

SECTION 9

Deceased Donor Pancreas Donation

This section summarises pancreas donation activity from deceased donors in 2024 compared with previous years. The rate of pancreas transplant procedures in 2024 was 1.6 pmp in Australia and 0.7 pmp in New Zealand.

CONTENTS

| Executive Summary | 3 |
|---|---|
| Suggested Citation | 3 |
| Pancreas Donation | 4 |
| Age of Pancreas Donors | 6 |
| Donor Pancreas Function | 6 |
| Pancreas Not Retrieved | 7 |
| Pancreas Retrieved and Not Utilised for Transplantation | 8 |
| Outcome of Pancreas Donation | 9 |

EXECUTIVE SUMMARY

Every organ donor provides a precious opportunity for the chance of an improved quality of life and survival through transplantation. It is important to understand the donation and transplant outcomes including the specific organs consented for donation, the organs retrieved and whether they were transplanted or not (non-utilised). This section provides information about the outcomes for pancreas donation and transplantation from deceased actual organ donors.

SUGGESTED CITATION

H Opdam, C Davies, K Marshall, G Irish, 29th Report, Section 9: Deceased Donor Pancreas Donation. Australia and New Zealand Organ Donation Registry, Adelaide, Australia. 2025. Available at: https://www.anzdata.org.au/anzod/publications-2/annual-reports/

PANCREAS DONATION

In Australia, there were 44 pancreas transplants in 2024. 43 pancreases were transplanted simultaneously with another organ resulting in 40 simultaneous pancreas/kidney transplant recipients, one combined pancreas/liver recipient, one combined pancreas/intestine recipient, and one combined pancreas/liver/intestine recipient. There was one pancreas only transplant. The rate of pancreas transplants in 2024 was 1.6 per million population (pmp) compared to 1.7 pmp in 2023. Figure 9.1.1 shows the outcomes of requests for pancreas donation in Australia for 2024.

Figure 9.1.1
Outcomes of requests for pancreas donation in Australia - 2024



In New Zealand, there were 4 pancreas transplants (0.7 pmp) in 2024. 4 pancreas were transplanted simultaneously with another organ, with all being simultaneous pancreas/kidney transplants. The number of pancreas transplant recipients (4) in 2024 was higher than in 2023 (3). Figure 9.1.2 shows the outcomes of requests for pancreas donation in New Zealand for 2024.

Figure 9.1.2
Outcomes of requests for pancreas donation in New Zealand - 2024



Figures 9.2 and 9.3 show the number of pancreas recipients by donation pathway and transplant region.

Figure 9.2.1 Recipients of Whole Pancreas Transplant by Donation Pathway, Australia 1998-2024

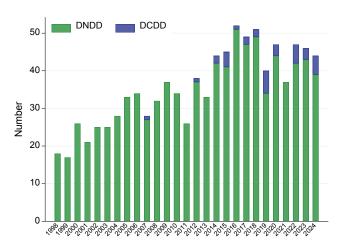


Figure 9.2.2 Recipients of Whole Pancreas Transplant by Donation Pathway, New Zealand 1998-2024

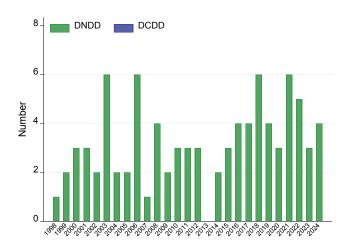
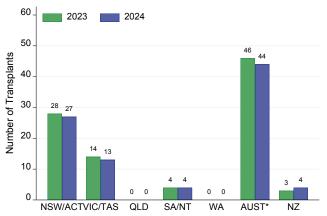


Figure 9.3 Deceased Donor Pancreas Transplant Recipients* by Transplant Region, Australia and New Zealand, 2023-2024[^]



* These numbers include the exchange of organ between States and Territories of Australia and New Zealar ^Year of donation.

AGE OF PANCREAS DONORS

The age distribution of donors providing retrieved pancreases for Australia and New Zealand is presented in Figure 9.4.

