 and 1 September 2020

Factor		1 Sep 2019		Current (1 Sep 2020)		New Registrations	
		N	(%)	N	(%)	N	(%)
Time listed (months)	0 to <3	66	(25)	14	(16)	91	(48)
	3 to <6	37	(14)	8	(9)	55	(29)
	6 to <12	74	(29)	22	(26)	41	(22)
	12 to <24	58	(22)	33	(39)	1	(1)
	24 to <36	12	(5)	4	(5)	0	(0)
	36 or more	12	(5)	4	(5)	0	(0)
Sensitisation (cRF%)	0 to <10	133	(51)	45	(53)	148	(79)
	10 to <30	27	(10)	5	(6)	14	(7)
	30 to <75	43	(17)	17	(20)	19	(10)
	75 to <95	22	(8)	5	(6)	5	(3)
	95 to <100	17	(7)	6	(7)	1	(1)
	100	17	(7)	7	(8)	1	(1)
Matchability Score	1-3	39	(15)	47	(55)	91	(48)
	4-7	133	(51)	24	(28)	75	(40)
	8-9	72	(28)	8	(9)	12	(6)
	10	15	(6)	6	(7)	2	(1)
	Not known ¹	0	(0)	0	(0)	8	(4)
On dialysis	Yes	95	(37)	35	(41)	82	(44)
	No	164	(63)	50	(59)	106	(56)
Transplant type	SPK	201	(78)	72	(85)	153	(81)
	PAK, PTA	15	(6)	6	(7)	10	(5)
	Routine islet	23	(9)	4	(5)	9	(5)
	Priority islet	3	(1)	1	(1)	8	(4)
	SIK	17	(7)	2	(2)	8	(4)
Recipient sex	Female	132	(51)	48	(56)	84	(45)
	Male	127	(49)	37	(44)	104	(55)
Recipient blood group	O	130	(50)	45	(53)	91	(48)
	A	75	(29)	28	(33)	67	(36)
	B	45	(17)	9	(11)	25	(13)
	AB	9	(3)	3	(4)	5	(3)
Recipient age (years)	Less than 30	18	(7)	6	(7)	16	(9)
	30 to <40	71	(27)	27	(32)	68	(36)
	40 to <50	77	(30)	29	(34)	66	(35)
	50 to <60	76	(29)	21	(25)	30	(16)
	60 or older	17	(7)	2	(2)	8	(4)
Recipient ethnicity	White	221	(85)	77	(91)	162	(86)
	Non-white	38	(15)	8	(9)	25	(13)
	Not known	0	(0)	0	(0)	1	(1)
Offering Tier	New KOS Tier A	11	(4)	2	(2)	1	(1)
	New POS Tier A	11	(4)	6	(7)	1	(1)
	Other	237	(92)	77	(91)	186	(99)

¹ Matchability score not calculated as patients were active for less than a day.

OFFERING, RETRIEVAL AND ORGAN USE

Table 3.1 Overall use of pancreases from solid organ donors, 11 September 2018 to 10 September 2020

	Solid organ donors	SPC ¹ donors	Offered		Accepted		Pancreas Retrieved		Transplanted		Conversion %
			N	(%)	N	(%)	N	(%)	N	(%)	
Donations after brain death											
NPOS Yr 1	888	721	547	(76)	277	(51)	227	(82)	106	(47)	19
Previous year	909	696	598	(86)	389	(65)	332	(85)	144	(43)	24
Donations after cardiac death											
NPOS Yr 1	510	280	211	(75)	111	(53)	81	(73)	39	(48)	18
Previous year	664	297	249	(84)	146	(59)	109	(75)	50	(46)	20

¹ Standard pancreas criteria (SPC) donors have been defined as those aged 65 years or less for DBD and 55 years or less for DCD

Table 3.2 Use of pancreases from solid organ donors, 11 September 2018 to 10 September 2020

	Solid organ donors	SPC ¹ donors	Offered		Accepted		Whole Pancreas Retrieved		Transplanted	
			N	(%)	N	(%)	N	(%)	N	(%)
Donations after brain death										
NPOS Yr 1	888	721	486	(67)	223	(46)	179	(80)	93	(52)
Previous year	909	696	518	(74)	280	(54)	241	(86)	118	(49)
Donations after cardiac death										
NPOS Yr 1	510	280	194	(69)	92	(47)	67	(73)	34	(51)
Previous year	664	297	226	(76)	119	(53)	95	(80)	47	(49)
	Solid organ donors	SPIC ² donors	Offered		Accepted		Pancreas Islets Retrieved		Transplanted	
			N	(%)	N	(%)	N	(%)	N	(%)
Donations after brain death										
NPOS Yr 1	888	642	205	(32)	72	(35)	48	(67)	13	(27)
Previous year	909	613	274	(45)	129	(47)	91	(71)	26	(29)
Donations after cardiac death										
NPOS Yr 1	510	214	72	(34)	21	(29)	14	(67)	5	(36)
Previous year	664	220	98	(45)	28	(29)	14	(50)	3	(21)

¹ Standard pancreas criteria (SPC) donors have been defined as those aged 65 years or less for DBD and 55 years or less for DCD

² Standard pancreas islet criteria (SPIC) donors have been defined as those aged 60 years or less for DBD and 50 years or less for DCD

Figure 3.3 Review of islet isolations performed
11 September 2019 – 10 September 2020

