

NHS BLOOD AND TRANSPLANT

PANCREAS ADVISORY GROUP ISLET STEERING GROUP

ISOLATION STATISTICS

LAY SUMMARY

This paper reports on the outcomes of pancreases which were donated for an islet transplant. It reports on both 1-year and 3-year periods. It shows details of the number of pancreases for which the islet isolation process was started, through to details of the number of islets which were used for a transplant.

In 2025, 62 pancreases arrived at an isolation facility and the isolation process was started. 31 (50%) of these pancreases were then used for an islet transplant. The main reason for not using the remaining organs was 'insufficient islet yield'.

INTRODUCTION

- 1 This paper provides information on the outcome of pancreases retrieved with the intention to transplant as pancreas islets as reported to the UK Transplant Registry. The information includes outcomes by islet isolation facility overall and by category of donor quality.

DATA

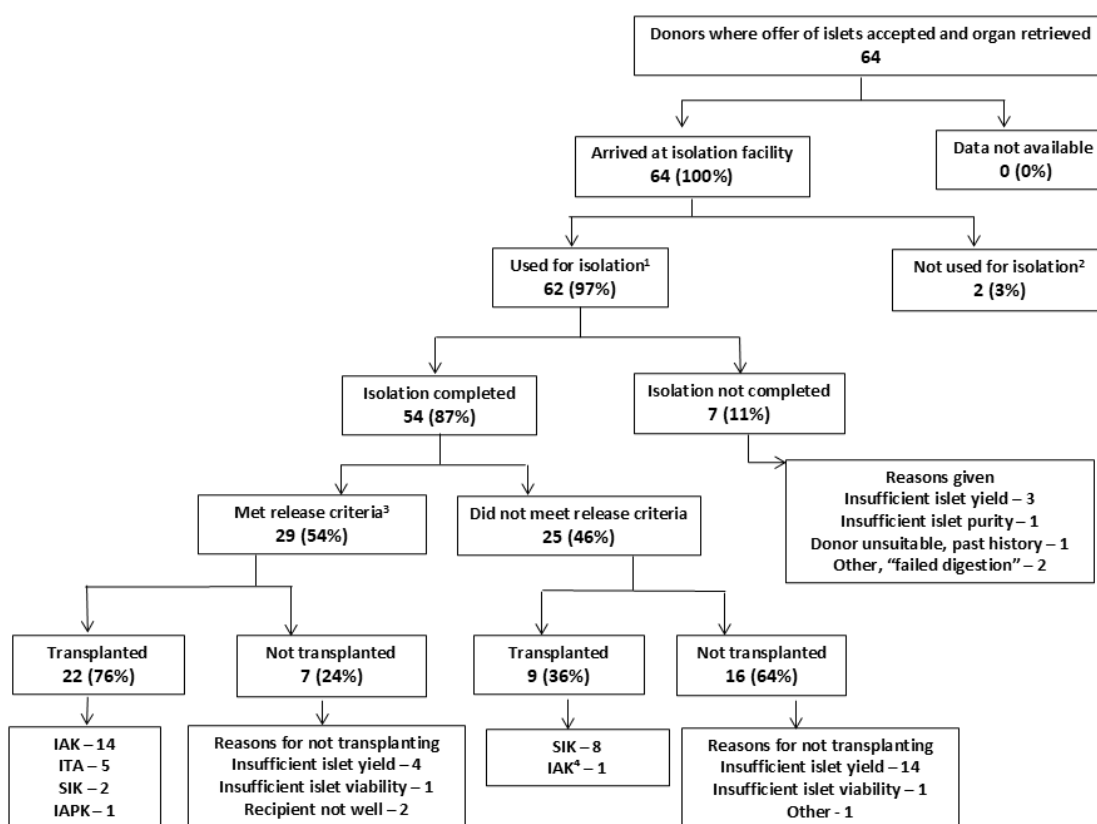
- 2 Data on 171 donors between 1 January 2023 and 31 December 2025, 64 of which were in the latest calendar year, whose pancreas was taken and accepted for islet transplantation were analysed from the UK Transplant Registry (UKTR). Information from the islet isolation page of the Deceased Donor Pancreas Information (DDPI) form was used to identify those pancreases arriving at an isolation facility and whether the pancreas was isolated and subsequently transplanted.
- 3 A quarterly report of missing data is issued to each isolation facility to ensure data reported are as complete as possible. Where a form had not been received, information has been sourced from Hub Operations notes and islet transplant data to ensure data were as accurately reported as possible. Data were available for 171 (100%) donors in the whole period, and 64 (100%) donors in 2025.
- 4 After isolation was completed, the islets were deemed to be suitable for transplantation or 'met the release criteria' if islet yield $\geq 200,000$, viability $\geq 70\%$ and purity $\geq 50\%$. Viability and purity include 70% and 50%, respectively, because it is not possible to report to one decimal place and it was found that in some cases although exactly 70% viability or 50% purity had been reported, these could have been slightly over and therefore met the criteria. If the final product information was available for yield, viability and purity then this was used to determine the release criteria, otherwise post isolation outcomes were used. Islet preparations which did not meet the predefined

