NHS BLOOD AND TRANSPLANT

PANCREAS ADVISORY GROUP

ISLET TRANSPLANT ACTIVITY AND OUTCOME SUMMARY

INTRODUCTION

1 Islet transplant data has been collected by NHSBT since the introduction of four transplant and follow-up forms in July 2010. This paper provides summaries of transplant activity and outcomes, including 28-day follow-up.

DATA

2 Islet transplant activity, including simultaneous islet and kidney (SIK) grafts, and end of year transplant list for the last three calendar years were analysed. Data on 225 routine, and subsequent priority, islet transplants performed in the UK between 1 April 2010 and 31 December 2023 were analysed from the UKTR. Outcome data are reported for routine transplants only.

RESULTS

3 In 2024 there were 17 islet transplants performed, of which 8 were SIK. There were 45 patients on the islet transplant list at 31 December 2024, 40 routine (25 SIK) and five priority patients.

4 One-year graft survival for first routine islet alone grafts is 80% for transplants performed 1 January 2017 to 31 December 2023. There is a significant difference in five-year graft survival for those receiving a routine and priority top-up graft compared with those receiving a routine only graft, 64% and 39%, respectively p<.0001.

5 There is no significant difference in one-year or five-year graft survival rates between DBD and DCD first routine islet transplants, p=0.52 and p=0.77, respectively. There is also no significant different in one-year or five-year graft survival rates between recipients receiving a routine and priority top-up from two DBD donors or at least one DCD donor, p=0.21 and p=0.86, respectively.

6 For patients receiving an islet alone routine and a priority graft, the median annual rate of severe hypoglycaemic events fell from 9 events (IQR 0 – 43) at time of transplant, to none at one, two, three- and five-years post-transplant.

7 Median HbA1c fell from 64 mmol/mol (IQR 55 – 76) at time of transplant, to 51 mmol/mol (IQR 42 – 58) at one year and 56 (IQR 47 – 65) at three years post-transplant, for patients who received a routine and a priority graft.

8 The median insulin dose, for patients who received routine and priority grafts, fell from 0.51 units/kg (IQR 0.38 – 0.62) at time of transplant to 0.30 units/kg (IQR 0.18 – 0.49) three years post-transplant.

9 At 28-day follow-up, where graft survival information was available, all grafts were functioning at 28-days post-transplant with a median fasting C-peptide of 452pmol/L (IQR 227 – 645) and 90-minute C-peptide of 732pmol/l (IQR 435 – 1110).

SUMMARY

10 In 2024, the number of islet transplants decreased slightly while the number of patients on the waiting list at the end of the calendar year have increased. One-year graft survival is 80% for transplants performed between 1 January 2017 and 31 December 2023. The median annual rate of severe hypoglycaemic events, HbA1c and insulin dose at one-year, two, three and five years post routine transplant are lower than pre-transplant.

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Statistics and Clinical Research **March 2025**

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INTRODUCTION

11 Islet transplant data has been collected by NHSBT since the introduction of four transplant and follow-up forms in July 2010. This paper provides basic summaries of transplant activity and outcomes, including 28-day follow-up.

DATA

12 Recent data on islet transplant activity, including simultaneous islet and kidney (SIK) grafts, and end of year transplant list between 1 January 2022 and 31 December 2024 from the UK Transplant Registry (UKTR) are reported, by centre and calendar year.

13 Between 1 April 2010 and 31 December 2024, there were 225 routine islet transplants performed in the UK. Outcome data on these 225 routine, and any subsequent priority, islet transplants have been analysed from the UKTR. Outcome data are reported for routine transplants only. Where outcome data are unavailable from UKTR, data collected by the UKITC clinical research forms have been considered. These data have been provided by the Newcastle research group who collate and maintain the research data base.

14 All islet transplant outcome data reported are specific to the routine transplant and one-year centre specific outcomes are presented in the Appendix.

RESULTS

15 The number of islet transplants performed by centre for the last three calendar years, 1 January 2022 to 31 December 2024, is shown by transplant type and islet status in **Tables 1** and **2**, respectively. **Table 3** shows the transplant list at the end of the last three calendar years by islet status. A breakdown of islet transplant activity by donor type is provided in **Appendix Tables I – IV**.

16 Between 1 April 2010 and 31 December 2023, there were a total of 347 islet transplants performed, 225 (65%) of which were routine (including 43 SIK transplants) and 122 were priority. One patient received only a priority transplant in this time period as their routine transplant was before 1 April 2010.

17 For those patients receiving a routine transplant between 1 April 2010 and 31 December 2023, the number of known graft failures at one-year post-transplant is reported in **Table 4**. Of the 225 routine transplants performed, 121 patients subsequently received a priority graft. The majority of these patients received their first priority graft within six months of their routine graft: 0-3 months for 36 (30%) patients; 3-6 months for 42 (35%) patients; 6-12 months for 39 (32%) patients and more than one year for four patients, two of which were highly sensitised.

Table 1 UK islet transplant activity between 1 January 2022 and 31 December 2024, by transplant type and calendar year

Transplant Centre	2022 ITA	IAK	IAP	IAPK	SIK	Total N	Total %	2023 ITA	IAK	IAP	IAPK	SIK	Total N	Total %	2024 ITA	IAK	IAP	IAPK	SIK	Total N	Total %
Edinburgh	6[1]	3[1]	0	0	2[1]	**11**	**65**	3[1]	2	0	0	3[3]	**8**	**38**	3	1	0	1	1	**6**	**35**
King's	0	0	0	0	0	**0**	**0**	0	0	0	0	0	**0**	**0**	0	0	0	0	0	**0**	**0**
Manchester	0	2	0	0	3	**5**	**29**	1	1	0	0	5[2]	**7**	**33**	1	1[1]	0	0	4	**6**	**35**
Newcastle	1	0	0	0	0	**1**	**6**	3	0	0	0	0	**3**	**14**	1[1]	0	0	0	0	**1**	**6**
Oxford	0	0	0	0	0	**0**	**0**	1	1	0	1	0	**3**	**14**	0	0	0	1	3	**4**	**24**
TOTAL	**7**	**5**	**0**	**0**	**5**	**17**	**100**	**8**	**4**	**0**	**1**	**8**	**21**	**100**	**5**	**2**	**0**	**2**	**8**	**17**	**100**

ITA = Islet transplant alone IAK = Islet after kidney IAP = Islet after pancreas IAPK = Islet after simultaneous pancreas/ kidney
SIK = Simultaneous islet/kidney

[1] Includes 1 DCD transplant
[2] Includes 2 DCD transplants
[3] Includes 3 DCD transplants

A breakdown of islet transplant activity by transplant type and donor type is presented in **Appendix Tables I and II**

Table 2 UK islet transplant activity between 1 January 2022 and 31 December 2024, by islet status, number of patients and financial year

	2022							2023							2024						
	Routine		Priority	Total		Number of patients		Routine		Priority	Total		Number of patients		Routine		Priority	Total		Number of patients	
Transplant Centre	Islet alone	SIK		N	%	N	%	Islet alone	SIK		N	%	N	%	Islet alone	SIK		N	%	N	%
Edinburgh	4[1]	2[1]	5[1]	**11**	**65**	**8**	**57**	4	3[3]	1[1]	**8**	**38**	**8**	**40**	2	1	3	**6**	**35**	**6**	**38**
King's	0	0	0	**0**	**0**	**0**	**0**	0	0	0	**0**	**0**	**0**	**0**	0	0	0	**0**	**0**	**0**	**0**
Manchester	0	3	2	**5**	**29**	**5**	**36**	1	5[2]	1	**7**	**33**	**7**	**35**	0	4	2[1]	**6**	**35**	**5**	**31**
Newcastle	1	0	0	**1**	**6**	**1**	**7**	1	0	2	**3**	**14**	**2**	**10**	1[1]	0	0	**1**	**6**	**1**	**6**
Oxford	0	0	0	**0**	**0**	**0**	**0**	3	0	0	**3**	**14**	**3**	**15**	0	3	1	**4**	**24**	**4**	**25**
TOTAL	**5**	**5**	**7**	**17**	**100**	**14**	**100**	**9**	**8**	**4**	**21**	**100**	**20**	**100**	**3**	**8**	**6**	**17**	**100**	**16**	**100**

ITA = Islet transplant alone IAK = Islet after kidney IAP = Islet after pancreas IAPK = Islet after simultaneous pancreas/ kidney
SIK = Simultaneous islet/kidney

[1] Includes 1 DCD transplant
[2] Includes 2 DCD transplants
[3] Includes 3 DCD transplants

A breakdown of islet transplant activity by islet status and donor type is presented in **Appendix Tables III and IV**

Table 3 UK islet transplant list as at 31 December, 2022 to 2024, by islet status and calendar year

