



# ANZIPTR Report 2026

Australia and New Zealand Islet and Pancreas Transplant Registry data 1984-2025

This report is a compilation of data provided by Pancreas transplant units in Australia and New Zealand. The registry is funded in part by the Organ and Tissue Authority

[www.anziptr.org](http://www.anziptr.org)

# Contents

## Sections

Contents .....	i
Sections .....	i
Table of Tables .....	iii
Table of Figures .....	iv
Summary .....	5
Introduction.....	5
Suggested Citation .....	5
ANZIPTR staff.....	5
Contact the ANZIPTR.....	5
Governance structure .....	6
Data release guidelines .....	6
Participating Centres .....	7
Analysis and Methods .....	8
Definitions .....	9
Glossary .....	9
Synopsis.....	10
Accessing report data.....	10
Chapter 1: Waiting List.....	11
Overview of waiting list activity .....	11
Patient waiting list flow.....	12
Distribution of active patients by state.....	14
New referrals received over time .....	16
Patient characteristics for those active on the list in 2025.....	17
Chapter 2: Pancreas transplant recipients.....	18
Pancreas transplant incidence .....	18
Patients transplanted by state .....	22
Demographics of new pancreas transplant recipients .....	22
Balance of donor and recipient characteristics in 2025.....	24
Patient survival.....	25
Pancreas survival.....	27

Prevalence of functioning pancreas transplants.....	34
Kidney survival.....	35
Pancreas transplant operative data .....	39
Surgical technique .....	40
Chapter 3: Pancreas donors .....	44
Pancreas donor characteristics .....	45
Donor and recipient state/territory .....	48
Appendices.....	49
Previous ANZIPTR Reports, other abstracts, and publications .....	49

## Table of Tables

Table 1.1: Referral and waiting list activity in Australia for the past three years .....	12
Table 1.2: Referral and waiting list activity in New Zealand for the past three years .....	13
Table 1.3: People active on the waiting list in Australia at end of year, by state of residence and pancreas transplant unit, over the past three years .....	14
Table 1.4: People under consideration or active on the waiting list in Australia at end of year, by state of residence and pancreas transplant unit, over the past three years .....	15
Table 1.5: New referrals by Australian state of residence and pancreas transplant unit, over the past three years .....	16
Table 2.1: Pancreas transplants over time, by transplant centre and operation type .....	21
Table 2.2: Pancreas transplants by transplant centre and recipient state of residence over the past three years .....	22
Table 2.3: Demographics and characteristics of pancreas transplant recipients.....	23
Table 2.4: Transplant and donor pathway in 2025 by country and donor sex.....	24
Table 2.5: Cross tabulation of recipient and donor blood groups for 2025 .....	24
Table 2.6: Cross tabulation of recipient and donor sex for 2025 .....	24
Table 2.7: Pancreas transplant survival censored at death, by country and era .....	34
Table 2.8: People alive with a functioning pancreas transplant in Australia and New Zealand by year and residence, at year end.....	34
Table 2.9: Descriptive characteristics of pancreas transplant operations .....	39
Table 2.10: Pancreas cold ischaemic time by donor state, for Australian pancreas transplants 2025 .....	40
Table 2.11: Immunological cross-matching of donor recipient pairs.....	43
Table 2.12: Infectious disease serology cross-tabulation of donor-recipient pairs .....	43
Table 3.1: Demographics and characteristics of pancreas transplant donors .....	45
Table 3.2: Pancreas donors in Australia by transplant unit and state of residence over time	47
Table 3.3: Pancreas transplants in Australia by donor and recipient state of residence for 2025 and all years .....	48

## Table of Figures

Figure 1.1: People active on the waiting list by state/country of residence, end of 2025.....	14
Figure 1.2: People active on the waitlist by blood group, end of 2025.....	17
Figure 1.3: People active on the waitlist by age group and transplant centre, end of 2025 ..	17
Figure 2.1: Pancreas transplants over time, by transplant centre .....	19
Figure 2.2: Pancreas transplants over time, by operation type .....	20
Figure 2.3: Kaplan-Meier plot of patient survival after pancreas transplantation.....	25
Figure 2.4: Kaplan-Meier plot of patient survival by era of transplantation.....	26
Figure 2.5: Kaplan-Meier plot of patient survival by age at transplantation .....	27
Figure 2.6: Kaplan-Meier plot of pancreas graft survival (censored at death).....	28
Figure 2.7 Kaplan-Meier plot of pancreas graft survival (including death as graft failure).....	29
Figure 2.8: Kaplan-Meier plot of pancreas graft survival over time (censored at death) .....	30
Figure 2.9: Kaplan-Meier plot of pancreas graft survival by donor BMI, censored at death ..	31
Figure 2.10: Kaplan-Meier plot of pancreas graft survival by donor BMI, including death as pancreas failure .....	32
Figure 2.11: Kaplan-Meier plot of pancreas graft survival by donor age (censored at death)33	
Figure 2.12: Kaplan-Meier plot of kidney graft survival from SPK transplants (censored at death).....	35
Figure 2.13: Kaplan-Meier plot of kidney graft survival from SPK transplants (including death as graft failure).....	36
Figure 2.14: Kaplan-Meier plot of kidney graft survival from SPK transplants by era (censored at death).....	37
Figure 2.15: Kaplan-Meier plot of kidney graft survival from SPK transplants by era (including death as graft failure) .....	38
Figure 2.16: Change in management of exocrine drainage of the pancreas over time .....	41
Figure 2.17: Site of donor artery anastomosis onto recipient vessel.....	42
Figure 2.18: Site of donor vein anastomosis onto recipient vessel.....	42

# Summary

## Introduction

This report is produced and edited by: Angela Webster and James Hedley

Chapters 1-3 are authored by: Angela Webster, Paul Robertson, Tia Mark, Helen Pilmore, Danielle Stephenson, James Hedley

We thank all contributors who have made the registry what it is and whose work has made this report possible.

## Suggested Citation

Webster AC, Hedley JA, Robertson P, Mark T, Pilmore H, Stephenson D. *ANZIPTR Annual Report 2026*. Australian and New Zealand Islet and Pancreas Transplant Registry; 2026.

<https://anziptr.org/>

## ANZIPTR staff

Prof Angela Webster	Executive Officer
Mr Paul Robertson	Transplant Co-ordinator
Ms Frederika Sciberras	Registry Clerk
Dr James Hedley	Biostatistician

## Contact the ANZIPTR

Enquiries or comments should be directed to ANZIPTR:

Australia and New Zealand Islet and Pancreas Transplant Registry

Westmead NSW 2145

Phone: +61 2 9845 6962

Fax: +61 2 9633 9351

Email: [info@anziptr.org](mailto:info@anziptr.org)

## **Governance structure**

This report is a compilation of data provided by the four current solid-organ Pancreas transplant units in Australia and New Zealand: Auckland Renal Transplant Group, New Zealand; National Pancreas Transplant Unit Monash Medical Centre, Victoria; National Pancreas Transplant Unit, Westmead Hospital, NSW; South Australian/Northern Territory Transplant Service, Royal Adelaide Hospital, SA; The ANZIPTR registry is funded in part by the Organ and Tissue Authority.

## **Data release guidelines**

The registry can provide de-identified data for at no cost to Transplant Physicians, Transplant Units, and Government Departments. Release of data for academic or clinical research projects is provisional on an agreed project plan and proof of ethical oversight. The registry will not provide any personally identifiable data.

The clinical data provided contains potentially sensitive information and should be used only within agreed guidelines. If data are further published elsewhere ANZIPTR permission is necessary prior to submission for publication, and ANZIPTR should be identified as the source of the data. If data provided by ANZIPTR is the primary source of data, then a copy of publication should be provided to ANZIPTR.

Data provided by ANZIPTR should be utilised by requesting parties only, further data sharing with other parties or projects is not permitted without prior approval from ANZIPTR. The data supplied will be in accordance with ANZIPTR data specifications. Please see [www.anziptr.org](http://www.anziptr.org) for our data dictionary.

## Participating Centres

### Australian National Program:

#### ***Westmead Hospital***

Prof Germaine Wong	Director of Transplant and Renal Medicine
Prof Angela Webster	Executive Director ANZIPTR
Prof Natasha Rogers	Director of Transplantation
Dr Jen Li	Physician
Dr Brian Nankivell	Physician
Dr Ankit Sharma	Physician
Dr Elke Woodhouse	Physician
Dr Melanie Wyld	Physician
Prof Henry Pleass	Director of Transplant Surgery
Dr Taina Lee	Surgeon
Dr Lawrence Yuen	Surgeon
Ms Kathy Kable	Transplant Nurse Practitioner
Mr Paul Robertson	Transplant Co-ordinator

#### ***Monash Medical Centre***

Prof John Kanellis	Director of Nephrology
A/Prof William Mulley	Head of Transplantation
Mr Alan Saunder	Director of Surgery
Mr Stephen Thwaites	Head of Transplant Surgery
Mr Roger Bell	Surgeon
Mr Ming Yii	Surgeon
Miss Nancy Suh	Surgeon
Mr Michael Wu	Surgeon
Miss Sherry Salter	Surgeon
Mr Aaron Hui	Surgeon
Dr Sandy Fernando	Physician
A/Prof Jessica Ryan	Physician
Mrs Tia Mark	Transplant Clinical Nurse Consultant

***Royal Adelaide Hospital***

Prof Toby Coates	Director of Transplantation
Dr Shantanu Bhattacharjya	Surgical Lead
Prof Randall Faull	Director of Renal Unit
Dr Georgina Irish	Physician
Dr Michael Collins	Physician
A/Prof Philip Clayton	Physician
Dr Christine Russell	Surgeon
Dr Santosh Antony-Olakkengil	Surgeon
Ms Danielle Stephenson	Nurse Unit Manager
Ms Jill Diack	Transplant Coordinator
Ms Hilary Styles	Transplant coordinator
Ms Alice Rickard	Transplant coordinator
Ms Colleen Etherton	Transplant coordinator

**New Zealand:**

***Auckland Renal Transplant Group***

Dr Helen Pilmore  
Dr Carl Muthukumaraswamy

**Analysis and Methods**

The aim of this report is to record all pancreas transplant activity in Australia and New Zealand. Data included in this report was locked on 3<sup>rd</sup> February 2025, for all people transplanted up to the end of 2024. Please note new data are added to the registry regularly, and corrections are made where previous data are missing or where errors are discovered. This year the report is for solid organ pancreas transplant activity only; there is no report for islet transplant activity.