release criteria could be released on concession to be used for islet alone transplants. Whereas, for SIK transplants there is no agreed minimum islet yield threshold set in the UK, and so these will not be referred to as 'released on concession'.

RESULTS

- 5 **Figure 1** shows the outcome for the 64 donors between 1 January 2025 and 31 December 2025 where the pancreas was accepted and retrieved with the intention to transplant as islets. Overall, of the 62 indicated to have isolation started, 31 were transplanted giving a conversion rate of 50%. Of the 31 not transplanted, the main reason given was insufficient islet yield for the patient (68%).
- 6 There were 36 isolations started from DBD donors, of which 17 (47%) were transplanted. This was similar to the conversion rate from the 26 DCD donor isolations, 14 of which were transplanted (54%).
- 7 There were eight SIK and one islet after kidney transplants from isolations that did not meet the specified criteria.

Figure 1 Outcome of pancreas donors where organ was retrieved with the intention to transplant as islets, 1 January 2025 – 31 December 2025



¹ Isolation completed was not recorded for 1 organ.

² One organ was not used for isolation as islets were embedded in exocrine tissue, the other was not used because of organ damage.

³ Release criteria defined in this paper as islet yield $\geq 200,000$, viability $\geq 70\%$ and purity $\geq 50\%$.

⁴ Priority islet transplant with islet yield of 184k.

- 8 In Appendix I, the same information as in **Figure 1** is shown separately for those donors who were first offered for islet patients (Figure I) and those first offered for whole pancreas patients (Figure II).
- 9 There were 171 donors whose pancreas was taken and accepted for islet transplantation in the last three calendar years, and all 171 were indicated to have arrived at an isolation facility using information available. **Table 1** shows information on these 171, by calendar year and isolation facility as reported on the islet page of the DDPI form. In 2023, the conversion rate from isolation started to those transplanted ranged from 25% to 64% across the isolation facilities, and in the latest calendar year it ranged from 42% to 63%.