	31 December 2022					31 December 2023					31 December 2024				
	Routine		Priority	Total		Routine		Priority	Total		Routine		Priority	Total	
Transplant Centre	Islet alone	SIK		N	%	Islet alone	SIK		N	%	Islet alone	SIK		N	%
Edinburgh	2	0	1	**3**	**14**	4	5	4	**13**	**37**	5	11	4	**20**	**44**
King's	0	0	0	**0**	**0**	0	0	0	**0**	**0**	0	0	0	**0**	**0**
Manchester	0	8	0	**8**	**36**	1	6	1	**8**	**23**	4	10	1	**15**	**33**
Newcastle	7	1	0	**8**	**36**	5	0	0	**5**	**14**	4	0	0	**4**	**9**
Oxford	1	2	0	**3**	**14**	2	7	0	**9**	**26**	2	4	0	**6**	**13**
TOTAL	**10**	**11**	**1**	**22**	**100**	**12**	**18**	**5**	**35**	**100**	**15**	**25**	**5**	**45**	**100**

Table 4 One-year graft outcome following routine islet transplant, 1 April 2010 to 31 December 2023

Number of grafts	No. of transplants	No. with known outcome at one year	No. with known graft failure at one year
Islet routine graft			
Routine only	76	65	17
Routine and one priority graft	105	102	6
Routine and two priority grafts	1	1	0
SIK routine graft			
Routine only	28	20	6
Routine and one priority graft	15	12	0
Routine and two priority grafts	0	0	0
Total	**225**	**200**	**29**

18 One-year graft outcome by total IEQ per kg (IEQx1000/kg) transplanted is presented in **Figures 1a** and **2a**, for the whole time period for islet alone routine only and routine and priority grafts, respectively. **Figures 1b** and **2b** show the data for transplants in the recent time period, 1 January 2017 to 31 December 2023. The median total IEQ per kg transplanted for 23 SIK routine only transplants was 4049 (IQR 2579 - 5000) and for 15 SIK routine and priority grafts was 7924 (IQR 5922 – 10526). This was lower than the median for islet alone transplants in both groups.

Figure 1a **One-year graft function by total IEQ per kg recipient body weight for islet alone routine only grafts, 1 April 2010 to 31 December 2023**

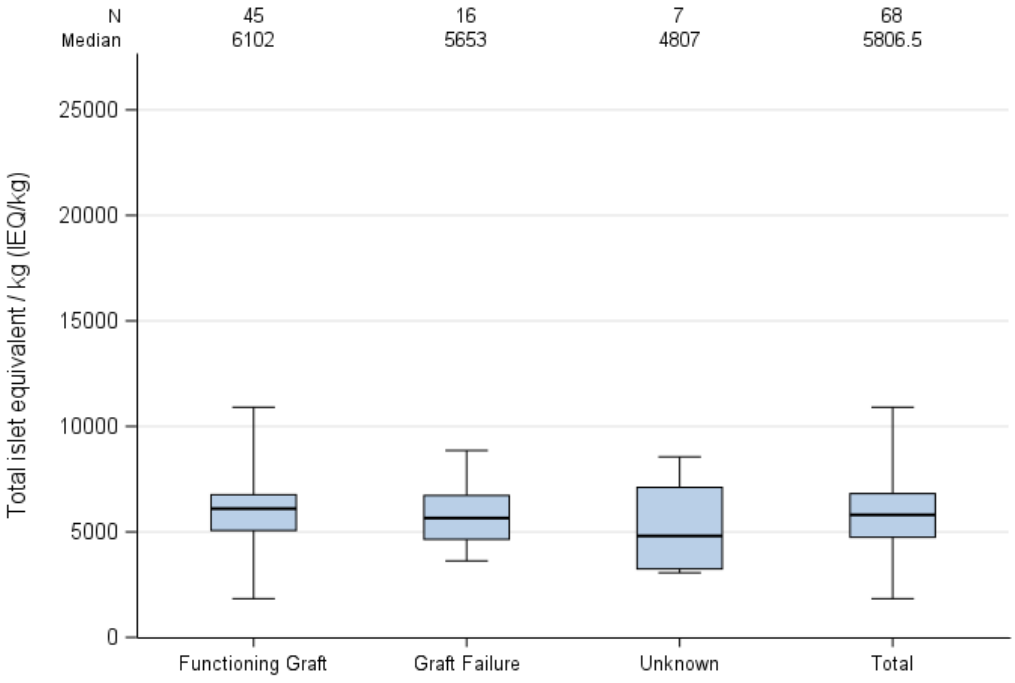


Figure 2a **One-year graft function by total IEQ per kg recipient body weight for islet alone routine and priority grafts, 1 April 2010 to 31 December 2023**

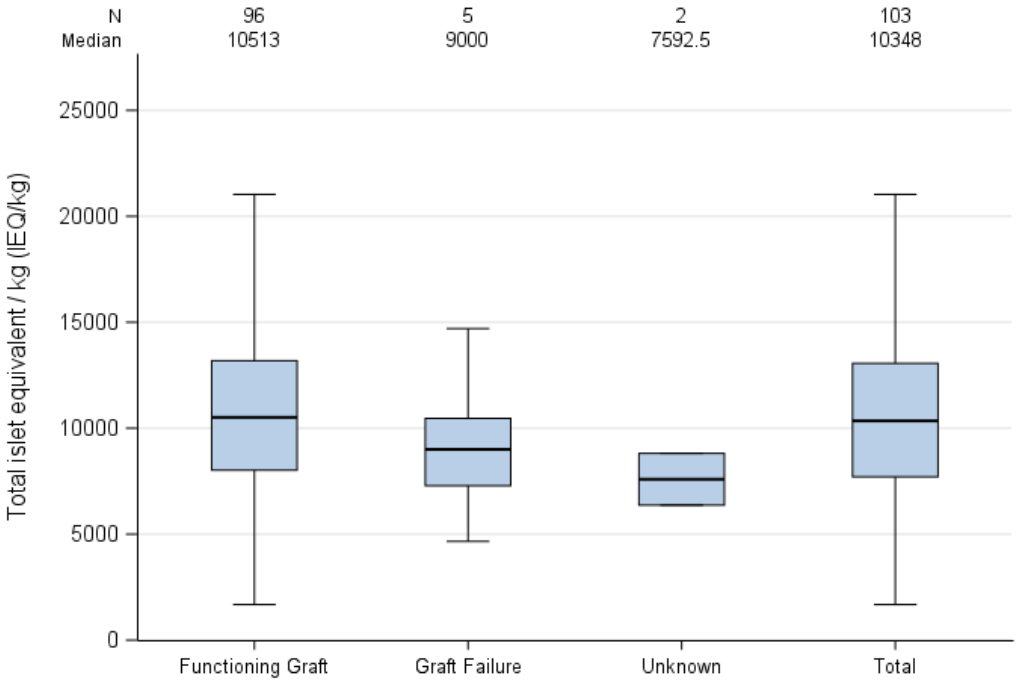


Figure 1b One-year graft function by total IEQ per kg recipient body weight for islet alone routine only grafts, 1 January 2017 to 31 December 2023

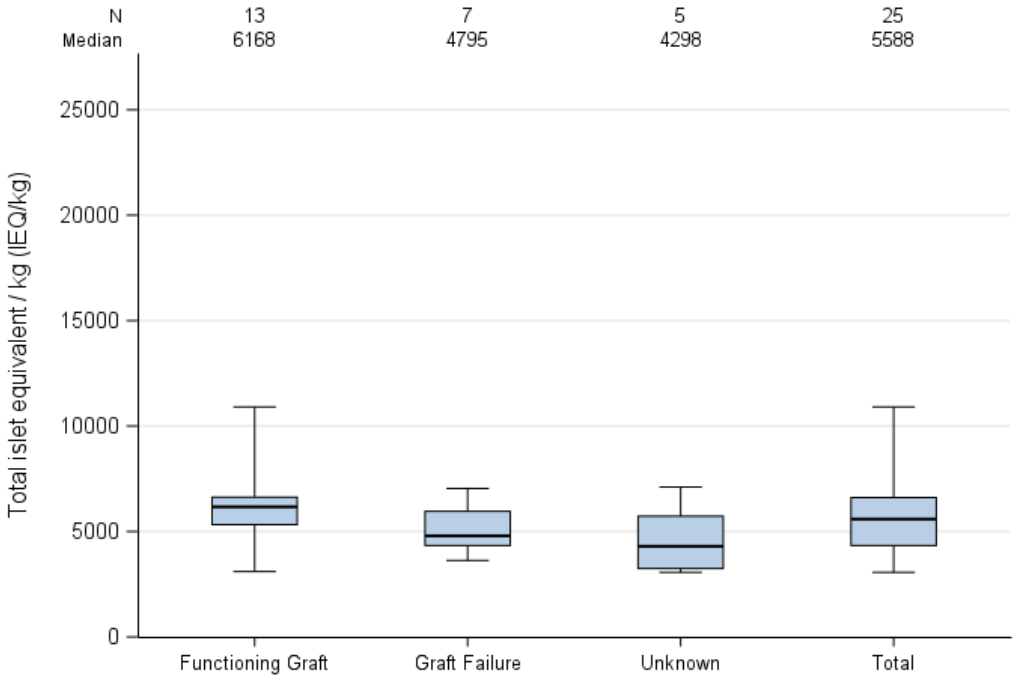
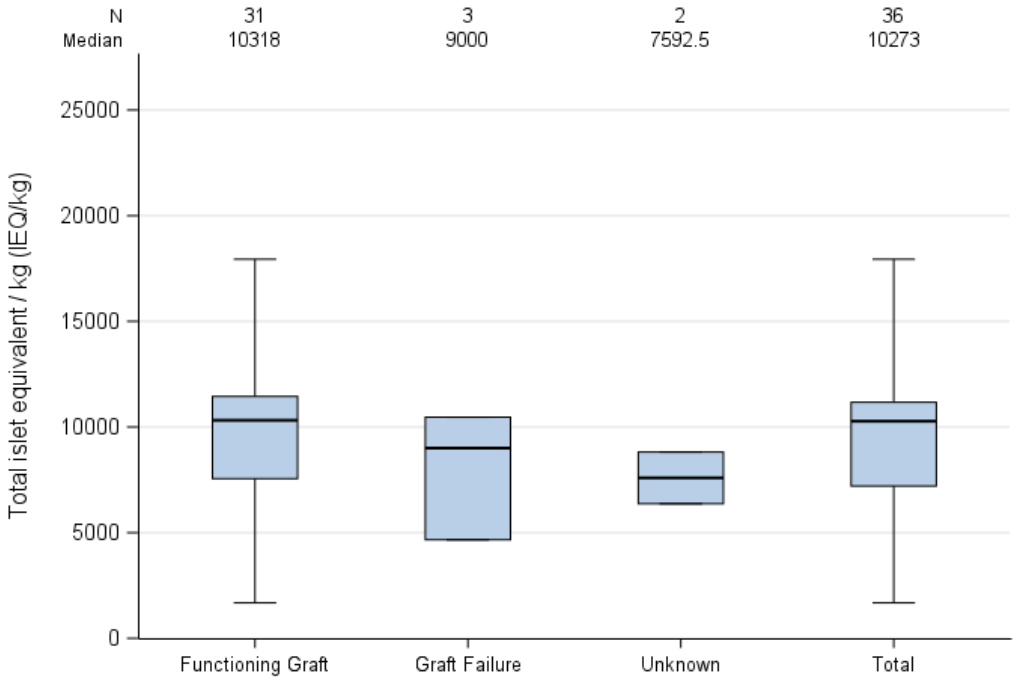