Figure 9.4.1 Age of Donors Providing Retrieved Pancreases Australia 2024

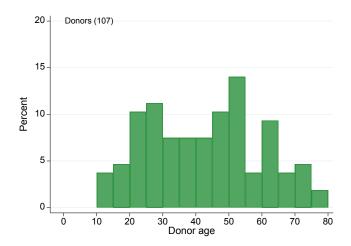
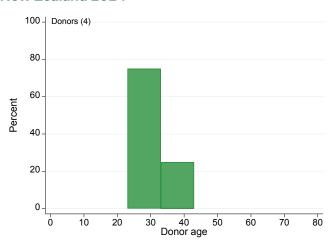


Figure 9.4.2
Age of Donors Providing Retrieved Pancreases
New Zealand 2024



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 396 donors in 2024 with a measurement taken, 78.0% had blood sugar levels greater than 8mmol/L. Of those 95 donors with the pancreas retrieved and a measurement taken, 70.5% had blood sugar levels greater than 8mmol/L.

Of the 322 donors with a measurement taken, 87.6% had normal amylase levels or lipase less than 80 U/L. Of the 95 donors with the pancreas retrieved and a measurement taken, 88.4% had normal amylase levels or lipase less than 80 U/L.

NEW ZEALAND

In New Zealand, of the 24 donors 2024 with a measurement taken, 87.5% had blood sugar levels greater than 8mmol/L. Of those 4 donors with the pancreas retrieved and a measurement taken, 100.0% had blood sugar levels greater than 8mmol/L.

Of the 15 donors with a measurement taken, 86.7% had normal amylase levels or lipase less than 80 U/L. Of the 3 donors with the pancreas retrieved and a measurement taken, 100.0% had normal amylase levels or lipase less than 80 U/L.

PANCREAS NOT RETRIEVED

In 2024, there were 246 pancreases not retrieved from Australian donors and 21 not retrieved from New Zealand donors. The reasons why pancreases were not retrieved for organ transplantation are presented in Table 9.1.

Table 9.1
Reasons for Pancreases Not Retrieved 2024

| Reason | Australia | New Zealand |
|--|-----------|-------------|
| Intraoperative assessment | 4 | 1 |
| Declined in offer process | 121 | 8 |
| Organ not offered - pathway | 16 | 2 |
| Organ not offered - age of donor | 61 | 4 |
| Organ not offered - not medically suitable | 34 | 5 |
| No consent from Coroner | 1 | 0 |
| Organ not offered - no suitable recipients | 1 | 0 |
| Organ not offered - other | 8 | 1 |
| Total | 237 | 20 |

PANCREAS RETRIEVED AND NOT UTILISED FOR TRANSPLANTATION

Figure 9.5 shows the non-utilisation rate of retrieved pancreases - the proportion of pancreases

Figure 9.5.1 Non-utilisation Rate of Pancreases Retrieved for Organ Transplantation - Australia 2020-2024

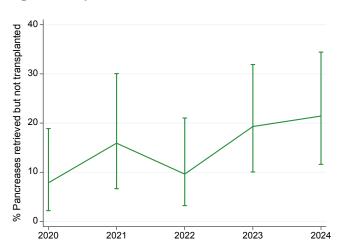
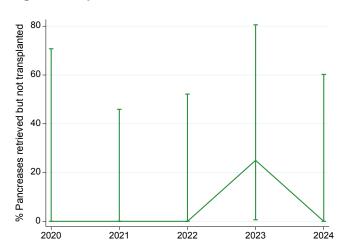


Figure 9.5.2 Non-utilisation Rate of Pancreases Retrieved for Organ Transplantation - New Zealand 2020-2024



that were retrieved for the purpose of organ transplantation, but not ultimately transplanted into a recipient (either due to an absence of suitable recipients, or the pancreas being found to

Table 9.2
Reasons Pancreas Retrieved & Not Utilised for Transplantation, 2021 - 2024

| Country | Reason | 2021 | 2022 | 2023 | 2024 |
|----------------|-------------------------------|------|------|------|------|
| Australia | Intraoperative assessment | 0 | 1 | 0 | 2 |
| | Assessment at transplant unit | 2 | 2 | 6 | 4 |
| | Surgical retrieval injury | 0 | 0 | 1 | 0 |
| | Other | 5 | 3 | 9 | 1 |
| | Total | 7 | 6 | 16 | 7 |
| New Zealand | Intraoperative assessment | 0 | 0 | 0 | 0 |
| | Assessment at transplant unit | 0 | 0 | 1 | 0 |
| | Surgical retrieval injury | 0 | 0 | Ο | 0 |
| | Other | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 1 | 0 |

be medically or surgically unsuitable after retrieval). Organ donation for the purpose of research is excluded when calculating a specific organ's non-utilisation rate for transplantation.

Table 9.2 tabulates the reasons pancreases were not used for transplantation after retrieval for that purpose since 2021.