Kaplan-Meier survival curves were used to illustrate the survival distributions, and these were generated using Stata software version 19.5 (StataCorp, College Station, TX USA). Transplant survival is analysed and presented both including and excluding death with a functioning pancreas transplant. For patients receiving a second transplant, survival time was measured from first transplant.

## Definitions

### Pancreas transplant

A functioning pancreas transplant is defined as a recipient free of exogenous insulin dependence; thus a pancreas transplant failure is declared when either a pancreatectomy is performed, or when the recipient returns to permanent insulin therapy. Kidney transplants are defined as functioning if recipients are dialysis free. All causes of death are included in the mortality analyses.

## Glossary

SPK	Simultaneous Kidney Pancreas Transplant
PTA	Pancreas Transplant Alone
PAK	Pancreas after Kidney Transplant
DBD	Donor after Brain Death
DCD	Donor after Circulatory Death
CMV	Cytomegalovirus
EBV	Epstein-Barr Virus
SD	Standard Deviation
IQI	Interquartile Interval
NSW	New South Wales
VIC	Victoria
QLD	Queensland
SA	South Australia
WA	Western Australia
TAS	Tasmania
ACT	Australian Capital Territory
NT	Northern Territory
NZ	New Zealand

## Synopsis

A total of 1,188 solid organ pancreas transplants have been performed in Australia and New Zealand, in 1,162 individuals from 1984-2025 (excluding islet transplants).

In 2025, 50 pancreas transplants were performed: 47 SPK, one PAK, and two combined liver/pancreas. By centre, the number of transplants performed were: Auckland (6); Monash (15); Westmead (25); Adelaide (2); and two liver-pancreas transplants at Austin Hospital.

## Accessing report data

The ANZIPTR website is at [www.anziptr.org](http://www.anziptr.org). This describes the registry structure and function, outlines the procedure for data requests, and provides a download area for past reports. For each ANZIPTR report, a slide set of key registry data tables and plots is available for download, to complement the main report.

The ANZIPTR welcomes suggestions for improvement or specific analyses you would like to see in the next annual report.

# Chapter 1: Waiting List

*Authors: Angela Webster, James Hedley.*

*Data contributed by: Paul Robertson, Tia Mark, Helen Pilmore, Danielle Stephenson*

## Overview of waiting list activity

### Definitions

Patients join the waiting list on the date they are referred to the transplanting centre; however, this may occur sometime before their kidneys fail. Patients are therefore classified as “under consideration” until they medically require a kidney pancreas transplant (eGFR  $\leq 15\text{ml}/\text{min}/1.72\text{m}^2$  or dependant on dialysis). Once they require a kidney pancreas transplant, they are classified as “active” on the list while they remain medically fit. The “under consideration” classification also captures people recently referred to the transplant centre, who are still undergoing assessment about their medical fitness for pancreas transplant. People referred to a transplanting centre when they are already on dialysis become “active” on the list as soon as they are accepted as medically fit. People referred to a transplanting centre when their kidneys still function become active once their kidney disease progresses to such a level that dialysis is planned in the near future (eGFR  $\leq 15\text{ml}/\text{min}/1.72\text{m}^2$ ). Once active on the waiting list, a patient may be transplanted depending on multiple factors including waiting time, blood group, duration of dialysis and other considerations.

## Patient waiting list flow

Patient referral and waiting list activity over the last three years is shown in Table 1.1 for Australia (Westmead, Monash and Royal Adelaide units), and Table 1.2 for New Zealand. In both Australia and New Zealand, the number of transplants performed annually has returned to pre-covid levels, and in Australia the backlog of patients under consideration is reducing.

**Table 1.1: Referral and waiting list activity in Australia for the past three years**

Activity	Patients (n)		
	2023	2024	2025
<b>Referrals</b>			
Under consideration (not yet active on list) at beginning of year	154	151	151
<i>New referrals during the year</i>	71	53	42
<i>Added to active list during the year</i>	65	51	44
<i>Declined for pancreas transplantation</i>	5	1	3
<i>Died while under consideration</i>	4	2	1
Under consideration (not yet active on list) at end of year	151	150	145
<b>Waitlist</b>			
Active on list at beginning of year	109	113	106
<i>Added to active list during the year</i>	65	51	44
<i>Removed from active list during year</i>	14	15	16
<i>Pancreas transplants to patients on waiting list</i>	42	42	44
<i>Kidney only transplants to patients on waiting list</i>	1	1	2
<i>Transplants performed outside Australia/New Zealand</i>	0	0	0
<i>Died while active on list</i>	4	0	2
On active waiting list at the end of year	113	106	86
Died within 12 months of removal from list	0	0	0

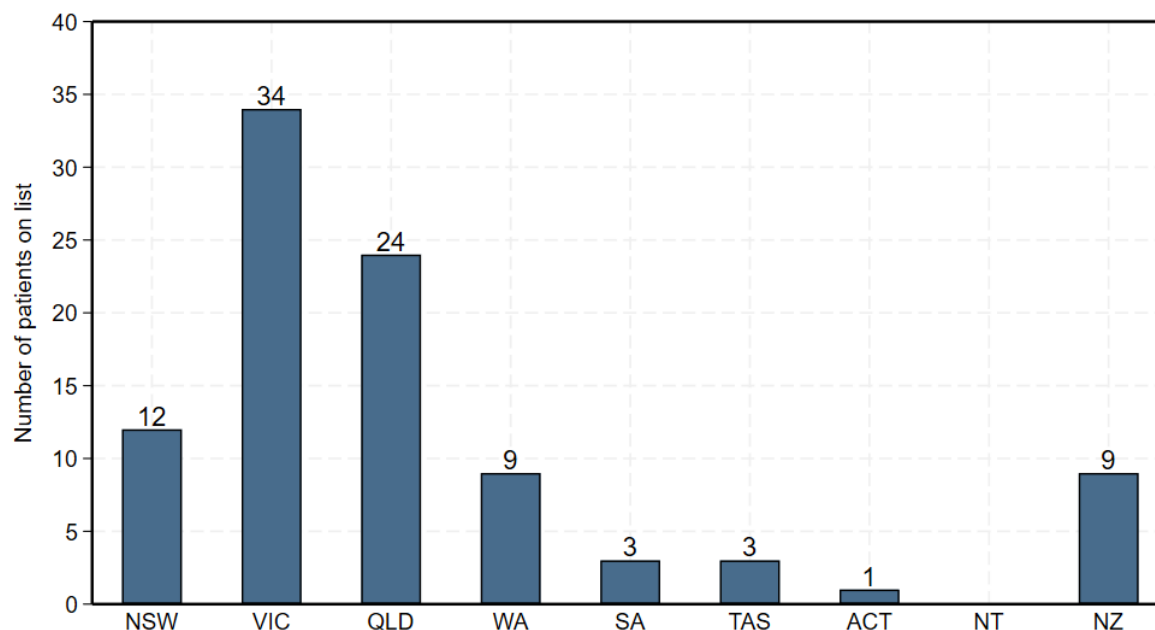
**Table 1.2: Referral and waiting list activity in New Zealand for the past three years**

Activity	Patients (n)		
	2023	2024	2025
<b>Referrals</b>			
Under consideration (not yet active on list) at beginning of year	8	5	5
<i>New referrals during the year</i>	9	8	1
<i>Added to active list during the year</i>	11	8	4
<i>Declined for pancreas transplantation</i>	0	0	0
<i>Died while under consideration</i>	1	0	0
Under consideration (not yet active on list) at end of year	5	5	2
<b>Waitlist</b>			
Active on list at beginning of year	8	13	13
<i>Added to active list during the year</i>	11	8	4
<i>Removed from active list during year</i>	3	3	2
<i>Pancreas transplants to patients on waiting list</i>	3	4	6
<i>Kidney only transplants to patients on waiting list</i>	0	0	0
<i>Transplants performed outside Australia/New Zealand</i>	0	0	0
<i>Died while active on list</i>	0	1	0
On active waiting list at the end of year	13	13	9
Died within 12 months of removal from list	0	0	0

## Distribution of active patients by state

Figure 1.1 and Table 1.3 show the state and country of residence for people active on the pancreas waiting list, by year and the pancreas transplanting centre they were referred to (Australia only).