Figure 2b One-year graft function by total IEQ per kg recipient body weight for islet alone routine and priority grafts, 1 January 2017 to 31 December 2023



19 Kaplan-Meier survival plots showing one-year graft survival after first routine islet alone transplants, by when transplant was performed and donor type, are presented in **Figure 3** and **Figure 4**, respectively. One year graft survival is 90%, 95% CI (83-95%) for transplants performed between 1 April 2010 and 31 December 2016 and 80%, 95% CI (66-89%) for transplants performed between 1 January 2017 and 31 December 2023, and was borderline statistically significantly different (p=0.0856). There was no statistically significant difference in one-year graft survival between DBD (88%, 95% CI 81-92%) and DCD (81%, 95% CI 53-94%) transplants (p=0.52) using donor type of first graft.

20 **Figure 5** shows a Kaplan-Meier survival plot of one-year graft survival in recipients receiving a priority top-up graft, by donor types of grafts received. Estimated one-year graft survival for recipients receiving two DBD donor grafts is 96%, 95% CI (89-99%) and for recipients receiving at least one DCD donor graft is 89%, 95% CI (62-97%). This difference was not statistically significant, p=0.21.

21 Kaplan-Meier survival plots showing five-year graft survival after first routine islet alone transplants, by when transplant was performed and donor type, are presented in **Figure 6** and **Figure 7**, respectively. Five year graft survival is 56%, 95% CI (46-64%) for transplants performed between 1 April 2008 and 31 December 2016 and 60%, 95% CI (43-73%) for transplants performed between 1 January 2017 and 31 December 2023, and was not statistically significantly different (p=0.65). There was no statistically significant difference in five-year graft survival between DBD (56%, 95% CI 47-64%) and DCD (51%, 95% CI 26-72%) transplants (p=0.77) using donor type of first graft.

22 **Figure 8** shows a Kaplan-Meier survival plot of five-year graft survival in recipients receiving a priority top-up graft, by donor types of grafts received. Estimated five-year graft survival for recipients receiving two DBD donor grafts is 64%, 95% CI (53-74%) and for recipients receiving at least one DCD donor graft is 63%, 95% CI (38-81%). This difference was not statistically significant, p=0.86.

Figure 3 **One-year graft survival following first routine islet alone transplantation performed in the UK between 1 April 2010 and 31 December 2023, by when transplant was performed**

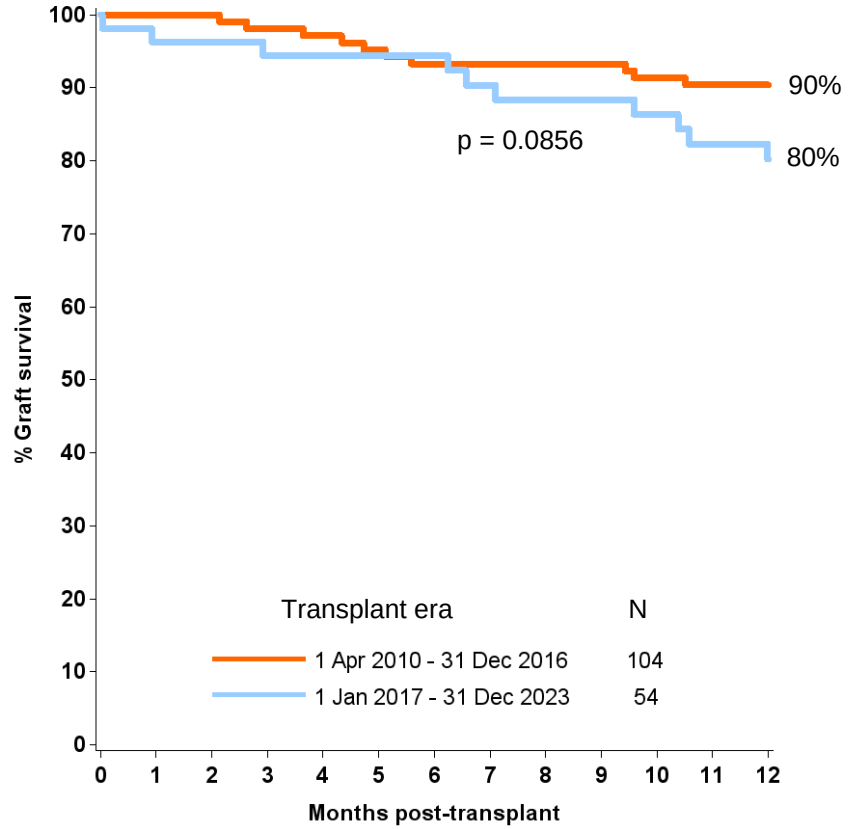


Figure 4 **One-year graft survival following first routine islet alone transplantation performed in the UK between 1 April 2010 and 31 December 2023, by donor type of first graft**

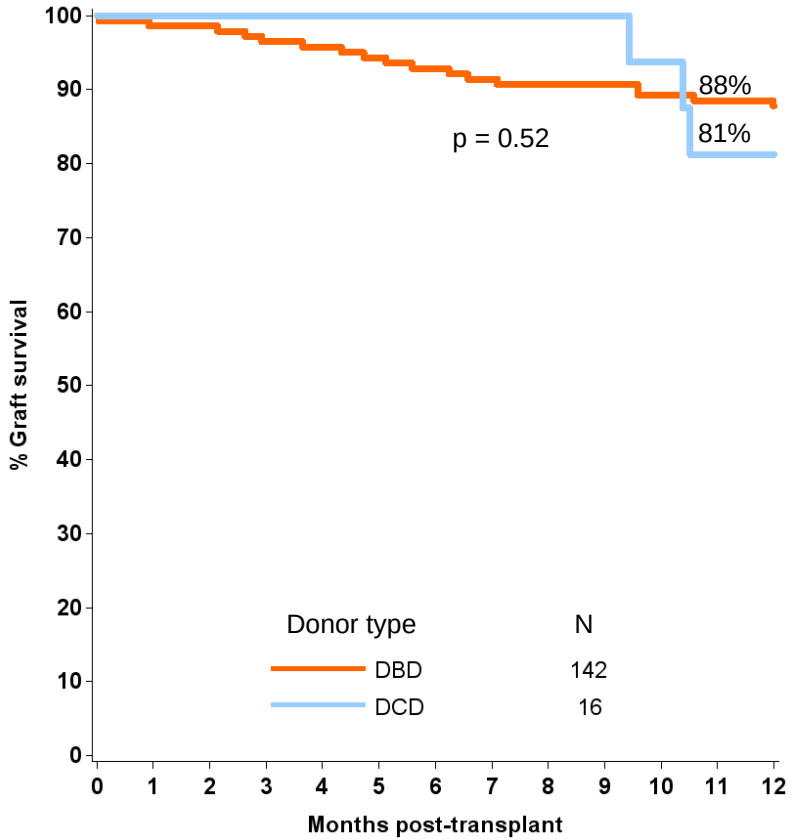


Figure 5 **One-year graft survival following first routine islet alone transplant and received top-up graft performed in the UK between 1 April 2010 and 31 December 2023, by donor types of grafts received**