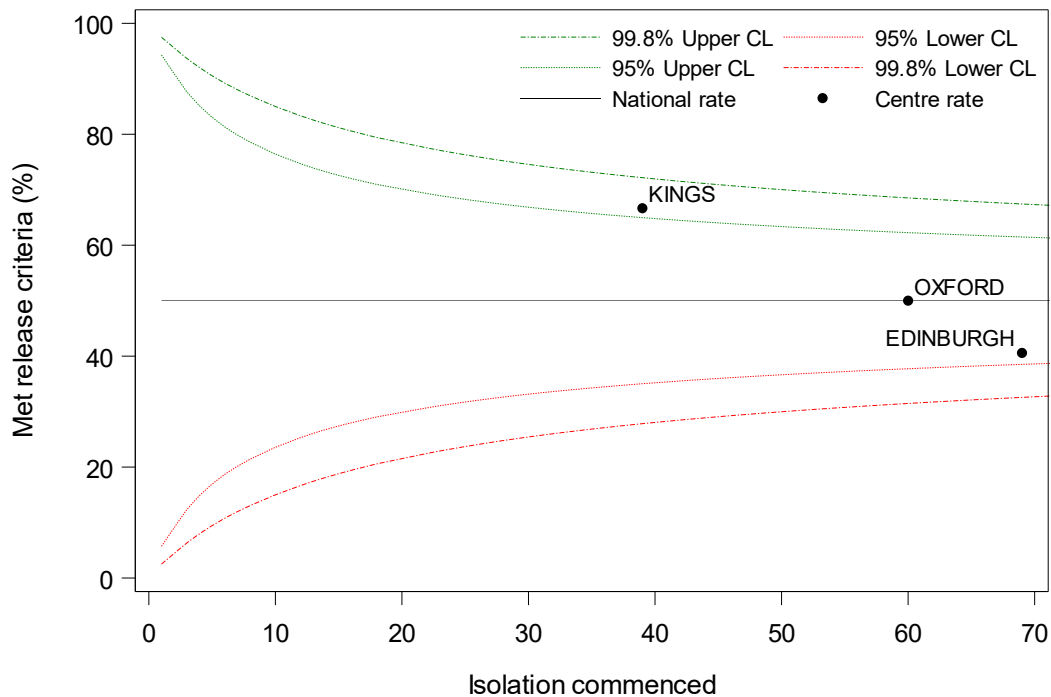
Table 1 Isolation data by isolation facility, 1 January 2023 – 31 December 2025

Islet isolation facility	Arrived at facility		Isolation started		Isolation completed		Met release criteria (% of isolation started)		Met release criteria & transplanted		Transplanted overall* (% of isolation started)	
	N		N	%	N	%	N	%	N	%	N	%
2023												
EDINBURGH	19		19	100	19	100	9	47	4	44	8	42
KINGS	11		11	100	10	91	7	64	7	100	7	64
OXFORD	21		20	95	16	80	10	50	5	50	5	25
TOTAL	51		50	98	45	90	26	52	16	62	20	40
2024												
EDINBURGH	26		26	100	26	100	14	54	7	50	8	31
KINGS	9		9	100	8	89	6	67	4	67	4	44
OXFORD	21		21	100	14	67	9	43	5	56	5	24
TOTAL	56		56	100	48	86	29	52	16	55	17	30
2025												
EDINBURGH	24		24	100	22	92	5	21	4	80	10	42
KINGS	20		19	95	19	100	13	68	10	77	12	63
OXFORD	20		19	95	13	68	11	58	8	73	9	47
TOTAL	64		62	97	54	87	29	47	22	76	31	50

* Includes isolations that did not meet release criteria but were released under concession, or for SIK transplants

