



SECTION 9

Deceased Donor Pancreas Donation

SUMMARY

This section summarises pancreas donation activity from deceased donors in 2019 compared with previous years. The rate of pancreas transplantation in 2019 was 1.6 pmp in Australia and 0.8 pmp in New Zealand.

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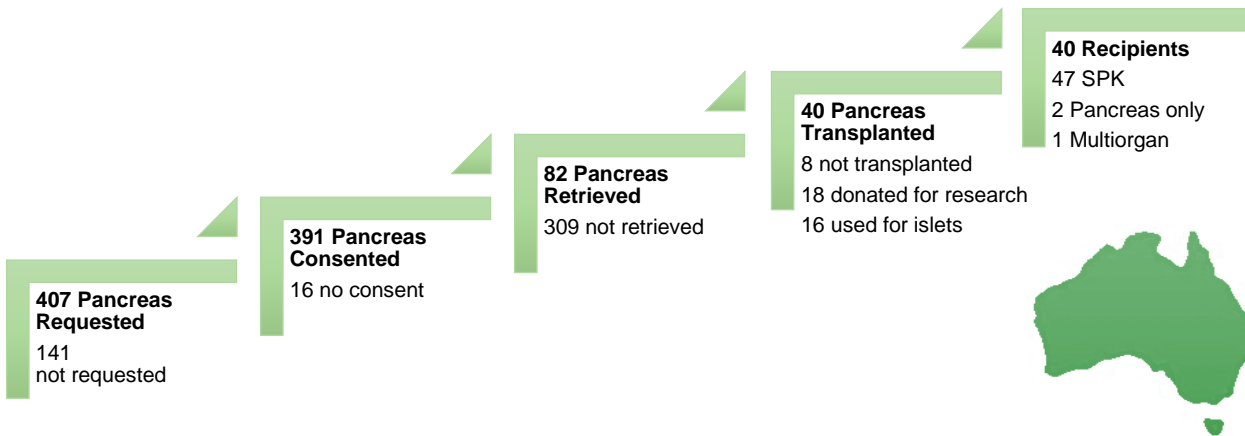
Suggested Citation

ANZOD Registry. 2020 Annual Report, Section 9: Deceased Donor Pancreas Donation. Australia and New Zealand Dialysis and Transplant Registry, Adelaide, Australia. 2020. Available at: www.anzdata.org.au

Pancreas Donation

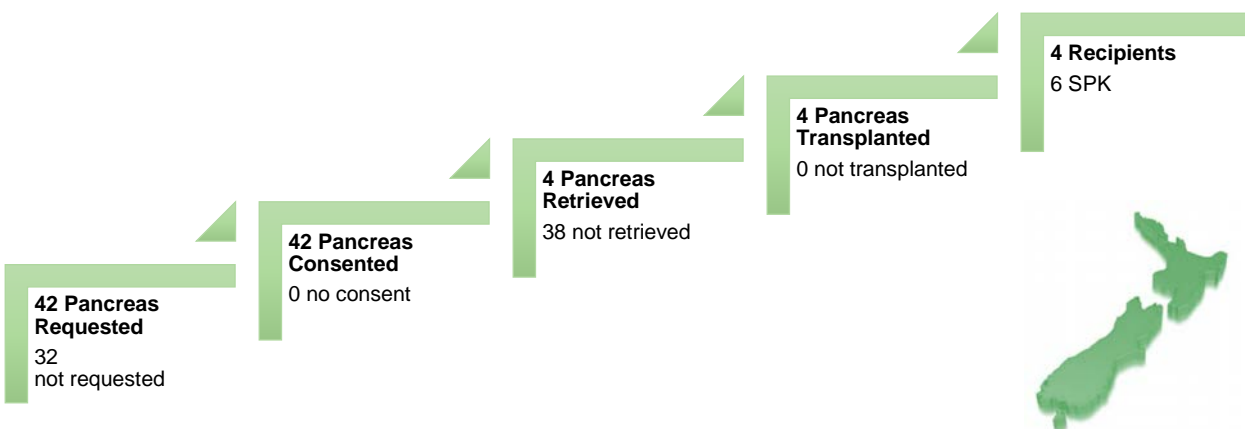
In Australia there were 40 pancreas transplants in 2019. 38 pancreas were transplanted simultaneously with a pancreas. There was a rate of 1.6 per million population (pmp) pancreas transplants in 2019. Figure 9.1 below shows the outcomes of requests for pancreas donation in Australia and New Zealand for 2019.