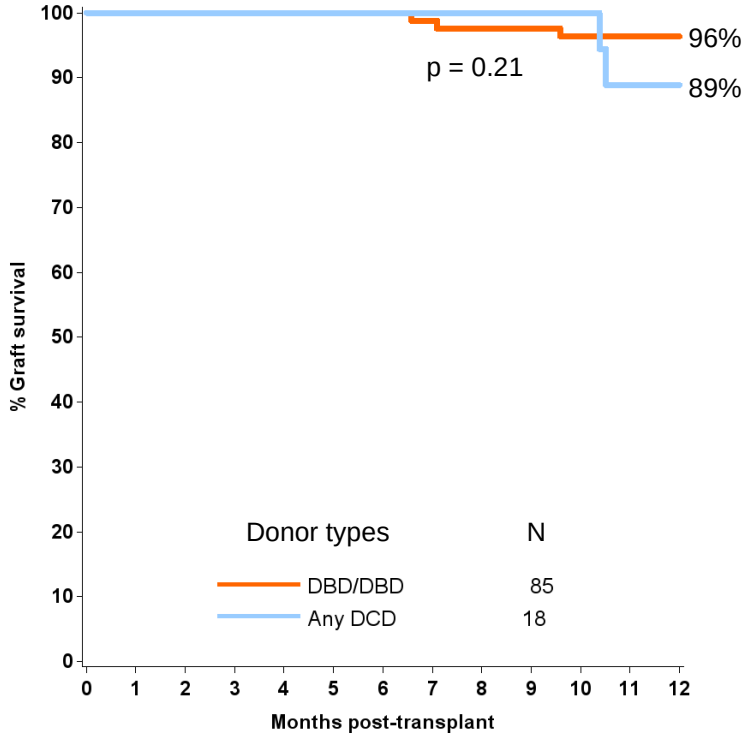


Figure 6 **Five-year graft survival following first routine islet alone transplantation performed in the UK between 1 April 2008 and 31 December 2023, by when transplant was performed**

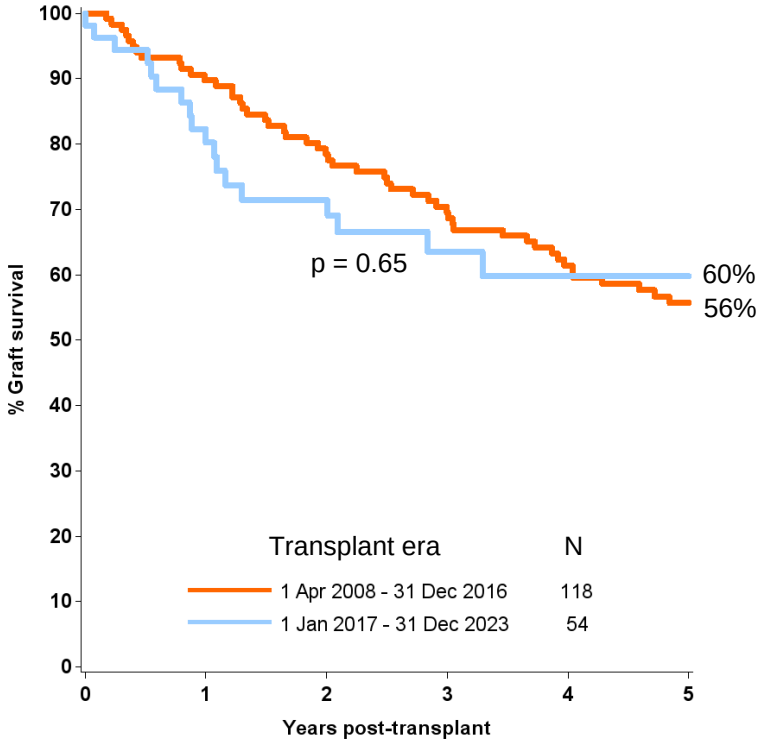


Figure 7 **Five-year graft survival following first routine islet alone transplantation performed in the UK between 1 April 2008 and 31 December 2023, by donor type of first graft**

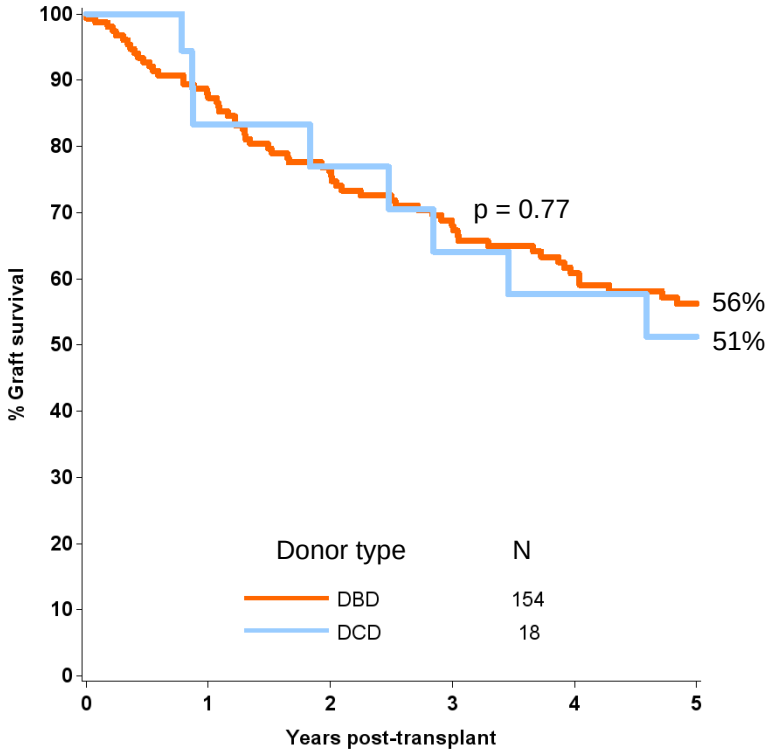
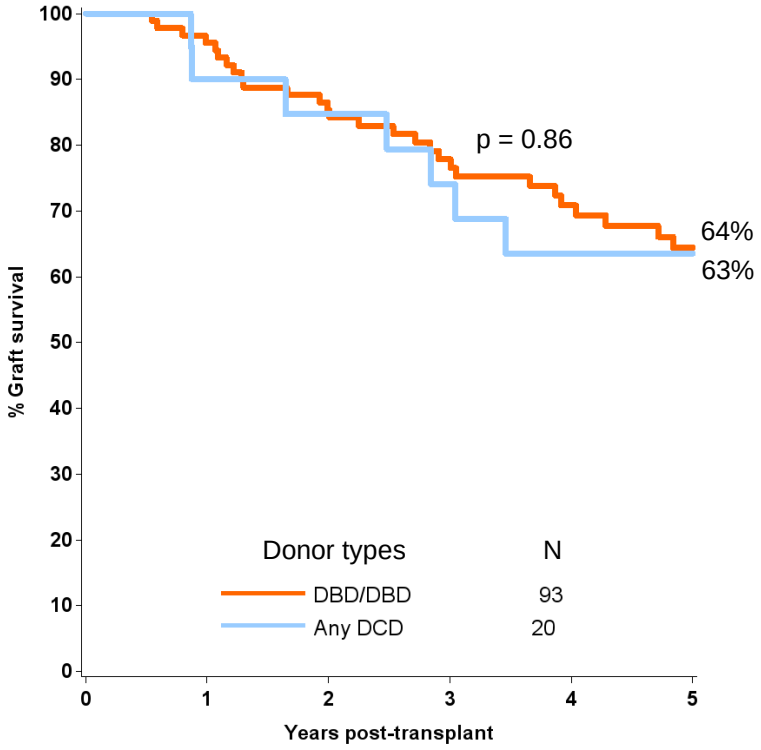
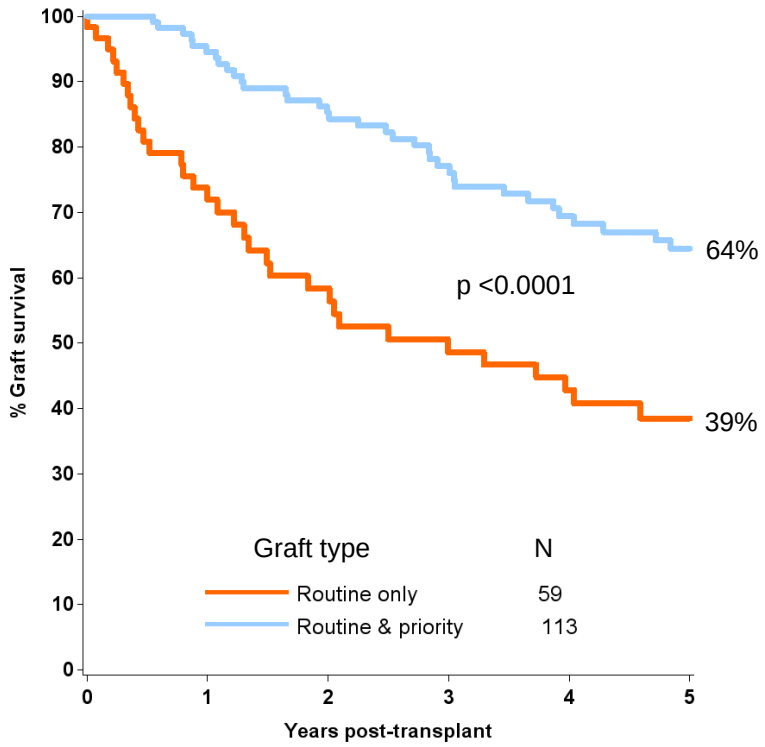


Figure 8 **Five-year graft survival following first routine islet alone transplant and received top-up graft performed in the UK between 1 April 2008 and 31 December 2023, by donor types of grafts received**



23 **Figure 9** shows a Kaplan-Meier survival plot of five-year graft survival by type of graft. Estimated five-year graft survival for first routine only grafts is 39%, 95% CI (25-51%) and for first routine grafts followed by a priority graft is 64%, 95% CI (54-73%). This difference was statistically significant, p<.0001.