**Figure 1.1: People active on the waiting list by state/country of residence, end of 2025**



**Table 1.3: People active on the waiting list in Australia at end of year, by state of residence and pancreas transplant unit, over the past three years**

Year	State of residence, n (row %)																Total
	NSW		VIC		QLD		WA		SA		TAS		ACT		NT		
<b>Westmead (NSW)</b>																	
2025	12	(26)	0	(0)	24	(51)	9	(19)	1	(2)	0	(0)	1	(2)	0	(0)	47
2024	22	(34)	0	(0)	27	(42)	13	(20)	1	(2)	0	(0)	1	(2)	0	(0)	64
2023	27	(42)	0	(0)	23	(36)	13	(20)	1	(2)	0	(0)	0	(0)	0	(0)	64
<b>Monash (VIC)</b>																	
2025	0	(0)	34	(87)	0	(0)	0	(0)	2	(5)	3	(8)	0	(0)	0	(0)	39
2024	0	(0)	30	(86)	1	(3)	0	(0)	1	(3)	3	(9)	0	(0)	0	(0)	35
2023	0	(0)	35	(85)	1	(2)	0	(0)	1	(2)	4	(10)	0	(0)	0	(0)	41
<b>Royal Adelaide (SA)</b>																	
2025	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0
2024	0	(0)	0	(0)	0	(0)	0	(0)	4	(80)	0	(0)	0	(0)	1	(20)	5
2023	0	(0)	0	(0)	0	(0)	0	(0)	5	(83)	0	(0)	0	(0)	1	(17)	6

## Summary

Table 1.4 shows the state of residence for people who are under consideration together with people who are active on the pancreas waiting list, by the pancreas transplanting centre they were referred to, in Australia. For New Zealand data, there is no breakdown beyond that seen in Table 1.2.

**Table 1.4: People under consideration or active on the waiting list in Australia at end of year, by state of residence and pancreas transplant unit, over the past three years**

Year	State of residence, n (row %)														Total		
	NSW		VIC		QLD		WA		SA		TAS		ACT			NT	
<b>Westmead (NSW)</b>																	
2025	36	(31)	0	(0)	40	(34)	32	(27)	6	(5)	1	(<1)	2	(2)	0	(0)	117
2024	50	(35)	0	(0)	45	(32)	37	(26)	6	(4)	1	(<1)	2	(1)	0	(0)	141
2023	60	(39)	0	(0)	46	(30)	39	(25)	6	(4)	1	(<1)	1	(<1)	0	(0)	153
<b>Monash (VIC)</b>																	
2025	1	(<1)	99	(88)	0	(0)	0	(0)	5	(4)	6	(5)	1	(<1)	0	(0)	112
2024	1	(<1)	96	(89)	1	(<1)	0	(0)	4	(4)	6	(6)	0	(0)	0	(0)	108
2023	1	(1)	87	(88)	1	(1)	0	(0)	2	(2)	8	(8)	0	(0)	0	(0)	99
<b>Royal Adelaide (SA)</b>																	
2025	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0
2024	0	(0)	0	(0)	0	(0)	0	(0)	4	(80)	0	(0)	0	(0)	1	(20)	5
2023	0	(0)	0	(0)	0	(0)	0	(0)	9	(90)	0	(0)	0	(0)	1	(10)	10

## New referrals received over time

Table 1.5 shows the number of new referrals received by transplanting units in Australia and New Zealand over time, and by state of residence (for Australian units only).

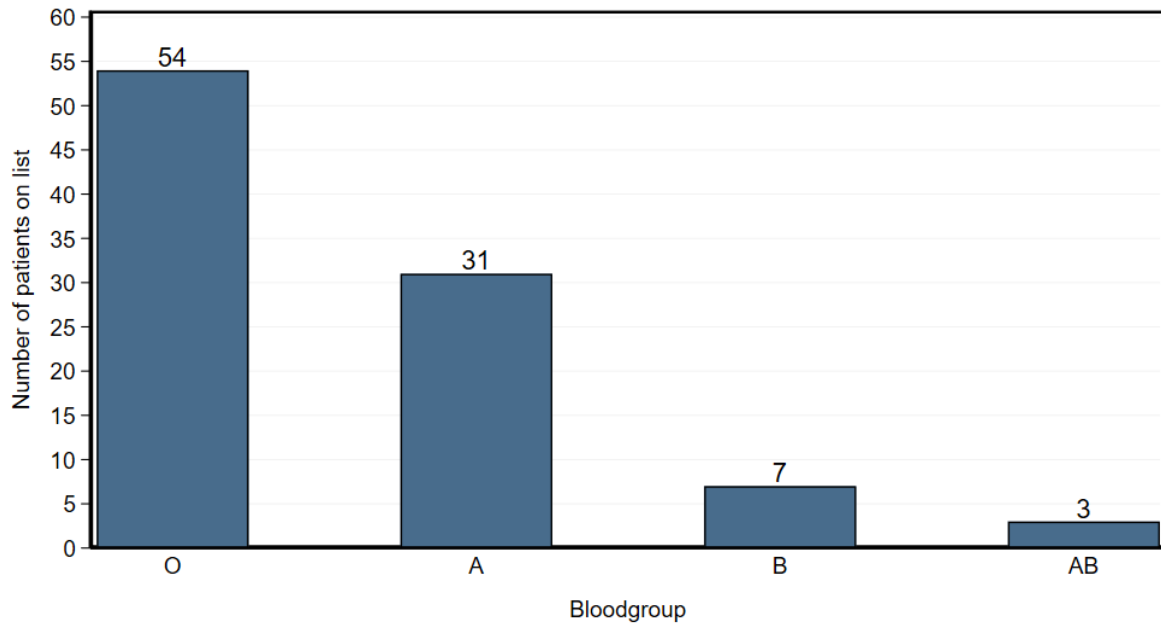
**Table 1.5: New referrals by Australian state of residence and pancreas transplant unit, over the past three years**

Year	State of residence, n (row %)																Total
	NSW		VIC		QLD		WA		SA		TAS		ACT		NT		
<b>Westmead (NSW)</b>																	
2025	1	(33)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	2	(67)	0	(0)	3
2024	6	(40)	0	(0)	7	(47)	1	(7)	0	(0)	0	(0)	1	(7)	0	(0)	15
2023	17	(55)	0	(0)	10	(32)	3	(10)	0	(0)	0	(0)	1	(3)	0	(0)	31
<b>Monash (VIC)</b>																	
2025	1	(3)	31	(82)	0	(0)	0	(0)	1	(3)	4	(11)	1	(3)	0	(0)	38
2024	0	(0)	34	(92)	0	(0)	0	(0)	2	(5)	1	(3)	0	(0)	0	(0)	37
2023	0	(0)	31	(86)	0	(0)	0	(0)	1	(3)	4	(11)	0	(0)	0	(0)	36
<b>Royal Adelaide (SA)</b>																	
2025	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0
2024	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(100)	1
2023	0	(0)	0	(0)	0	(0)	0	(0)	1	(50)	0	(0)	0	(0)	1	(50)	2
<b>Auckland (NZ)</b>																	
2025	-		-		-		-		-		-		-		-		1
2024	-		-		-		-		-		-		-		-		8
2023	-		-		-		-		-		-		-		-		9

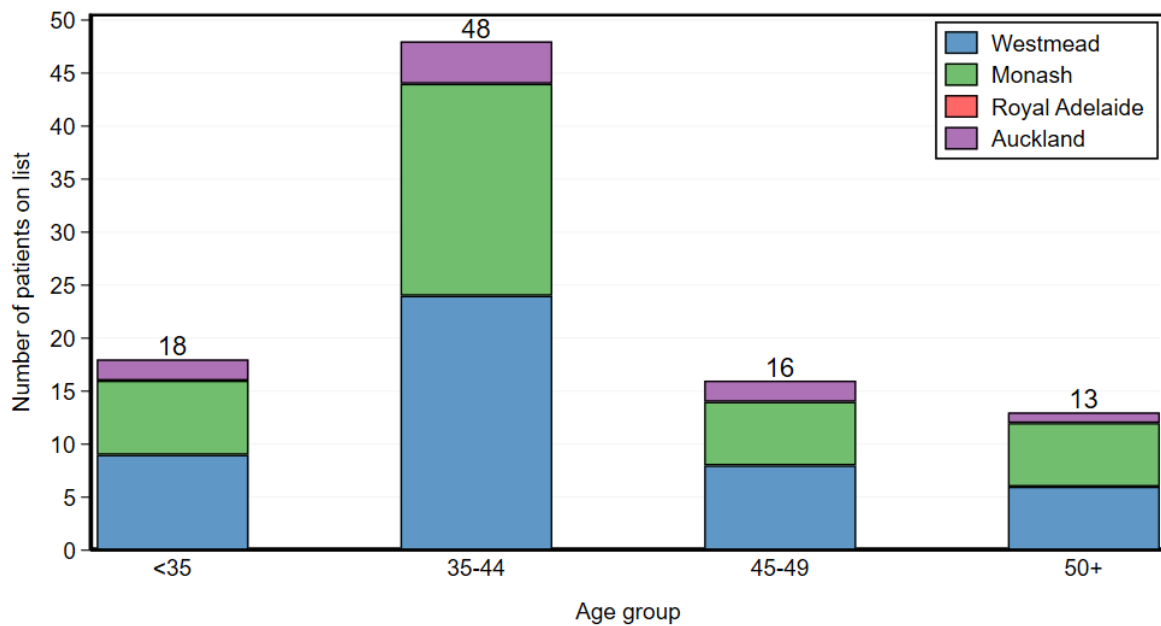
## Patient characteristics for those active on the list in 2025

The following figures illustrate the distribution of other characteristics of those active on the waiting list in 2025, including the distribution of blood groups and patient ages.