Table 9.3.1
Outcome of Request for Pancreas Donation in Australia, 2020-2024

| Outcome of Request | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|-------|-------|-------|-------|-------|
| Total Donors | 463 | 421 | 454 | 513 | 527 |
| Pancreas Requested for Donation | 347 | 327 | 359 | 389 | 370 |
| Pancreas Not Requested for Donation | 116 | 94 | 95 | 124 | 157 |
| Pancreas with Consent Given | 327 | 306 | 348 | 372 | 353 |
| Pancreas with Consent Not Given | 20 | 21 | 11 | 17 | 17 |
| Pancreas Retrieved | 70 | 70 | 143 | 125 | 107 |
| Pancreas Not Retrieved | 257 | 236 | 205 | 247 | 246 |
| Whole Pancreas Transplanted | 47 | 37 | 47 | 46 | 44 |
| Pancreas Only Transplanted | 1 | 2 | 3 | 2 | 1 |
| Pancreas Transplanted with Other Organ | 46 | 35 | 44 | 44 | 43 |
| Pancreas Islets Transplanted | 6 | 5 | 7 | 8 | 2 |
| Pancreas Not Used | 10 | 7 | 6 | 16 | 7 |
| Pancreas Used for Research* | 4 | 0 | 0 | 0 | 0 |
| Pancreas Retrieved for Research** | 1 | 12 | 73 | 50 | 38 |
| Pancreas Retrieved for Transplantation and Used for Research*** | 0 | 5 | 4 | 4 | 7 |
| Pancreas Islets Used for Research [^] | 2 | 4 | 6 | 1 | 9 |
| Whole Pancreas Recipients | 47 | 37 | 47 | 46 | 44 |
| Pancreas Only Recipients | 1 | 2 | 3 | 2 | 1 |
| Pancreas with Other Organ Recipients | 46 | 35 | 44 | 44 | 43 |
| Pancreas Islets Recipients | 6 | 5 | 7 | 8 | 2 |
| Pancreas (including Islets) Non-utilisation Rate | 15.9% | 22.2% | 15.6% | 27.0% | 23.3% |
| Pancreas (Whole, no Islets) Utilisation Rate | 74.6% | 68.5% | 73.4% | 62.2% | 73.3% |

OUTCOME OF PANCREAS

Table 9.3.2
Table 9.3.2 Outcome of Request for Pancreas Donation in New Zealand, 2020-2024

| Outcome of Request | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|--------|--------|--------|-------|--------|
| Total Donors | 64 | 66 | 63 | 64 | 70 |
| Pancreas Requested for Donation | 38 | 31 | 38 | 38 | 26 |
| Pancreas Not Requested for Donation | 26 | 35 | 25 | 26 | 44 |
| Pancreas with Consent Given | 38 | 30 | 38 | 37 | 25 |
| Pancreas with Consent Not Given | 0 | 1 | 0 | 1 | 1 |
| Pancreas Retrieved | 3 | 6 | 5 | 4 | 4 |
| Pancreas Not Retrieved | 35 | 24 | 33 | 33 | 21 |
| Whole Pancreas Transplanted | 3 | 6 | 5 | 3 | 4 |
| Pancreas Only Transplanted | 0 | 0 | 0 | 0 | 0 |
| Pancreas Transplanted with Other Organ | 3 | 6 | 5 | 3 | 4 |
| Pancreas Islets Transplanted | 0 | 0 | 0 | 0 | 0 |
| Pancreas Not Used | 0 | 0 | 0 | 1 | 0 |
| Pancreas Used for Research* | 0 | 0 | 0 | 0 | 0 |
| Pancreas Retrieved for Research** | 0 | 0 | 0 | 0 | 0 |
| Pancreas Retrieved for Transplantation and Used for Research*** | 0 | 0 | 0 | 0 | 0 |
| Pancreas Islets Used for Research [^] | 0 | 0 | 0 | 0 | 0 |
| Whole Pancreas Recipients | 3 | 6 | 5 | 3 | 4 |
| Pancreas Only Recipients | 0 | 0 | 0 | 0 | 0 |
| Pancreas with Other Organ Recipients | 3 | 6 | 5 | 3 | 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% |

DONATION

The outcome of pancreas donation activity in Australia and New Zealand through the donation process is presented in table 9.3.

*Primary/Secondary Intention not recorded prior to Nov 2020



SECTION 9

Deceased Donor Pancreas Donation