Figure 9 **Five-year graft survival following first routine islet alone transplantation performed in the UK between 1 April 2008 and 31 December 2023, by type of graft**



24 **Figure 10** shows a Kaplan-Meier survival plot of five-year graft survival by type of graft, where the first routine graft was still functioning at one-year post-transplant. Estimated five-year graft survival for routine only grafts is 54%, 95% CI (36-68%) and for routine grafts followed by a priority graft is 68%, 95% CI (57-77%). This difference was borderline statistically significant, p=0.0814.

25 **Figure 11** shows a Kaplan-Meier survival plot of five-year patient survival after first routine islet alone transplant. Five year patient survival is 93%, 95% CI (87-97%).

26 Of the 43 SIK islet transplants in the 1 April 2010 to 31 December 2023 time period, 41 were the first islet transplant for the patient. Of these 41, follow-up information was available for 38 and the estimated one-year graft survival rate is 83%, 95% CI (66-92%).

Figure 10 **Five-year graft survival following first routine islet alone transplantation where the routine graft was functioning at one year in the UK between 1 April 2008 and 31 December 2023, by type of graft**

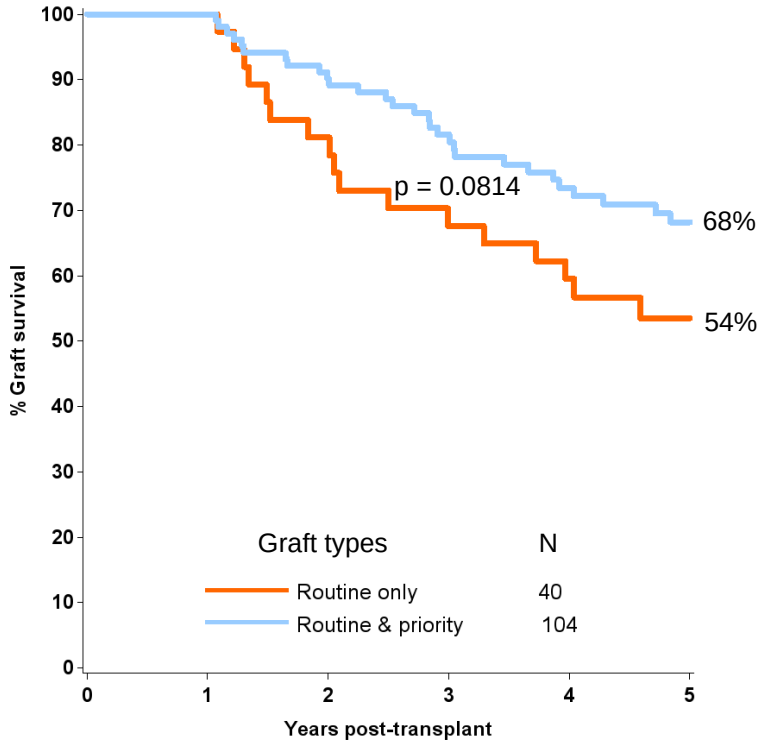
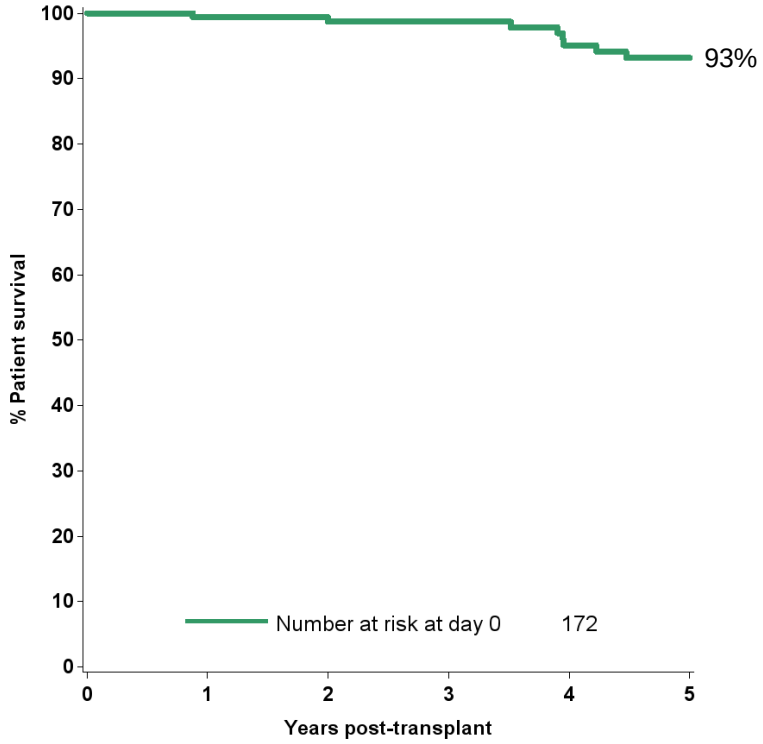


Figure 11 **Five-year patient survival following first routine islet alone transplantation performed in the UK between 1 April 2008 and 31 December 2023**



27 **Figures 12** and **13** show the median rate of severe hypoglycaemic events, excluding SIK transplants, for routine only grafts and for routine and priority grafts, respectively**.** Overall, at one-year post-transplant data were available in 133 cases, 114 (86%) patients experienced no severe hypoglycaemic events during the first year following their routine transplant, whilst 19 (14%) patients experienced between one and five events. Of 128 cases where it could be calculated, 88 (69%) patients had a reduced number of events at one year post-transplant.

28 For the 36 SIK transplants where severe hypoglycaemic events were reported at transplant, the median rate was 0 (IQR 0-8) and for the 24 reported at one-year post-transplant, the median rate was 0 (IQR 0-0). The number of severe hypoglycaemic events is not part of the SIK registration criteria and is provided only for information.

29 Median HbA1c is reported in **Figure 14** for routine only grafts and **Figure 15** for routine and priority grafts, excluding SIK transplants. Overall, data were available to calculate the reduction in HbA1c in 134 cases at one-year post-transplant and in 111 (83%) patients a reduction in HbA1c was reported. The proportion of patients with HbA1c of less than 53 mmol/mol was 17% of 169 at time of transplant, 55% of 142 patients at one-year post-transplant, 37% of 94 patients at three years and 35% of 54 patients at five years post-transplant.

30 For the 38 SIK transplants where HbA1c was reported at transplant, the median was 64 mmol/mol (IQR 56-73) and for the 23 reported at one-year post-transplant, the median was 55 mmol/mol (IQR 47-59).

Figure 12 Median annual rate of severe hypoglycaemic events post-transplant for routine only grafts, 1 April 2010 – 31 December 2023 (excluding SIK transplants)

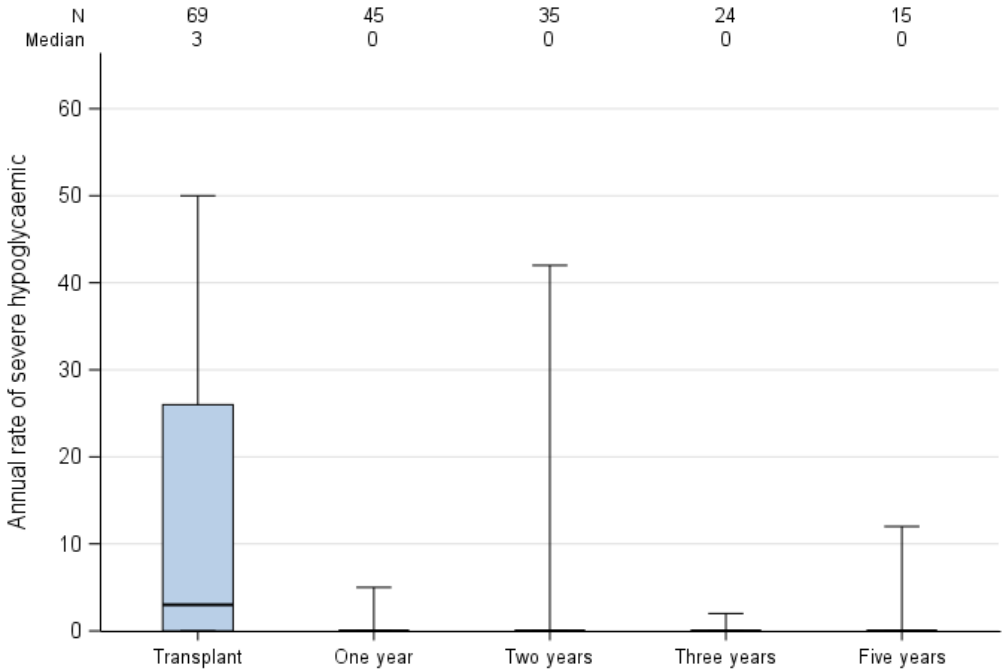


Figure 13 Median annual rate of severe hypoglycaemic events post-transplant for routine and priority grafts, 1 April 2010 – 31 December 2023 (excluding SIK transplants)