**Figure 1.2: People active on the waitlist by blood group, end of 2025**



**Figure 1.3: People active on the waitlist by age group and transplant centre, end of 2025**

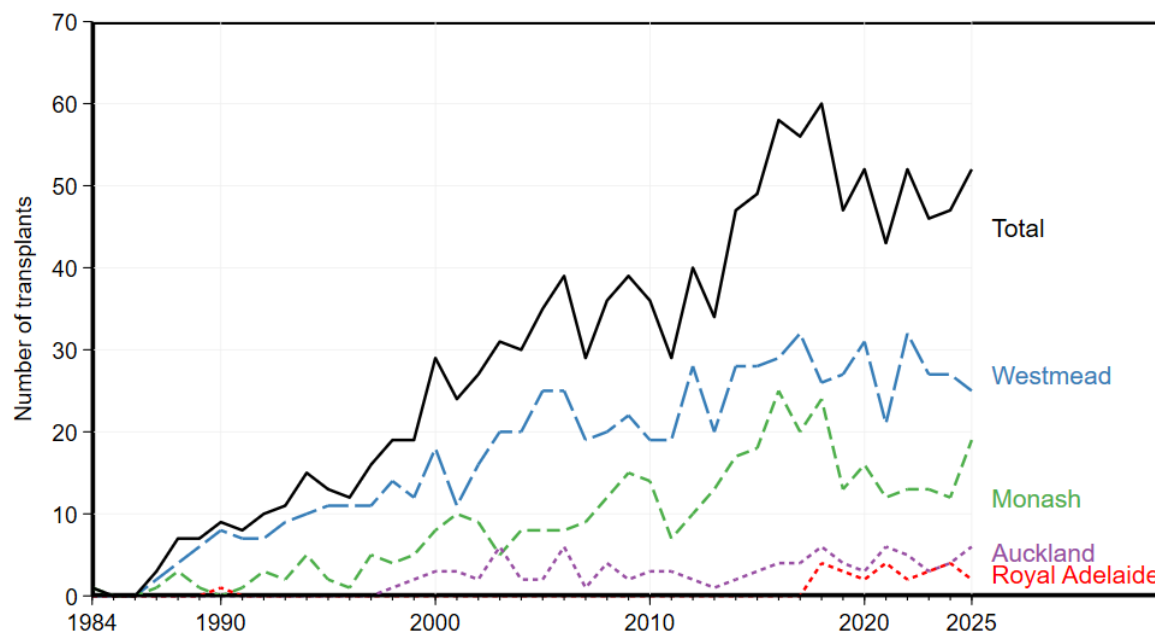


## Chapter 2: Pancreas transplant recipients

*Authors: Angela Webster, Paul Robertson, Tia Mark, Helen Pilmore, Danielle Stephenson, James Hedley*

### **Pancreas transplant incidence**

A total of 1,188 solid pancreas transplants have been performed in Australia and New Zealand from 1984-2025. Transplants have been performed in Westmead (723), Monash (339), Auckland (93), and Royal Adelaide (24). There have also been multi-organ transplants including pancreas in several locations over time. Since 1984 there have been a total of 3 SPK transplants conducted outside the main transplanting centres (1 at Royal Prince Alfred, 1 at Royal Melbourne Hospital, 1 at Queen Elizabeth Hospital), as well as 6 multi-organ transplants conducted at Austin Hospital (4 liver-pancreas, 1 liver-kidney-pancreas, 1 liver-kidney-pancreas-intestine). Figure 2.1 shows pancreas transplants over time, by transplant centre.

**Figure 2.1: Pancreas transplants over time, by transplant centre**

Note: There have been nine pancreas transplants performed in Australia, which were not conducted by either Westmead, Monash, or Royal Adelaide. These occurred in 1988, 1990, 2005, and 2017, two in 2021, one in 2024, and two in 2025.

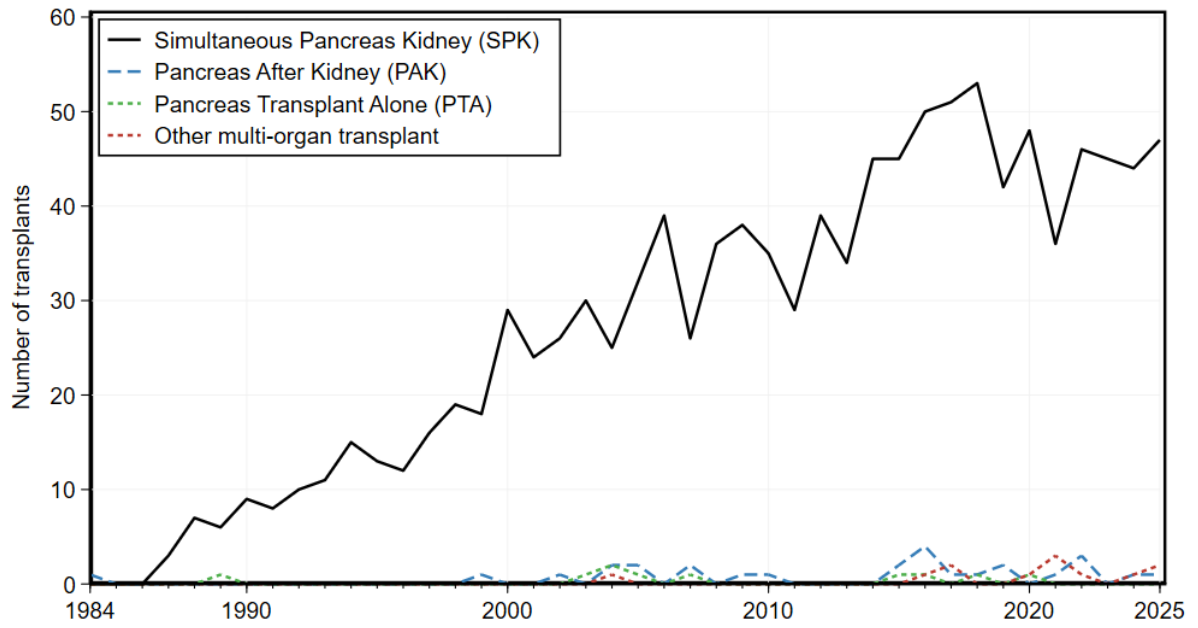
In 2025, 50 people received a pancreas transplant, by centre this was; Monash (15), Westmead (25), Royal Adelaide (2), Auckland (6), and Austin (2). The number of transplants performed in 2025 increased by 4 (9%) from the previous year.

Not all pancreas transplant operations are undertaken together with a kidney. In 2025, 47 of the 50 pancreas transplants were simultaneous pancreas-kidney transplant (SPK), one was PAK, and two were liver-pancreas. Pancreas after kidney (PAK) operations are performed for type 1 diabetic people who either had a first kidney transplant without a pancreas (most commonly from a living donor relative) and subsequently opt for a pancreas, or for people who underwent an SPK and have good kidney transplant function, but had a pancreas transplant failure, so need a further pancreas transplant. Pancreas transplant alone (PTA) is a less common operation and occurs very rarely. Indications for PTA include management of patients with hypoglycaemic unawareness or brittle diabetes that have failed best medical therapy. On rarer occasions, a multi-organ transplant is undertaken which includes a pancreas transplant. This includes liver-pancreas transplants (two in 2025, one in 2024, one in 2022, two in 2021, one in 2020, and one in 2016), liver-kidney-pancreas transplants (one in 2021, one in 2017, and one in 2005), and one liver-pancreas-intestine transplant in 2012.

**The distribution of operation types is shown in Figure 2.2 and the number of transplants by operation type is shown in**

Table 2.1.