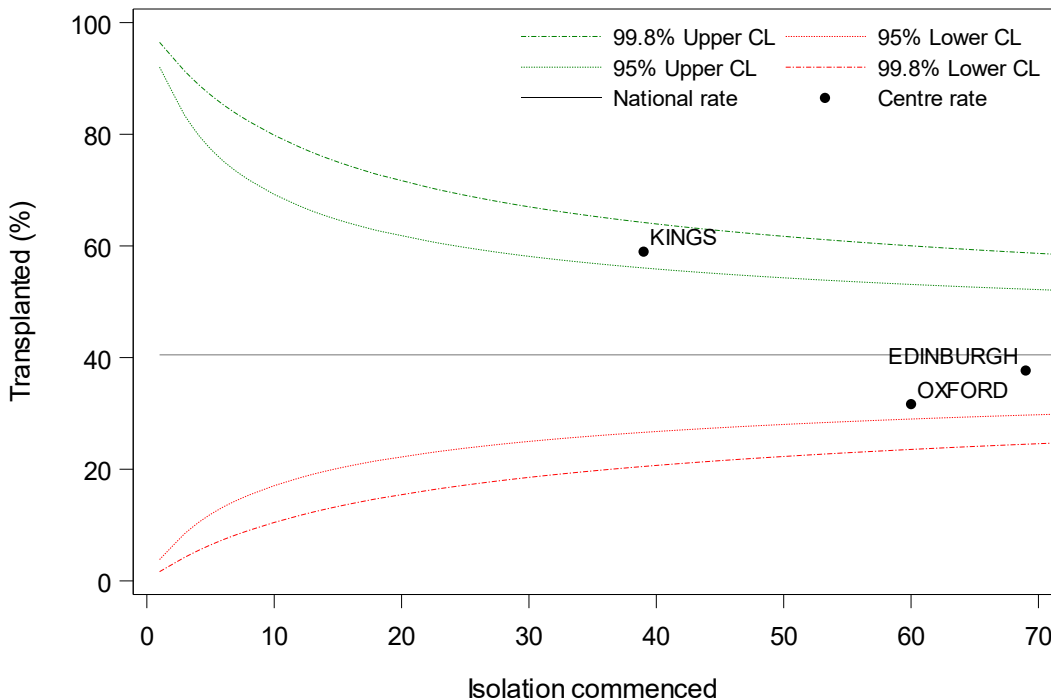
- 10 Of the 168 isolations commenced in the period, 84 (50%) met the release criteria and 68 (40%) were eventually transplanted. **Figure 2** shows the rate of isolations commenced that met the release criteria, by isolation facility. All isolation facilities' rates were within or above the 95% upper confidence limit of the national rate and hence each have release criteria rates that are consistent with or better than the national rate.

Figure 2: Rates of commenced isolations that met release criteria, 1 January 2023 – 31 December 2025



11 Of the 168 isolations commenced in the period, 68 (40%) were eventually transplanted. **Figure 3** shows the rate of isolations commenced that were eventually transplanted, by isolation facility. All isolation facilities had conversion rates that were consistent with or better than the national rate.

Figure 3: Rates of commenced isolations that were eventually transplanted, 1 January 2023 – 31 December 2025



- 12 **Table 2** shows the information for 2025 split into Grade A donors and Non-Grade A donors. Definition of Grade A donors can be found in the Appendix II. If cold ischaemic time could not be calculated or other relevant information was missing, then donors are categorised as non-Grade A.
- 13 **Table 2** shows that there were 6 (9%) donors identified as Grade A compared to 58 (91%) non-Grade A donors. Three of the donors at Oxford and two at Kings and one at Edinburgh were identified as Grade A. Of those 6 Grade A donors where isolation started, 4 (67%) were transplanted.

Table 2 Isolation data by isolation facility by grade of donor, 1 January 2025 – 31 December 2025												
Islet isolation facility	Arrived at facility		Isolation started		Isolation completed		Met release criteria (% of isolation started)		Met release criteria & transplanted		Transplanted overall (% of isolation started)	
	N		N	%	N	%	N	%	N	%	N	%
GRADE A												
EDINBURGH	1		1	100	1	100	-	-	-	-	1	100
KINGS	2		2	100	2	100	1	50	-	-	-	-
OXFORD	3		3	100	3	100	3	100	3	100	3	100
TOTAL	6		6	100	6	100	4	67	3	75	4	67
NON-GRADE A												
EDINBURGH	23		23	100	21	91	5	22	4	80	9	39
KINGS	18		17	94	17	100	12	71	10	83	12	71
OXFORD	17		16	94	10	63	8	50	5	63	6	38
TOTAL	58		56	97	48	86	25	45	19	76	27	48