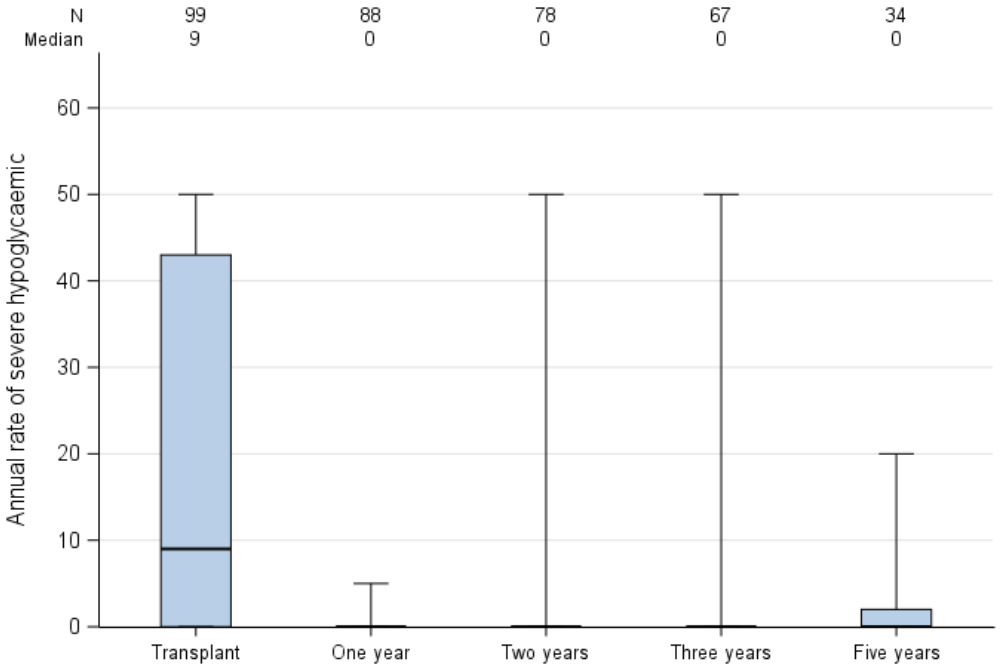


Figure 14 Median HbA1C post-transplant for routine only grafts, 1 April 2010 – 31 December 2023 (excluding SIK transplants)

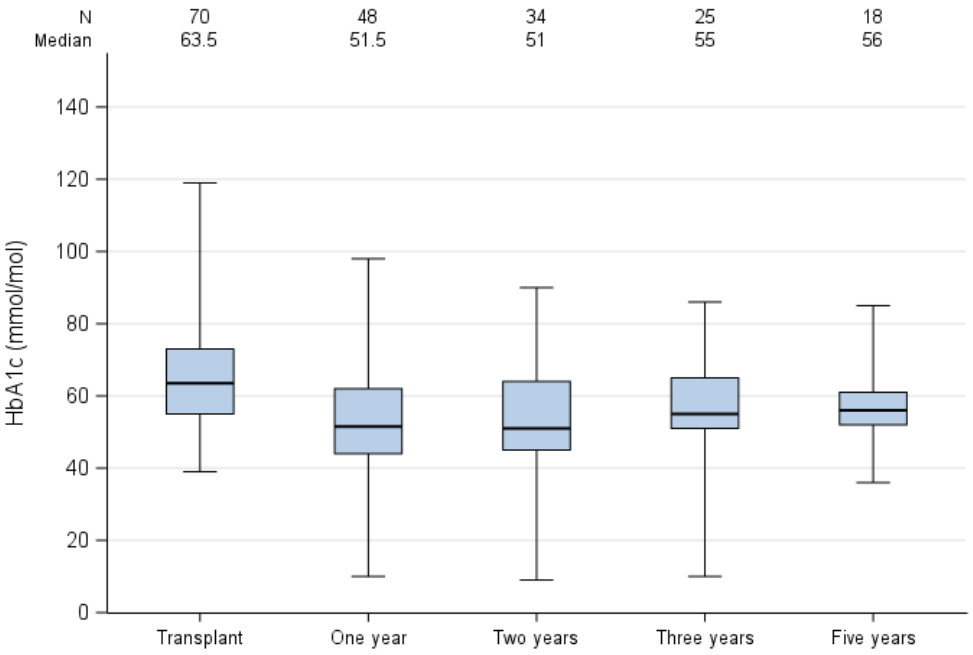


Figure 15 Median HbA1C post-transplant for routine and priority grafts, 1 April 2010 – 31 December 2023 (excluding SIK transplants)

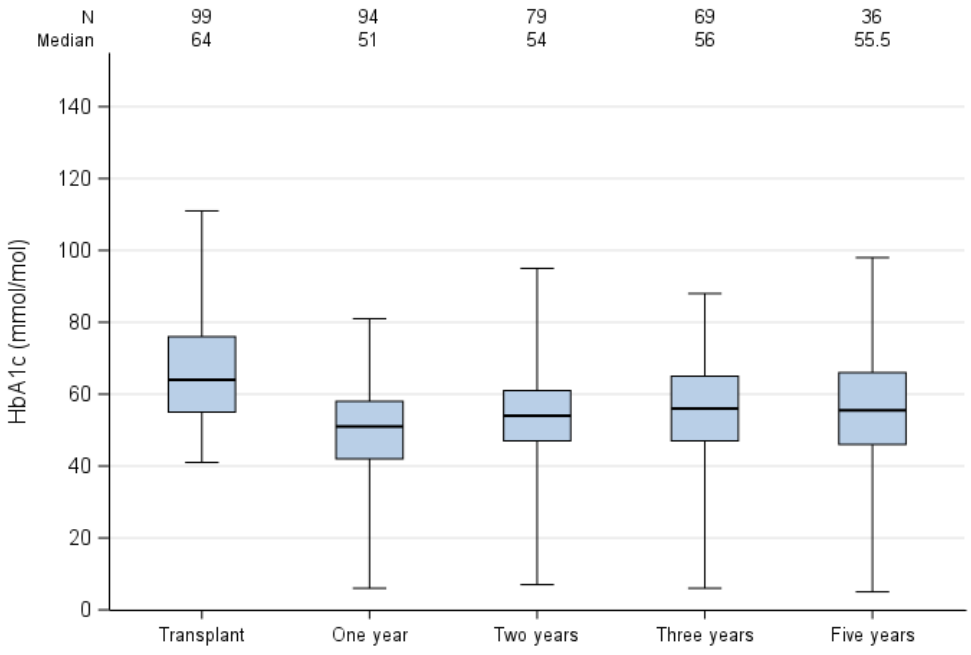


Figure 16 **Median insulin dose post-transplant for routine only grafts, 1 April 2010 – 31 December 2023 (excluding SIK transplants)**