Figure 2.2: Pancreas transplants over time, by operation type



**Table 2.1: Pancreas transplants over time, by transplant centre and operation type**

Year	Hospital and transplant type, n (row %)												Total
	Westmead			Monash			Royal Adelaide	New Zealand					
	SPK	PAK	PTA	SPK	PAK	PTA	All	All	All				
2025	25 (52)	0 (0)	0 (0)	14 (29)	1 (2)	0 (0)	2 (4)	6 (13)	48				
2024	26 (58)	1 (2)	0 (0)	10 (22)	0 (0)	0 (0)	4 (9)	4 (9)	45				
2023	27 (60)	0 (0)	0 (0)	12 (27)	0 (0)	0 (0)	3 (7)	3 (7)	45				
2022	31 (62)	1 (2)	0 (0)	10 (20)	2 (4)	0 (0)	1 (2)	5 (10)	50				
2021	21 (55)	0 (0)	0 (0)	6 (16)	1 (3)	0 (0)	4 (11)	6 (16)	38				
2020	30 (60)	0 (0)	1 (2)	13 (26)	0 (0)	0 (0)	3 (6)	3 (6)	50				
2019	26 (59)	1 (2)	0 (0)	10 (23)	0 (0)	0 (0)	3 (7)	4 (9)	44				
2018	24 (44)	1 (2)	0 (0)	20 (36)	0 (0)	0 (0)	4 (7)	6 (11)	55				
2017	31 (60)	0 (0)	0 (0)	16 (31)	1 (2)	0 (0)	0 (0)	4 (8)	52				
2016	26 (47)	3 (5)	0 (0)	20 (36)	1 (2)	1 (2)	0 (0)	4 (7)	55				
2015	27 (56)	1 (2)	0 (0)	16 (33)	1 (2)	0 (0)	0 (0)	3 (6)	48				
2014	28 (62)	0 (0)	0 (0)	15 (33)	0 (0)	0 (0)	0 (0)	2 (4)	45				
2013	20 (59)	0 (0)	0 (0)	13 (38)	0 (0)	0 (0)	0 (0)	1 (3)	34				
2012	28 (72)	0 (0)	0 (0)	9 (23)	0 (0)	0 (0)	0 (0)	2 (5)	39				
2011	19 (66)	0 (0)	0 (0)	7 (24)	0 (0)	0 (0)	0 (0)	3 (10)	29				
2010	19 (53)	0 (0)	0 (0)	14 (39)	0 (0)	0 (0)	0 (0)	3 (8)	36				
2009	22 (56)	0 (0)	0 (0)	14 (36)	1 (3)	0 (0)	0 (0)	2 (5)	39				
2008	20 (56)	0 (0)	0 (0)	12 (33)	0 (0)	0 (0)	0 (0)	4 (11)	36				
2007	16 (55)	2 (7)	1 (3)	9 (31)	0 (0)	0 (0)	0 (0)	1 (3)	29				
2006	25 (64)	0 (0)	0 (0)	8 (21)	0 (0)	0 (0)	0 (0)	6 (15)	39				
2005	21 (62)	2 (6)	1 (3)	8 (24)	0 (0)	0 (0)	0 (0)	2 (6)	34				
2004	15 (52)	2 (7)	2 (7)	8 (28)	0 (0)	0 (0)	0 (0)	2 (7)	29				
2003	19 (61)	0 (0)	1 (3)	5 (16)	0 (0)	0 (0)	0 (0)	6 (19)	31				
2002	15 (56)	1 (4)	0 (0)	9 (33)	0 (0)	0 (0)	0 (0)	2 (7)	27				
2001	11 (46)	0 (0)	0 (0)	10 (42)	0 (0)	0 (0)	0 (0)	3 (13)	24				
'84-'00	128 (72)	1 (<1)	1 (<1)	40 (23)	1 (<1)	0 (0)	0 (0)	6 (3)	177				
<b>Total</b>	<b>700 (59)</b>	<b>16 (1)</b>	<b>7 (&lt;1)</b>	<b>328 (28)</b>	<b>9 (&lt;1)</b>	<b>1 (&lt;1)</b>	<b>24 (2)</b>	<b>93 (8)</b>	<b>1,178</b>				

SPK, simultaneous pancreas-kidney; PAK, pancreas after kidney; PTA, pancreas alone. Excludes nine transplants performed in Australia outside of Westmead, Monash, or Royal Adelaide in 1988, 1990, 2005, 2017, two in 2021, 2024, and two in 2025. Also excludes one combined liver-pancreas transplant performed at Monash in 2016.

## Patients transplanted by state

The state of origin of the people receiving pancreas transplants at each transplant unit over time is shown in Table 2.2.

**Table 2.2: Pancreas transplants by transplant centre and recipient state of residence over the past three years**

Year	State of residence, n (row %)														Total		
	NSW		VIC		QLD		WA		SA		TAS		ACT			NT	
<b>Westmead (NSW)</b>																	
2025	15	(60)	0	(0)	4	(16)	4	(16)	0	(0)	0	(0)	2	(8)	0	(0)	25
2024	16	(59)	0	(0)	8	(30)	3	(11)	0	(0)	0	(0)	0	(0)	0	(0)	27
2023	9	(33)	0	(0)	10	(37)	6	(22)	0	(0)	0	(0)	2	(7)	0	(0)	27
<b>Monash (VIC)</b>																	
2025	0	(0)	12	(80)	1	(7)	0	(0)	0	(0)	2	(13)	0	(0)	0	(0)	15
2024	0	(0)	10	(91)	0	(0)	0	(0)	0	(0)	1	(9)	0	(0)	0	(0)	11
2023	0	(0)	9	(75)	0	(0)	0	(0)	1	(8)	2	(17)	0	(0)	0	(0)	12
<b>Royal Adelaide (SA)</b>																	
2025	0	(0)	0	(0)	0	(0)	0	(0)	2	(100)	0	(0)	0	(0)	0	(0)	2
2024	0	(0)	0	(0)	0	(0)	0	(0)	4	(100)	0	(0)	0	(0)	0	(0)	4
2023	0	(0)	0	(0)	0	(0)	0	(0)	3	(100)	0	(0)	0	(0)	0	(0)	3
<b>Auckland (NZ)</b>																	
2025	-		-		-		-		-		-		-		-		6
2024	-		-		-		-		-		-		-		-		4
2023	-		-		-		-		-		-		-		-		3

## Demographics of new pancreas transplant recipients

The characteristics of pancreas transplant recipients in 2025 and in previous years are shown in Table 2.3. The primary diagnosis causing end stage kidney disease of recipients during 2025 and historically was type I diabetes. Type 2 diabetes is not regarded as an indication for SPK in Australia and New Zealand, though there may be rare exceptions. Consequently, the number of people with type II diabetes accepted for pancreas transplantation was also small, and none received a transplant in 2025.

**Table 2.3: Demographics and characteristics of pancreas transplant recipients**

<b>Patients, n (column %)</b>	<b>2025</b>	<b>1984-2024</b>	<b>Total</b>
<b>Total, N (row %)</b>	50 (4)	1,138 (95)	1,188 (100)
<b>Age, median (IQR)</b>	43 (37, 48)	39 (34, 45)	39 (34, 45)
15-34	6 (12)	337 (29)	343 (28)
35-44	25 (50)	516 (45)	541 (45)
45-49	10 (20)	186 (16)	196 (16)
50+	9 (18)	99 (8)	108 (9)
<b>Sex</b>			
Female	19 (38)	525 (46)	544 (45)
Male	31 (62)	613 (53)	644 (54)
<b>Cause of kidney failure</b>			
Diabetes type 1	48 (96)	684 (60)	732 (61)
Diabetes type 2	0 (0)	2 (<1)	2 (<1)
Haemolytic uraemic syndrome	0 (0)	1 (<1)	1 (<1)
Interstitial nephritis	0 (0)	1 (<1)	1 (<1)
Wegener's granulomatosis	0 (0)	1 (<1)	1 (<1)
Polycystic kidney disease	0 (0)	0 (0)	0 (0)
Focal segmental glomerulosclerosis	0 (0)	1 (<1)	1 (<1)
No kidney disease	2 (4)	21 (1)	23 (1)
Not reported	0 (0)	427 (37)	427 (35)
<b>Ethnicity<sup>1</sup></b>			
Aboriginal & Torres Strait Islander	1 (2)	6 (<1)	7 (<1)
Māori	4 (8)	11 (<1)	15 (1)
Pacific peoples	1 (2)	14 (1)	15 (1)
White	41 (82)	1,058 (92)	1,099 (92)
North Asian	2 (4)	5 (<1)	7 (<1)
South-East Asian	0 (0)	1 (<1)	1 (<1)
Southern and Central Asian	0 (0)	24 (2)	24 (2)
North African and Middle Eastern	0 (0)	17 (1)	17 (1)
Other	0 (0)	1 (<1)	1 (<1)
Not reported	1 (2)	1 (<1)	2 (<1)
<b>Blood group</b>			
O	23 (46)	499 (43)	522 (43)
A	20 (40)	474 (41)	494 (41)
B	6 (12)	113 (9)	119 (10)
AB	1 (2)	52 (4)	53 (4)

The type of pancreas transplants and the types of donors for transplants performed in 2025 is presented in

Table 2.4, stratified by country and sex.

**Table 2.4: Transplant and donor pathway in 2025 by country and donor sex**

	Australia		New Zealand		Overall		Total
	Female	Male	Female	Male	Female	Male	
<b>Simultaneous pancreas-kidney</b>	12	25	1	5	13	30	43
<i>Donation after brain death</i>	11	20	1	5	12	25	37
<i>Donation after circulatory death</i>	1	5	0	0	1	5	6
<b>Pancreas alone</b>	1	0	0	0	1	0	1
<i>Donation after brain death</i>	1	0	0	0	1	0	1
<i>Donation after circulatory death</i>	0	0	0	0	0	0	0

Excludes two liver-pancreas transplants, three Australian SPK transplants where donor pathway was not reported, and one Australian SPK transplant where donor sex was not reported

## Balance of donor and recipient characteristics in 2025

Cross tabulations of donor and recipient blood group and sex for people transplanted in 2025 are displayed in Table 2.5 and Table 2.6. These distributions remain similar to previous years.