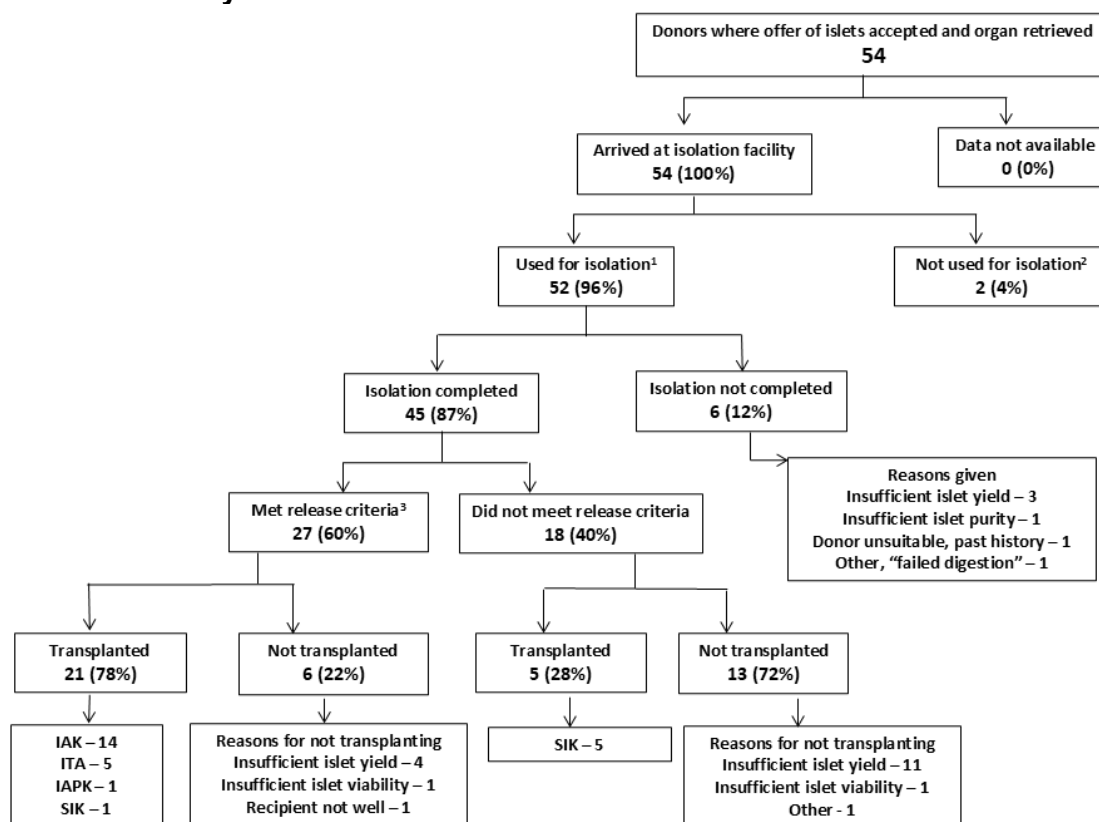
- 14 Of those 62 donors in 2025 whose pancreas was used for isolation and information was available, 48 (77%) were aged 50 years or younger and 14 (23%) were aged over 50 years. Of the 14 donors aged over 50 years with isolation started, 13 (93%) had isolation completed, 10 (77%) met the release criteria and seven were transplanted. This gives an overall conversion rate of those where isolation commenced of 50% (7 out of 14). This is similar to the rate of 50% (24 of 48 donors) for donors aged 50 years or younger.

ACTION

- 15 Isolation facilities are asked to ensure that the islet page of the DDPI form is completed fully, including the time part of any date field, and returned immediately to ODT Hub Information Services (NHSBT.odtthaforms@nhs.net). Please include the donor id and "islet page 5" in the subject of the email. A quarterly report is issued to capture missing data from forms returned and outstanding forms.