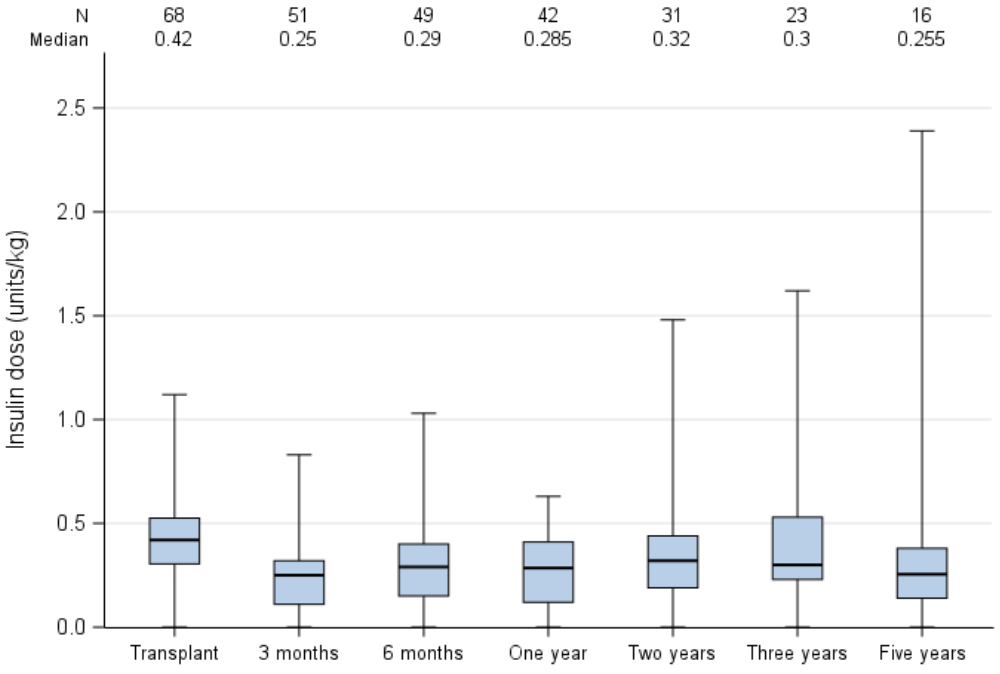
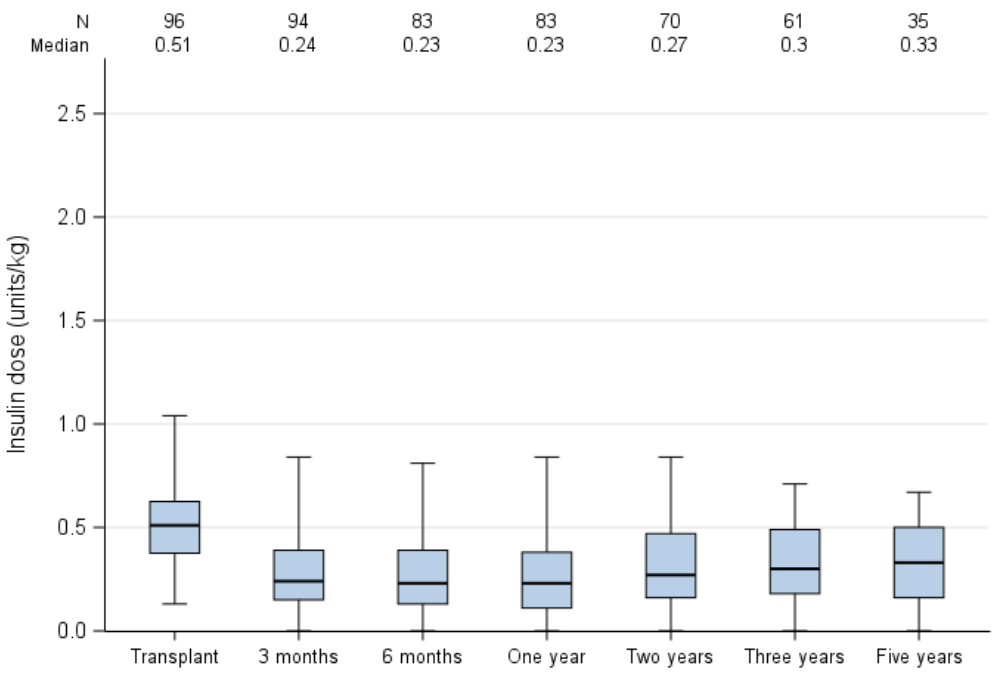


Figure 17 **Median insulin dose post-transplant for routine and priority grafts, 1 April 2010 – 31 December 2023 (excluding SIK transplants)**



31 **Figure 16** and **Figure 17** show the median insulin dose for routine only grafts and routine and priority grafts, respectively, excluding SIK transplants. Overall, in 120 patients where the difference in insulin dose between transplant and one-year post-transplant could be calculated, 106 (88%) reported a reduction. Of the 130 patients with insulin independence status reported for the first-year post-transplant, 46 (35%) achieved insulin independence at some point in the year.

32 For the 38 SIK transplants where insulin dose was reported at transplant, the median was 0.50 units/kg (IQR 0.35-0.70) and for the 23 reported at one-year post-transplant, the median was 0.35 units/kg (IQR 0.19-0.49).

33 The 28-day islet follow-up form was introduced on 1 January 2022. As at 19 March 2025, 53 follow-up forms had been received. There were 31 routine and 22 priority top-up grafts reported. Where graft survival information was available, all grafts were functioning at 28-days post-transplant. Fasting C-peptide was reported for 41 grafts with a median of 452pmol/L (IQR 227 – 645) and 90 minute C-peptide was reported for 43 grafts with a median of 732pmol/l (IQR 435 – 1110).

SUMMARY

34 In 2024, the number of islet transplants decreased slightly while the number of patients on the waiting list at the end of the calendar year have increased since 2023.

35 One-year graft survival is 80% for transplants performed between 1 January 2017 and 31 December 2023 and 90% for the earlier cohort between 1 April 2010 and 31 December 2016. Five-year graft survival was 56% overall between 1 April 2016 and 31 December 2023. Those patients receiving a routine and a priority top-up graft had significantly better five-year graft survival than those receiving a routine only, 64% and 39%, respectively, p<.0001.

36 There is no significant difference in one-year or five-year graft survival rates between DBD and DCD first routine islet transplants, p=0.52 and p=0.77, respectively. There is also no significant difference in one-year or five-year graft survival rates between recipients receiving a routine and priority top-up from two DBD donors compared with those receiving at least one DCD donor, p=0.21 and p=0.86, respectively.

37 The median annual rate of severe hypoglycaemic events, HbA1c and insulin dose at one-year, two, three and five years post routine transplant were lower than at pre-transplant.

Lewis Simmonds
Statistics and Clinical Research **March 2025**

APPENDIX

Table I UK DBD islet transplant activity between 1 January 2022 and 31 December 2024, by calendar year

Transplant Centre	2022 ITA	IAK	IAP	IAPK	SIK	Total N	%	2023 ITA	IAK	IAP	IAPK	SIK	Total N	%	2024 ITA	IAK	IAP	IAPK	SIK	Total N	%
Edinburgh	5	2	0	0	1	**8**	**57**	2	2	0	0	0	**4**	**27**	3	1	0	1	1	**6**	**40**
King's	0	0	0	0	0	**0**	**0**	0	0	0	0	0	**0**	**0**	0	0	0	0	0	**0**	**0**
Manchester	0	2	0	0	3	**5**	**36**	1	1	0	0	3	**5**	**33**	1	0	0	0	4	**5**	**33**
Newcastle	1	0	0	0	0	**1**	**7**	3	0	0	0	0	**3**	**20**	0	0	0	0	0	**0**	**0**
Oxford	0	0	0	0	0	**0**	**0**	1	1	0	1	0	**3**	**20**	0	0	0	1	3	**4**	**27**
TOTAL	**6**	**4**	**0**	**0**	**4**	**14**	**100**	**7**	**4**	**0**	**1**	**3**	**15**	**100**	**4**	**1**	**0**	**2**	**8**	**15**	**100**

Table II UK DCD islet transplant activity between 1 January 2022 and 31 December 2024, by calendar year

Transplant Centre	2022 ITA	IAK	IAP	IAPK	SIK	Total N	%	2023 ITA	IAK	IAP	IAPK	SIK	Total N	%	2024 ITA	IAK	IAP	IAPK	SIK	Total N	%
Edinburgh	1	1	0	0	1	**3**	**100**	1	0	0	0	3	**4**	**67**	0	0	0	0	0	**0**	**0**
King's	0	0	0	0	0	**0**	**0**	0	0	0	0	0	**0**	**0**	0	0	0	0	0	**0**	**0**
Manchester	0	0	0	0	0	**0**	**0**	0	0	0	0	2	**2**	**33**	0	1	0	0	0	**1**	**50**
Newcastle	0	0	0	0	0	**0**	**0**	0	0	0	0	0	**0**	**0**	1	0	0	0	0	**1**	**50**
Oxford	0	0	0	0	0	**0**	**0**	0	0	0	0	0	**0**	**0**	0	0	0	0	0	**0**	**0**
TOTAL	**1**	**1**	**0**	**0**	**1**	**3**	**100**	**1**	**0**	**0**	**0**	**5**	**6**	**100**	**1**	**1**	**0**	**0**	**0**	**2**	**100**

Table III UK DBD islet transplant activity between 1 January 2022 and 31 December 2024, by islet status, number of patients and calendar year

	2022							2023							2024						
	Routine		Priority	Total		Number of patients		Routine		Priority	Total		Number of patients		Routine		Priority	Total		Number of patients	
Transplant Centre	Islet alone	SIK		N	%	N	%	Islet alone	SIK		N	%	N	%	Islet alone	SIK		N	%	N	%
Edinburgh	3	1	4	**8**	**57**	**5**	**45**	4	0	0	**4**	**27**	**4**	**29**	2	1	3	**6**	**40**	**6**	**40**
King's	0	0	0	**0**	**0**	**0**	**0**	0	0	0	**0**	**0**	**0**	**0**	0	0	0	**0**	**0**	**0**	**0**
Manchester	0	3	2	**5**	**36**	**5**	**45**	1	3	1	**5**	**33**	**5**	**36**	0	4	1	**5**	**33**	**5**	**33**
Newcastle	1	0	0	**1**	**7**	**1**	**9**	1	0	2	**3**	**20**	**2**	**14**	0	0	0	**0**	**0**	**0**	**0**
Oxford	0	0	0	**0**	**0**	**0**	**0**	3	0	0	**3**	**20**	**3**	**21**	0	3	1	**4**	**27**	**4**	**27**
TOTAL	**4**	**4**	**6**	**14**	**100**	**11**	**100**	**9**	**3**	**3**	**15**	**100**	**14**	**100**	**2**	**8**	**5**	**15**	**100**	**15**	**100**