**Table 2.5: Cross tabulation of recipient and donor blood groups for 2025**

Recipient blood group	Donor blood group, n (row %)							Total
	O	A	B	AB				
O	23 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	23
A	0 (0)	20 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	20
B	0 (0)	0 (0)	6 (100)	0 (0)	0 (0)	0 (0)	0 (0)	6
AB	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	1
<b>Total</b>	23 (46)	20 (40)	6 (12)	1 (2)	0 (0)	0 (0)	0 (0)	50

**Table 2.6: Cross tabulation of recipient and donor sex for 2025**

Recipient sex	Donor sex, n (row %)				Total
	Female	Male	Female	Male	
Female	7 (41)	10 (58)	7 (41)	10 (58)	17
Male	7 (24)	22 (75)	7 (24)	22 (75)	29
<b>Total</b>	14 (30)	32 (69)	14 (30)	32 (69)	46

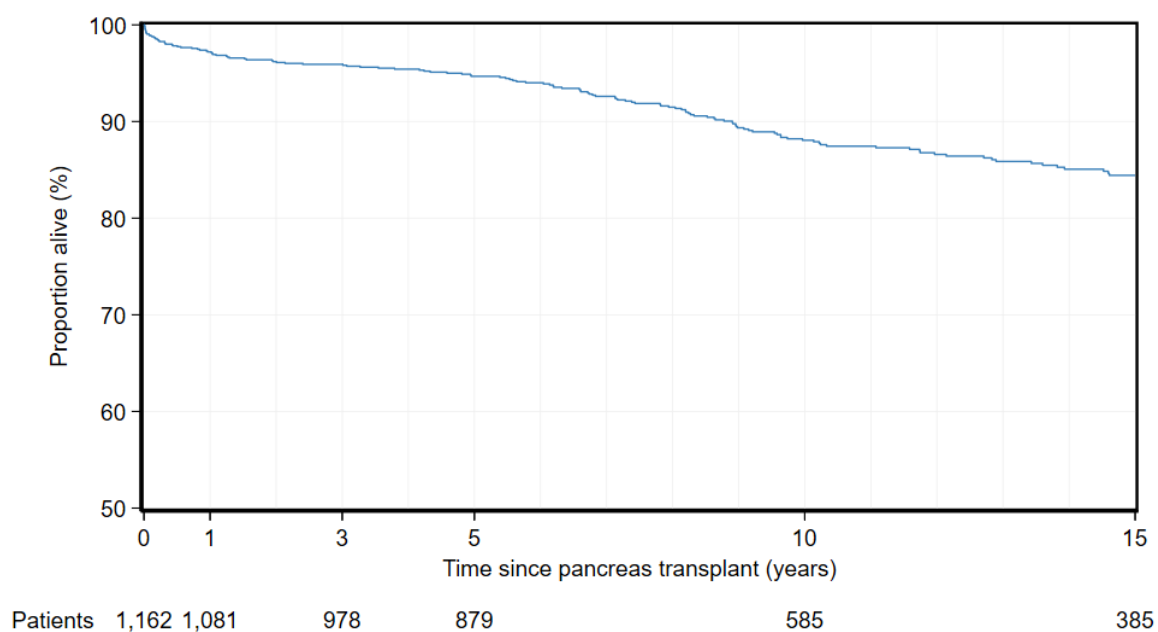
Excludes three transplants where donor sex was not reported

## Patient survival

Patient survival is calculated from the date of transplantation until death. Patients still alive at the end of 2025 are censored. For people who received more than one transplant, their survival is calculated from the date of their first transplant. There were 1,162 patients included, 26 of whom have received a second pancreas transplant, for a total of 1,188 pancreas transplant procedures. Note that for the following survival plots survival proportion on the y-axis does not always start at zero; this is to better demonstrate some observed differences.

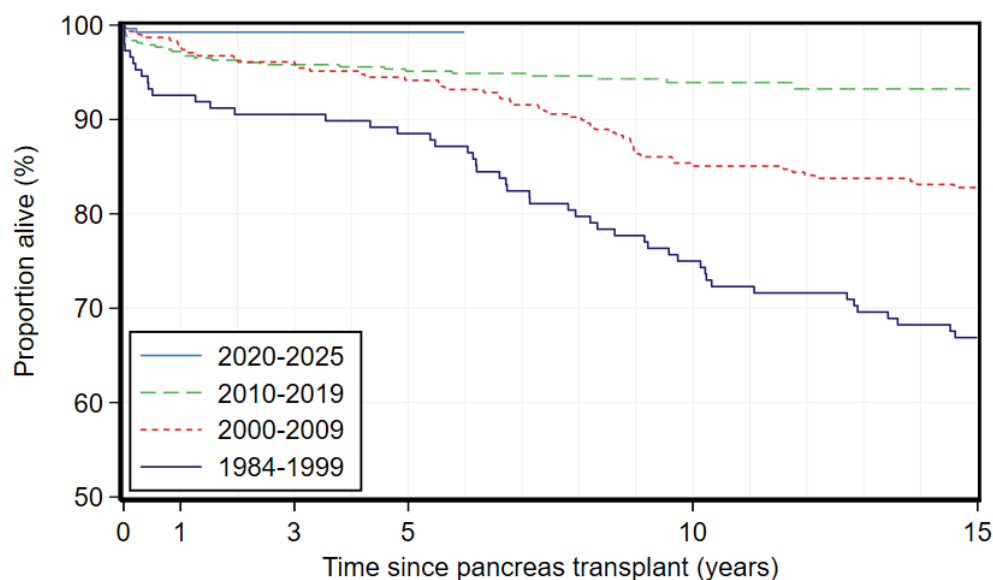
Figure 2.3 shows overall survival following pancreas transplant. There were 161 deaths over 13,754 years of follow-up. Survival at 1 year was 97.2%, at 5 years 94.7%, at 10 years 88.1%, and at 15 years 84.4%.

**Figure 2.3: Kaplan-Meier plot of patient survival after pancreas transplantation**



Patient survival by era of transplantation is shown in Figure 2.4. Survival has improved over time ( $p < 0.001$ ). Survival at 1 year for people transplanted 1984-1999 was 92.6%; in recent years this has risen to 99.3%. Survival at 5 years was 88.5% for those transplanted 1984-1999, whereas for those transplanted in 2020-2025, 5-year survival was 99.3%.

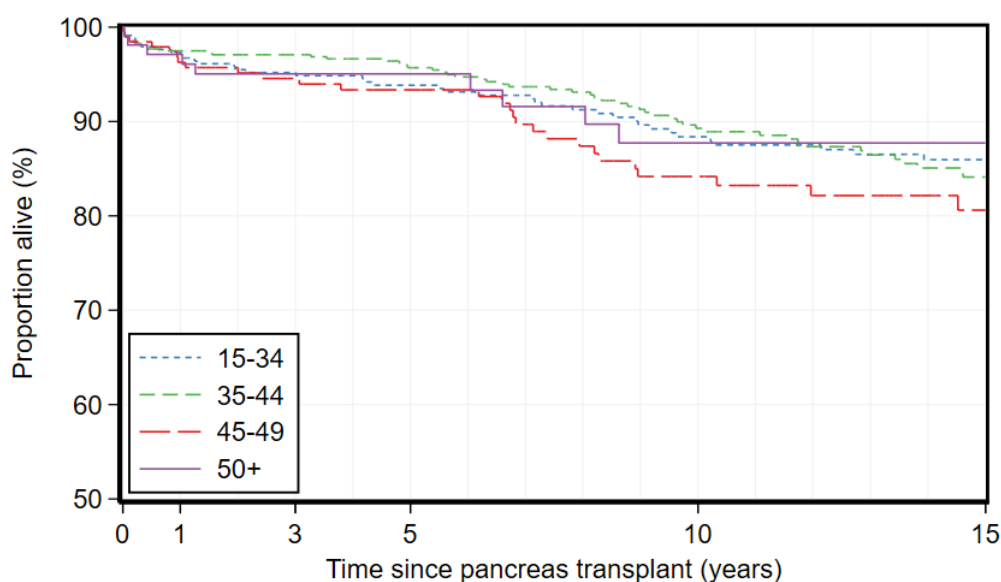
**Figure 2.4: Kaplan-Meier plot of patient survival by era of transplantation**



Year of transplant	0	1	3	5	10	15
2020-2025	276	225	136	49	0	0
2010-2019	430	418	412	409	212	31
2000-2009	308	301	296	290	262	255
1984-1999	148	137	134	131	111	99

Patient survival by age at transplantation is shown in Figure 2.5. Survival is generally similar across all age groups ( $p=0.3$ ). There is slightly greater survival for those aged 50 and older, potentially because these recipients are a more highly selected population. However, even among those younger than 50, survival is still similar across age groups ( $p=0.2$ ). Survival at 1 year was 97.3% for recipients aged 15-34, 97.5% for those aged 35-44, 96.3% for those aged 45-49, and 97.1% for those aged 50 or older. At 5 years, survival was 93.9% for those aged 15-34, 95.7% for those aged 35-44, 93.4% for those aged 45-49, and 95.1% for those aged 50 or older.

**Figure 2.5: Kaplan-Meier plot of patient survival by age at transplantation**



Age at transplant						
15-34	339	325	293	269	204	142
35-44	524	486	448	406	254	169
45-49	193	176	160	142	92	52
50+	106	94	77	62	35	22

## Pancreas survival

Pancreas graft survival was calculated from the time of transplant until the time of permanent return to insulin therapy or pancreatectomy. Analyses included both death-censored graft survival, and graft survival including death as graft failure. There are 26 patients who received two pancreas transplants, and therefore are included twice in the analysis, with a total of 1,138 pancreas transplants included.

Figure 2.6 shows pancreas graft survival censored at death. There were 189 pancreas failures over 11,562 years of follow-up (excluding people who died with a functioning transplant). Overall, 1-year pancreas graft survival was 90.2%, 5-year survival 86.6%, 10-year survival 84.1%, and 15-year survival was 81.8%.