Figure 9.1.1 Outcomes of Request for Pancreas Donation from Actual Donors in Australia 2019



In New Zealand, there were 4 pancreas transplants (0.8 pmp) in 2019. All 4 transplants were a combined pancreas/kidney transplant. The number of pancreas transplant recipients (4) in 2019 was lower than in 2018 (6).

Figure 9.1.2 Outcomes of Request for Pancreas Donation from Actual Donors in New Zealand 2019



Figures 9.2 and 9.3 below show the number of pancreas recipients in Australia and New Zealand by donation pathway and transplant region.

Figure 9.2.1 - Recipients of Whole Pancreas Transplant by Donation Pathway, Australia 1998-2019

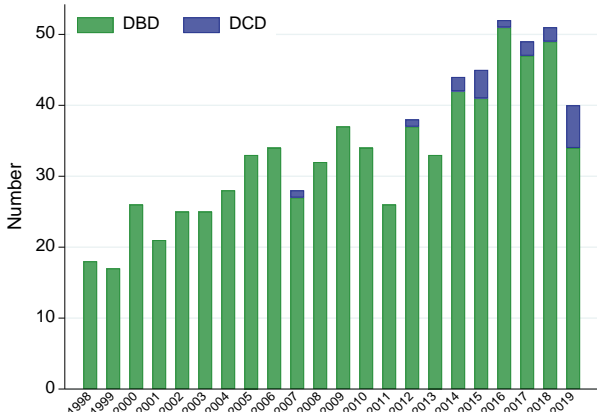


Figure 9.2.2 - Recipients of Whole Pancreas Transplant by Donation Pathway, New Zealand 1998-2019

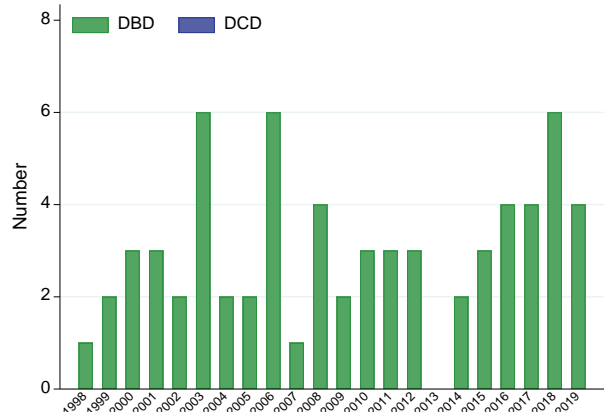
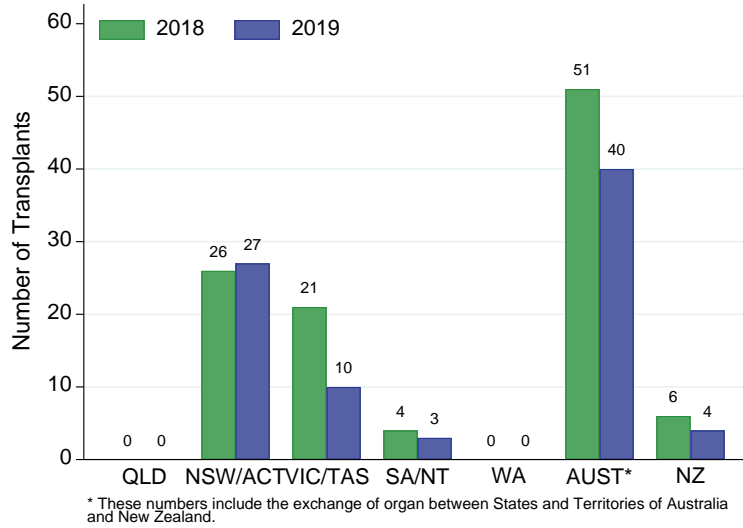


Figure 9.3 - Deceased Donor Pancreas Transplant Recipients* by Transplant Region, Australia and New Zealand, 2018-2019



Age of Pancreas Donors

The age distribution of donors providing retrieved pancreas for Australia and New Zealand is shown below in Figure 9.4