Table IV UK DCD islet transplant activity between 1 January 2022 and 31 December 2024, by islet status, number of patients and calendar year

	2022							2023							2024						
	Routine		Priority	Total		Number of patients		Routine		Priority	Total		Number of patients		Routine		Priority	Total		Number of patients	
Transplant Centre	Islet alone	SIK		N	%	N	%	Islet alone	SIK		N	%	N	%	Islet alone	SIK		N	%	N	%
Edinburgh	1	1	1	**3**	**100**	**3**	**100**	0	3	1	**4**	**67**	**4**	**67**	0	0	0	**0**	**0**	**0**	**0**
King's	0	0	0	**0**	**0**	**0**	**0**	0	0	0	**0**	**0**	**0**	**0**	0	0	0	**0**	**0**	**0**	**0**
Manchester	0	0	0	**0**	**0**	**0**	**0**	0	2	0	**2**	**33**	**2**	**33**	0	0	1	**1**	**50**	**1**	**50**
Newcastle	0	0	0	**0**	**0**	**0**	**0**	0	0	0	**0**	**0**	**0**	**0**	1	0	0	**1**	**50**	**1**	**50**
Oxford	0	0	0	**0**	**0**	**0**	**0**	0	0	0	**0**	**0**	**0**	**0**	0	0	0	**0**	**0**	**0**	**0**
TOTAL	**1**	**1**	**1**	**3**	**100**	**3**	**100**	**0**	**5**	**1**	**6**	**100**	**6**	**100**	**1**	**0**	**1**	**2**	**100**	**2**	**100**

Table V **Islet graft function at one year post transplant by transplant centre and transplant type, 1 April 2010 to 31 December 2023**

Transplant centre	Routine transplants performed	Priority transplants performed (% of routine)		Graft function at one year following routine transplant in the time period: No. with known outcome	Graft failure (% of known outcome)		Priority grafts with graft failure
Islet alone							
Bristol	3	1	(33)	3	0	(0)	0
Edinburgh	70	56	(80)	65	7	(11)	4
King's College	11	7	(64)	10	2	(20)	0
Manchester	10	16	(160)	9	1	(11)	0
Newcastle	38	19	(50)	36	3	(8)	0
Oxford	39	17	(44)	34	9	(26)	2
Royal Free	11	5	(45)	11	1	(9)	0
ITA total	**182**	**121**	**(66)**	**168**	**23**	**(14)**	**6**
SIK							
Bristol	0	-	-	-	-	-	-
Edinburgh	16	0	(0)	11	3	(27)	0
King's College	0	-	-	-	-	-	-
Manchester	24	0	(0)	19	3	(16)	0
Newcastle	1	0	(0)	1	0	(0)	0
Oxford	2	0	(0)	1	0	(0)	0
Royal Free	0	-	-	-	-	-	-
SIK total	**43**	**0**	**(0)**	**32**	**6**	**(19)**	**0**
Total	**225**	**121**	**(54)**	**200**	**29**	**(15)**	**6**

Table VI **Reduction in annual rate of severe hypoglycaemic events at one-year post transplant, 1 April 2010 to 31 December 2023[1]**

Transplant centre	Routine transplants (one-year data expected[2])		Annual rate of severe hypoglycaemic events												No. with reduced events	Reduction not calculated[4]
			At registration			At transplant			At one-year			Reduction[3]				
	N	(N)	N	Median	(IQ range)	N	Median	(IQ range)	N	Median	(IQ range)	N	Median	(IQ range)	N	N (%)
Bristol	3	3	3	2	(2 - 3)	3	3	(2 - 50)	3	0	(0 - 0)	3	3	(2 - 50)	3	0 (0)
Edinburgh	70	66	60	25	(4 - 50)	68	27	(6 - 50)	55	0	(0 - 0)	53	27	(7 - 50)	46	13 (20)
King's College	11	9	9	4	(2 - 16)	11	3	(0 - 16)	6	0	(0 - 0)	6	2	(0 - 50)	3	3 (33)
Manchester	10	9	7	5	(1 - 8)	10	4	(1 - 10)	8	0	(0 - 0)	8	4	(1 - 9)	6	1 (11)
Newcastle	38	36	23	10	(2 - 25)	38	14	(2 - 29)	28	0	(0 - 1)	28	8	(1 - 28)	24	8 (22)
Oxford	39	36	7	3	(1 - 4)	28	0	(0 - 1)	24	0	(0 - 0)	21	0	(0 - 0)	5	15 (42)
Royal Free	11	10	3	4	(0 - 8)	10	0	(0 - 0)	9	0	(0 - 0)	9	0	(0 - 0)	1	1 (10)
Total	**182**	**169**	**112**	**10**	**(3 - 50)**	**168**	**7**	**(0 - 33)**	**133**	**0**	**(0 - 0)**	**128**	**7**	**(0 - 34)**	**88**	**41 (24)**

[1] Excluding SIK transplants
[2] Follow-up reported or graft not known to have failed
[3] Between transplant and one-year
[4] Information missing at either transplant or one-year out of those where expected

Table VII **Reduction in HbA1c at one-year post transplant, 1 April 2010 to 31 December 2023[1]**

Transplant centre	Routine transplants (one-year data expected[2])		HbA1c mmol/mol At transplant			At one-year			Reduction[3]			No. with lower HbA1c	Reduction not calculated[4]
	N	(N)	N	Median	(IQ range)	N	Median	(IQ range)	N	Median	(IQ range)	N	N (%)
Bristol	3	3	3	68	(53 - 70)	3	56	(33 - 81)	3	0	(0 - 37)	1	0 (0)
Edinburgh	70	66	67	62	(53 - 71)	57	53	(47 - 62)	54	6	(1 - 13)	42	12 (18)
King's College	11	9	11	70	(55 - 86)	6	42	(10 - 45)	6	26	(9 - 87)	6	3 (33)
Manchester	10	9	10	62	(54 - 75)	8	45	(43 - 47)	8	18	(8 - 36)	8	1 (11)
Newcastle	38	36	38	73	(62 - 83)	31	51	(41 - 58)	31	17	(12 - 31)	27	5 (14)
Oxford	39	36	29	62	(55 - 69)	28	50	(42 - 58)	23	15	(8 - 25)	21	13 (36)
Royal Free	11	10	11	61	(56 - 86)	9	51	(43 - 57)	9	4	(0 - 20)	6	1 (10)
Total	**182**	**169**	**169**	**64**	**(55 - 75)**	**142**	**51**	**(43 - 59)**	**134**	**12**	**(3 - 21)**	**111**	**35 (21)**

[1] Excluding SIK transplants
[2] Follow-up reported or graft not known to have failed
[3] Between transplant and one-year
[4] Information missing at either transplant or one-year out of those where expected

Table VIII **Reduction in insulin dose per kg at one-year post transplant and insulin independent in first year post-transplant 1 April 2010 to 31 December 2023[1]**

Transplant centre	Routine transplants (one-year data expected[2])		Insulin dose/kg At transplant			Insulin dose/kg At one-year			Reduction[3]			No. insulin independent	Reduction not calculated[4]
	N	(N)	N	Median	(IQ range)	N	Median	(IQ range)	N	Median	(IQ range)	N	N (%)
Bristol	3	3	3	0.42	(0.37 - 0.48)	3	0.20	(0.12 - 0.47)	3	0.22	(0.01 - 0.25)	1	0 (0)
Edinburgh	70	66	67	0.50	(0.38 - 0.61)	53	0.23	(0.11 - 0.38)	50	0.24	(0.14 - 0.36)	25	16 (24)
King's College	11	9	10	0.35	(0.22 - 0.42)	4	0.13	(0.07 - 0.21)	4	0.20	(0.15 - 0.27)	3	5 (56)
Manchester	10	9	10	0.52	(0.35 - 0.55)	8	0.28	(0.12 - 0.35)	8	0.27	(0.26 - 0.33)	3	1 (11)
Newcastle	38	36	37	0.43	(0.32 - 0.55)	27	0.31	(0.12 - 0.40)	26	0.19	(0.04 - 0.28)	6	10 (28)
Oxford	39	36	27	0.45	(0.32 - 0.62)	21	0.26	(0.14 - 0.38)	21	0.25	(0.06 - 0.43)	6	15 (42)
Royal Free	11	10	10	0.56	(0.40 - 0.80)	9	0.42	(0.24 - 0.50)	8	0.14	(0.01 - 0.35)	2	2 (20)
Total	**182**	**169**	**164**	**0.47**	**(0.33 - 0.59)**	**125**	**0.25**	**(0.12 - 0.38)**	**120**	**0.23**	**(0.10 - 0.33)**	**46**	**49 (29)**

[1] Excluding SIK transplants
[2] Follow-up reported or graft not known to have failed
[3] Between transplant and one-year
[4] Information missing at either transplant or one-year out of those where expected