**Figure 2.6: Kaplan-Meier plot of pancreas graft survival (censored at death)**

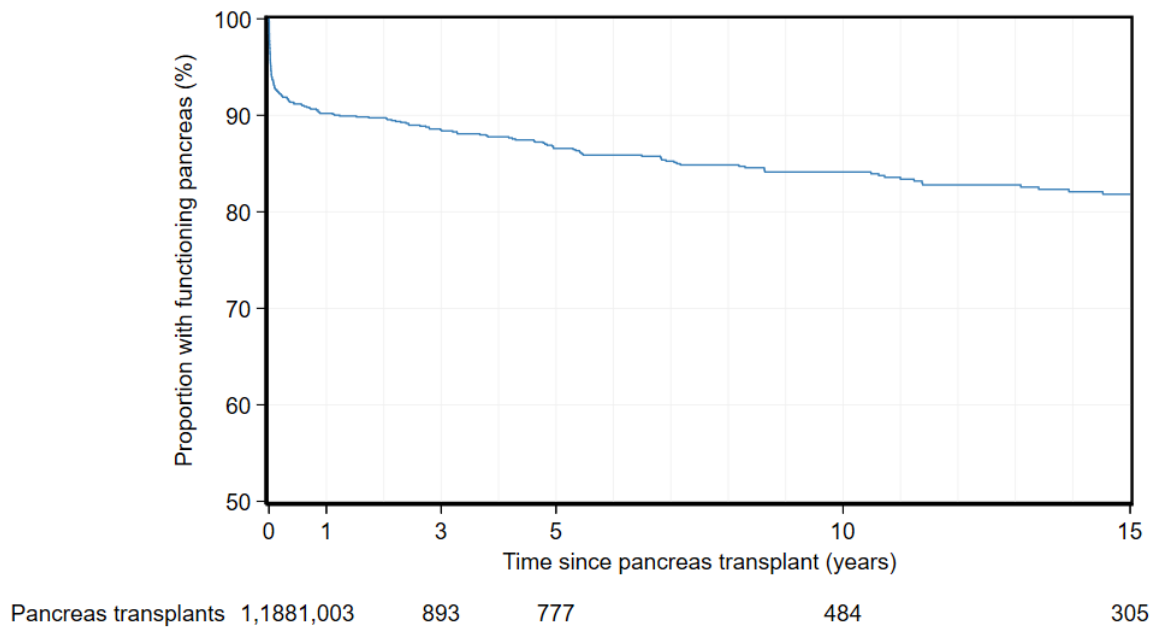
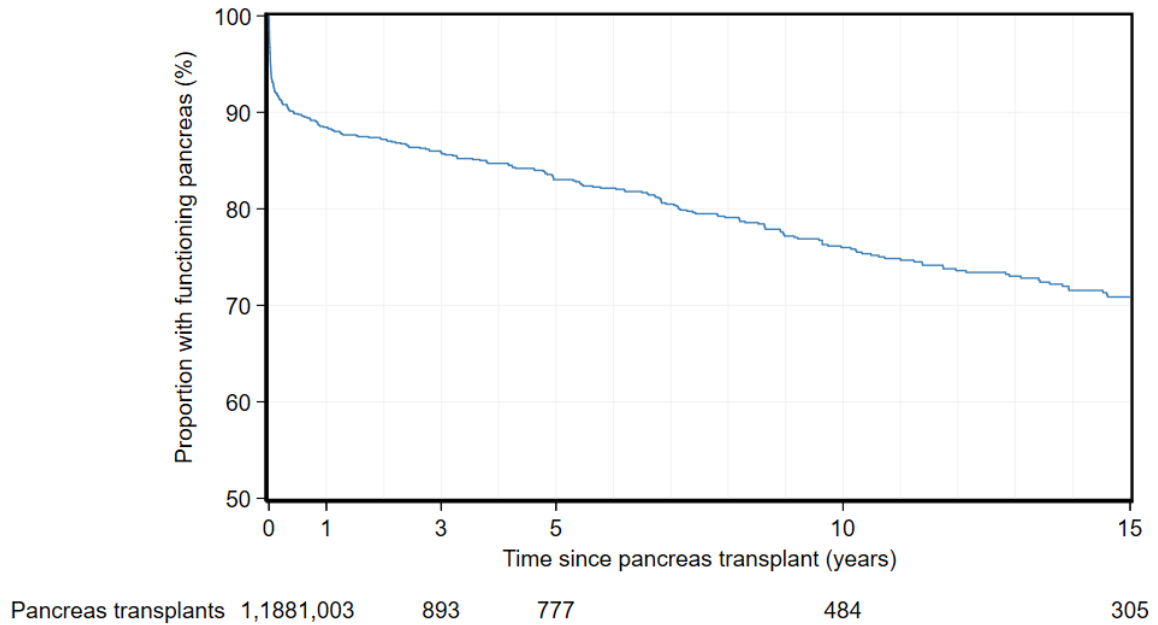


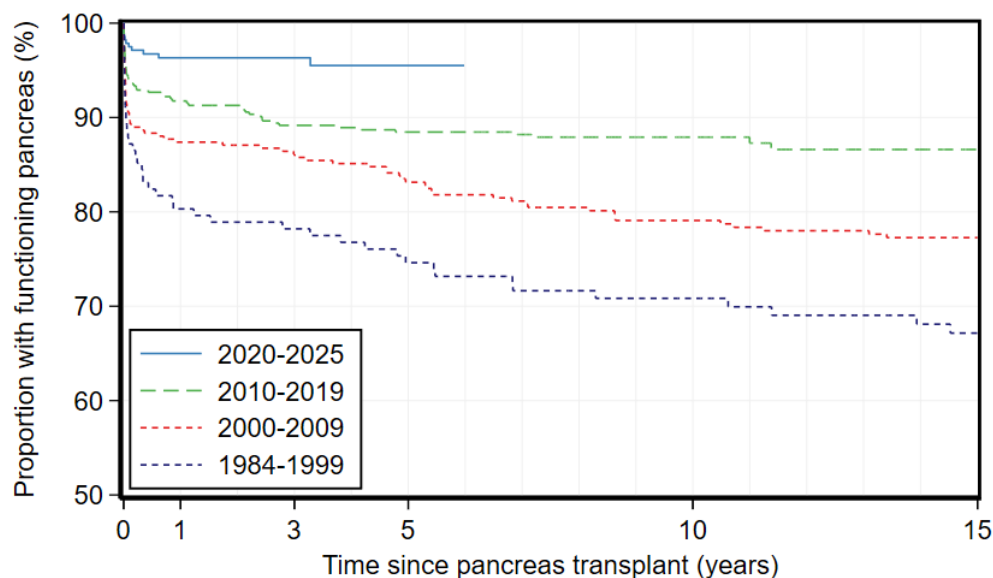
Figure 2.7 shows pancreas graft survival including death with a functioning pancreas as graft failure. Over the same observation time there were 304 recipients who either died or experienced pancreas graft failure. Overall, 1-year pancreas graft survival including death as graft failure was 88.5%, 5-year survival 83.0%, 10-year survival 86.0%, and 15-year survival was 70.8%.

**Figure 2.7 Kaplan-Meier plot of pancreas graft survival (including death as graft failure)**



Survival of pancreas transplants has changed over time, as shown in Figure 2.8. Survival improved markedly over time ( $p < 0.001$ ). For those transplanted 1984-1999, 1-year pancreas graft survival was 80.3%, and 5-year survival 74.6%. For those transplanted 2000-2009, 1-year pancreas graft survival was 87.6%, and 5-year survival 84.6%. For those transplanted 2010-2019, 1-year pancreas graft survival was 91.3%, and 5-year survival 88.6%. For those transplanted 2020-2025, 1-year pancreas graft survival was 96.3%, and 5-year survival 95.5%.

**Figure 2.8: Kaplan-Meier plot of pancreas graft survival over time (censored at death)**

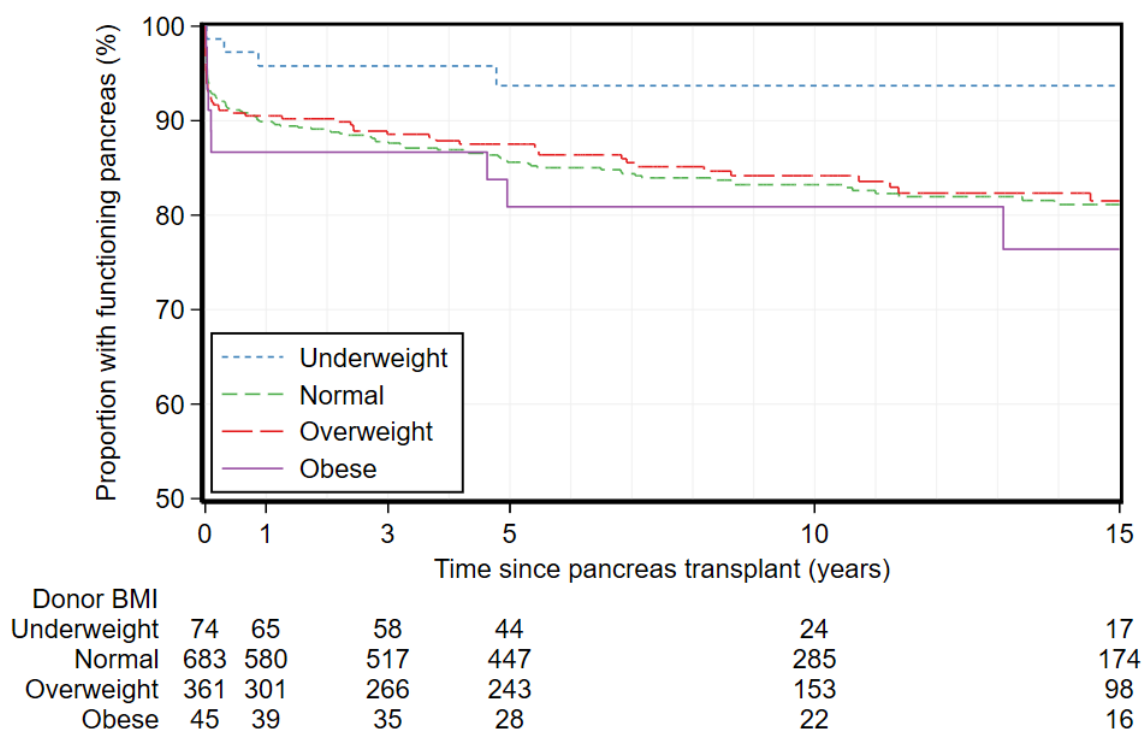


Year of transplant	0	1	3	5	10	15
2020-2025	281	220	138	49	0	0
2010-2019	439	394	379	374	182	27
2000-2009	318	274	266	251	219	208
1984-1999	150	115	110	103	83	70