Figure 9.4.1 - Age of Donors Providing Retrieved Pancreas Australia 2019

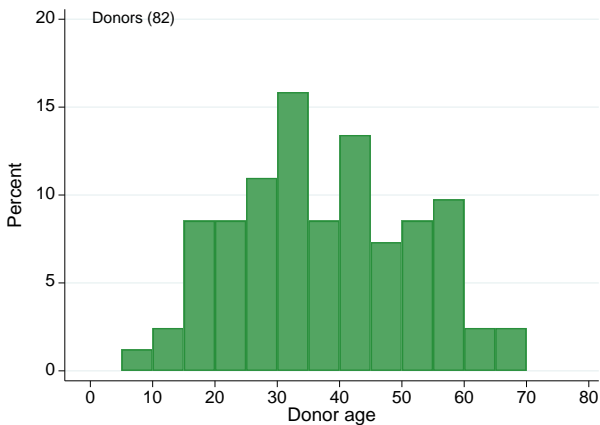
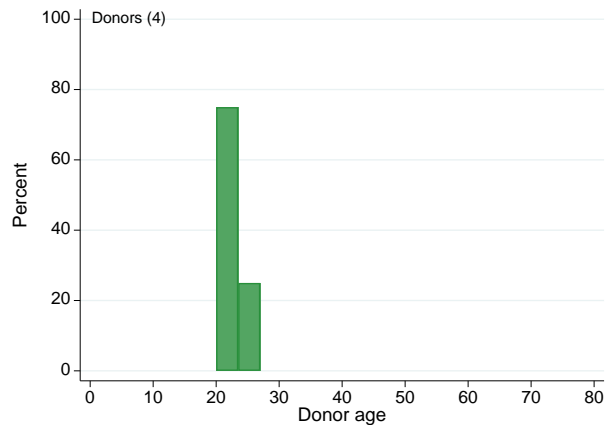


Figure 9.4.2 - Age of Donors Providing Retrieved Pancreas New Zealand 2019



Donor Pancreas Function

Tests for pancreas function of deceased donors include blood sugar levels, serum amylase and serum lipase tests.

Australia

In Australia, of the 437 donors in 2019 with a measurement taken, 84.9% had blood sugar levels greater than 8mmol/L. Of those 82 donors with pancreas retrieved and a measurement taken, 85.4% had blood sugar levels greater than 8mmol/L.

Of the 311 donors with a measurement taken, 89.1% had normal amylase levels or lipase less than 80 U/L. Of the 77 donors with pancreas retrieved and a measurement taken, 97.4% had normal amylase levels or lipase less than 80 U/L.

New Zealand

In New Zealand, of the 4 donors in 2019 with pancreas retrieved, 50.0% had blood sugar levels greater than 8mmol/L and 75.0% had normal amylase levels or lipase less than 80 U/L.

Pancreas Not Retrieved

In 2019 there were 309 pancreases not retrieved from Australian donors, and 38 not retrieved from New Zealand donors. The reasons why pancreas was not retrieved for organ transplantation in Australia and New Zealand are presented in below in Table 9.1.

Table 9.1 Reasons for Pancreas Not Retrieved in Australia and New Zealand 2019

Reason	Australia	New Zealand
Logistics	12	0
Not Medically Suitable	144	14
Surgically Unsuitable	6	0
Trauma to Organ	5	1
No Suitable Recipients	32	4
Age of Donor	87	16
DCD Donor	22	3
Consent Withdrawn	1	0
Others	0	0
Total	309	38

Pancreas Retrieved and Not Utilised for Transplantation

Figure 9.5 below shows the non-utilisation rate of retrieved pancreases. This includes the proportion of pancreases that were retrieved for the purpose of solid organ transplantation, but not ultimately transplanted into a recipient. This could be due to an absence of suitable recipients, or the pancreas being found to be medically or surgically unsuitable after retrieval.

Note: Organ donation for the purpose of research is excluded when calculating a specific organ's non-utilisation rate for transplantation.

Figure 9.5.1 - Non-utilisation Rate of Pancreas Retrieved for Organ Transplantation - Australia 2015-2019

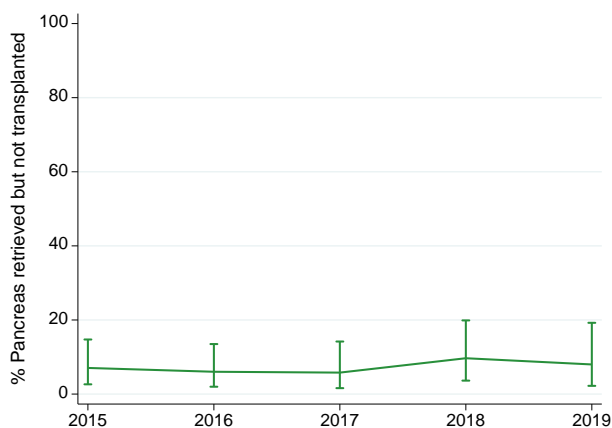


Figure 9.5.2 - Non-utilisation Rate of Pancreas Retrieved for Organ Transplantation - New Zealand 2015-2019