Appendix I

Figure I Outcome of pancreas donors where organ was retrieved with the intention to transplant as islets and donor was offered to an islet patient first, 1 January 2025 – 31 December 2025

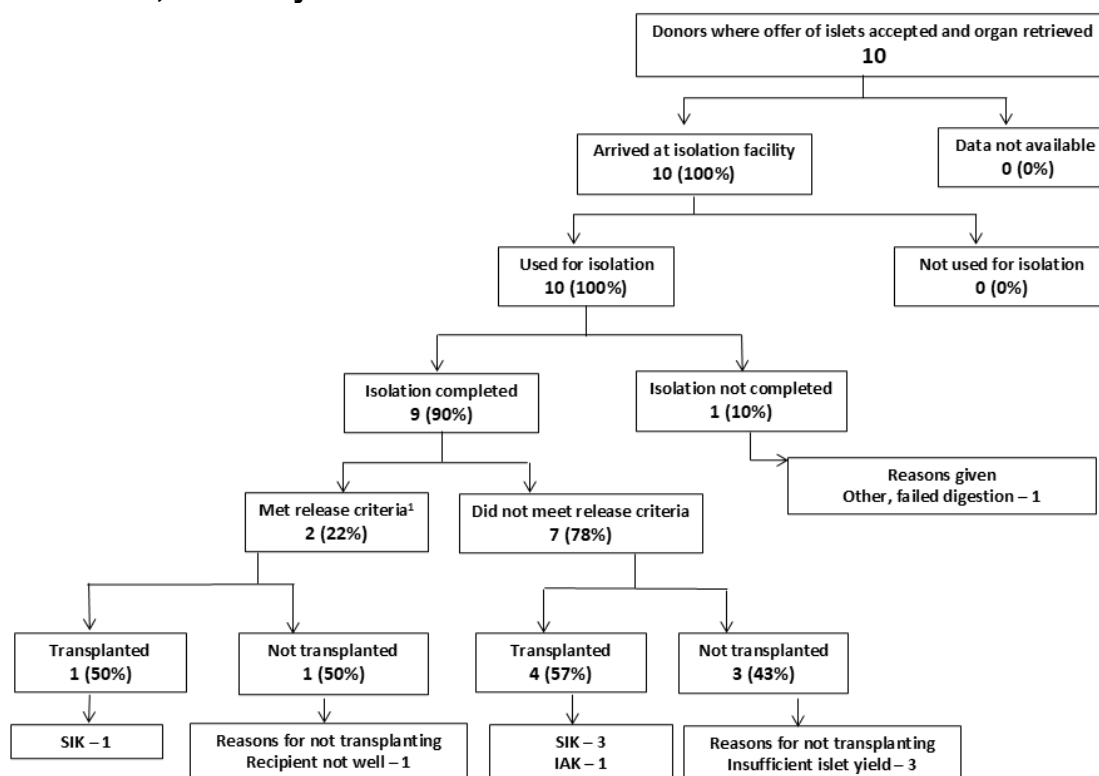


¹ Isolation completed was not recorded for 1 organ.

² One organ was not used for isolation as islets were embedded in exocrine tissue, the other was not used because of organ damage.

³ Release criteria defined in this paper as islet yield $\geq 200,000$, viability $\geq 70\%$ and purity $\geq 50\%$.

Figure II Outcome of pancreas donors where organ was retrieved with the intention to transplant as islets and donor was offered to a whole pancreas patient first, 1 January 2025 – 31 December 2025



¹ Release criteria defined in this paper as islet yield $\geq 200,000$, viability $\geq 70\%$ and purity $\geq 50\%$.

Appendix II

Grade A donors are donors who met all the following criteria:

- DBD
- Aged 40 to 60 years inclusive
- BMI 26.0 to 35.4 inclusive
- CIT <8 hours (time from perfusion commenced to isolation start time)
- No bench perfusion
- No pancreatic inflammation
- No pancreatic odema
- No parenchymal damage
- No haematomas
- No capsule damage
- No out of hospital cardiac arrest