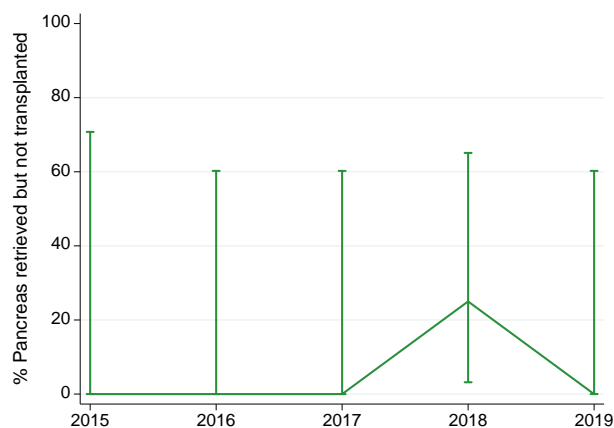


Table 9.2 below tabulates the reasons pancreas were not used for transplantation after retrieval for that purpose in Australia and New Zealand since 2015.

Table 9.2 Reasons Pancreas Retrieved & Not Utilised for Transplantation, Australia and New Zealand 2015 – 2019

Reason	2015	2016	2017	2018	2019
Logistics	1 (0)	1 (0)	0 (0)	0 (0)	0 (0)
Not Medically Suitable	4 (0)	2 (0)	4 (0)	5 (1)	4 (0)
Not Surgically Suitable	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)
Trauma to Organ	1 (0)	1 (0)	0 (0)	0 (0)	0 (0)
No Suitable Recipients	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Recipient Issue	0 (0)	0 (0)	0 (0)	0 (1)	0 (0)
Insufficient Islets	12 (0)	7 (0)	9 (0)	10 (0)	4 (0)
Others	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)
Total	18 (0)	12 (0)	13 (0)	16 (2)	8 (0)

Outcome of Pancreas Donation

The outcome of pancreas donation activity in Australia and New Zealand through the donation pathway is shown below in table 9.3.

Table 9.3.1 Outcome of Request for Pancreas Donation in Australia, 2015-2019

Outcome of Request	2015	2016	2017	2018	2019
Total Donors	435	503	510	554	548
Pancreas Requested for Donation	328	406	407	443	407
Pancreas Not Requested for Donation	107	97	103	111	141
Pancreas with Consent Given	314	394	393	416	391
Pancreas with Consent Not Given	14	12	14	27	16
Pancreas Retrieved	121	120	95	96	82
Pancreas Not Retrieved	193	274	298	320	309
Whole Pancreas Transplanted	45	52	49	51	40
Pancreas Only Transplanted	2	5	1	3	2
Pancreas Transplanted with Other Organ	43	47	48	48	38
Pancreas Islets Transplanted	16	8	11	14	16
Pancreas Not Used	18	12	13	16	8
Pancreas Retrieved for Research and Not for Transplantation	42	48	22	15	18
Whole Pancreas Recipients	45	52	49	51	40
Pancreas Only Recipients	2	5	1	3	2
Pancreas with Other Organ Recipients	43	47	48	48	38
Pancreas Islets Recipients	15	8	11	14	16
Pancreas (including Islets) Non-utilisation Rate	14.9%	10.0%	13.7%	16.7%	9.8%
Pancreas (Whole, no Islets) Utilisation Rate	37.2%	43.3%	51.6%	53.1%	48.8%

Table 9.3.2 Outcome of Request for Pancreas Donation in New Zealand, 2015-2019

Outcome of Request	2015	2016	2017	2018	2019
Total Donors	53	61	73	62	74
Pancreas Requested for Donation	39	45	40	44	42
Pancreas Not Requested for Donation	14	16	33	18	32
Pancreas with Consent Given	38	45	40	43	42
Pancreas with Consent Not Given	1	0	0	1	0
Pancreas Retrieved	3	4	4	8	4
Pancreas Not Retrieved	35	41	36	35	38
Whole Pancreas Transplanted	3	4	4	6	4
Pancreas Only Transplanted	0	0	0	0	0
Pancreas Transplanted with Other Organ	3	4	4	6	4
Pancreas Islets Transplanted	0	0	0	0	0
Pancreas Not Used	0	0	0	2	0
Pancreas Retrieved for Research and Not for Transplantation	0	0	0	0	0
Whole Pancreas Recipients	3	4	4	6	4
Pancreas Only Recipients	0	0	0	0	0
Pancreas with Other Organ Recipients	3	4	4	6	4
Pancreas Islets Recipients	0	0	0	0	0
Pancreas (including Islets) Non-utilisation Rate	0.0%	0.0%	0.0%	25.0%	0.0%
Pancreas (Whole, no Islets) Utilisation Rate	100.0%	100.0%	100.0%	75.0%	100.0%