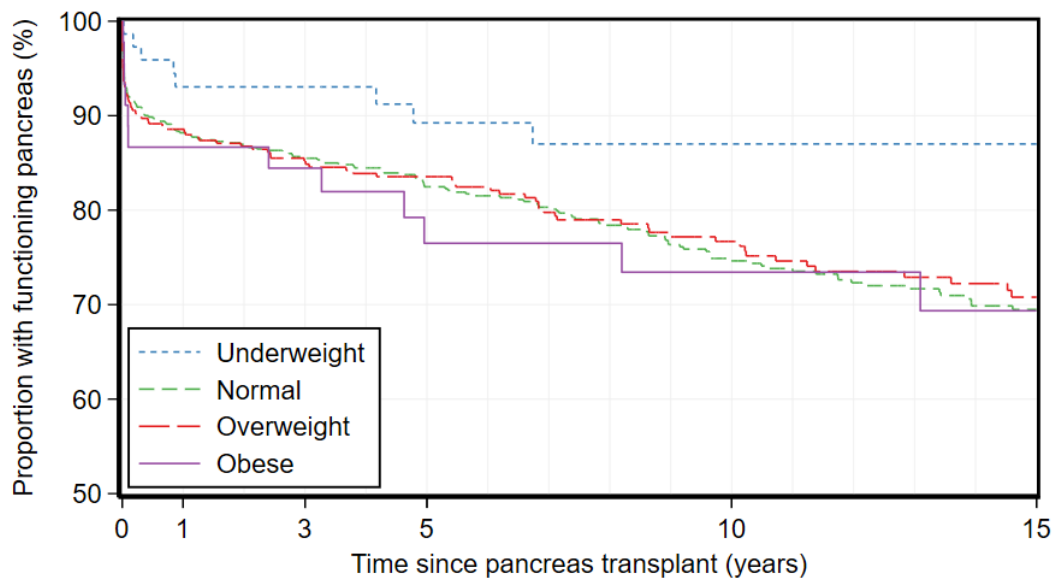
**Pancreas graft survival by donor BMI is presented in Figure 2.9 (censored at death) and**

Figure 2.10 (including death as pancreas failure). Most donors (59%) were normal weight (BMI 18.5-24.9). However, 6% were underweight (BMI <18.5), 31% were overweight (BMI 25-29.9) and 4% were obese (BMI 30+). While Figures 2.9 and 2.10 show slightly higher survival from underweight donors, there was no statistically significant association between donor BMI and pancreas survival either censored at death ( $p=0.2$ ) or including death as pancreas failure ( $p=0.2$ ). Pancreas graft survival at 1 year (censored at death) was 89.9% for transplants where the donor was normal BMI, 95.8% for underweight donors, 90.5% for overweight donors, and 86.7% for obese donors. Including death as pancreas failure, pancreas survival at 1-year was 88.2% for normal BMI donors, 93.1% for underweight donors, 88.6% for overweight donors, and 86.7% for obese donors.

**Figure 2.9: Kaplan-Meier plot of pancreas graft survival by donor BMI, censored at death**



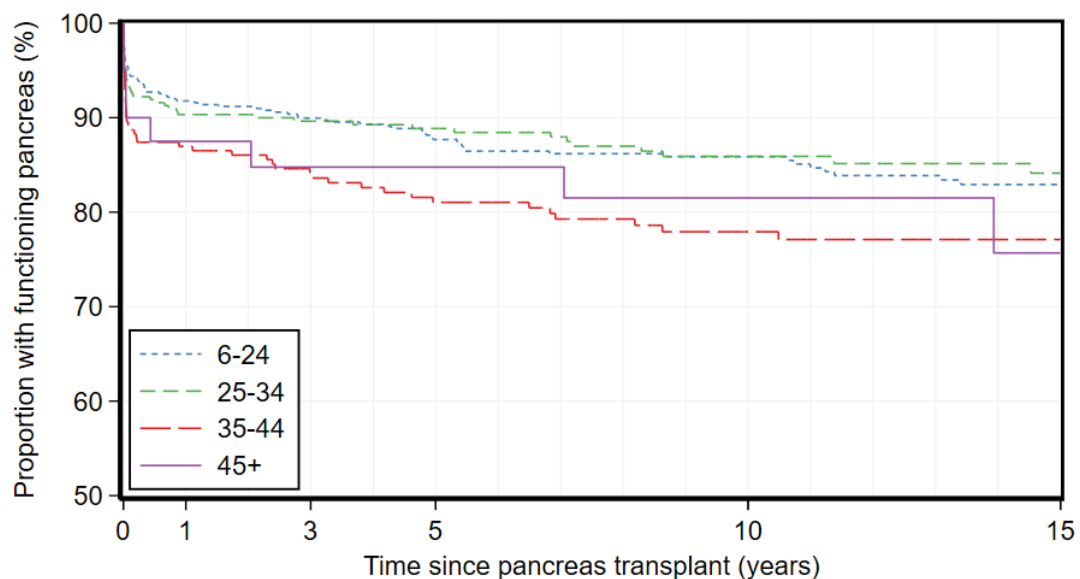
**Figure 2.10: Kaplan-Meier plot of pancreas graft survival by donor BMI, including death as pancreas failure**



Donor BMI	74	65	58	44	24	17
Underweight	74	65	58	44	24	17
Normal	683	580	517	447	285	174
Overweight	361	301	266	243	153	98
Obese	45	39	35	28	22	16

Pancreas graft survival by donor age is presented in Figure 2.11. The survival curves are similar across all donor age groups ( $p=0.1$ ), although there appears to be some evidence of a survival advantage from younger donors. Pancreas graft survival at 1 year was 91.5% for transplants from donors aged 6-24 years, 90.3% for donors aged 25-34 years, 87.0% for donors aged 35-44 years, and 87.5% for donors aged 45 years or older.

**Figure 2.11: Kaplan-Meier plot of pancreas graft survival by donor age (censored at death)**



Donor age	5	10	15			
6-24	553	478	431	369	231	150
25-34	335	282	249	216	133	81
35-44	242	195	170	154	99	61
45+	40	35	30	26	21	13

Pancreas graft survival at 1 year and 5 years post-transplant, censored at death and stratified by country and era of transplantation is presented in Table 2.7.

**Table 2.7: Pancreas transplant survival censored at death, by country and era**

Year	Transplants	Australia				New Zealand				
		1-year		5-year		1-year		5-year		
		<i>n</i>	%	<i>n</i>	%	<i>Transplants</i>	<i>n</i>	%	<i>n</i>	%
2016-2021	271	256	96.3%	219	95.5%	27	26	96.3%	20	92.6%
2017-2022	264	252	97.0%	172	96.2%	28	27	96.4%	17	96.4%
2018-2023	257	246	96.9%	130	96.4%	27	26	96.3%	13	96.3%
2019-2024	250	238	95.6%	84	94.9%	25	24	96.0%	7	96.0%
2020-2025	254	200	96.3%	46	95.4%	27	20	96.3%	3	96.3%

## Prevalence of functioning pancreas transplants

The number of people in Australia and New Zealand who were alive with a functioning transplant on 31<sup>st</sup> December each year for the last five years is shown in Table 2.8. This excludes people who are alive but had pancreas graft failure and no new transplant. The number of functioning transplants is increasing over time, possibly because of increased survival of pancreas transplants while the number of new transplants performed remains relatively steady over time.

**Table 2.8: People alive with a functioning pancreas transplant in Australia and New Zealand by year and residence, at year end**

Location	2021	2022	2023	2024	2025
<b>Australia</b>	<b>677</b>	<b>722</b>	<b>761</b>	<b>799</b>	<b>842</b>
New South Wales	189	200	208	223	238
Victoria	208	216	225	235	249
Queensland	145	162	172	179	184
Western Australia	35	39	45	47	51
South Australia	56	58	60	63	65
Tasmania	28	31	33	34	35
Australian Capital Territory	12	12	14	14	16
Northern Territory	4	4	4	4	4
<b>New Zealand</b>	<b>53</b>	<b>57</b>	<b>59</b>	<b>60</b>	<b>66</b>
<b>Total</b>	<b>730</b>	<b>779</b>	<b>820</b>	<b>859</b>	<b>908</b>

## Kidney survival

Kidney graft survival was calculated for those who received SPK transplants, from the time of transplantation until return to dialysis. Analyses included both death-censored graft survival, and graft survival including death as graft failure. Only SPK transplants were included, and there was a total of 1,141 SPK transplants.

Figure 2.12 shows kidney survival censored at death. There were 90 kidney failures over 12,517 years of observation (excluding people who died with a functioning kidney transplant). Overall, 1-year kidney transplant survival was 97.7%, 5-year survival 95.6%, 10-year survival 92.4%, and 15-year survival was 89.0%.

**Figure 2.12: Kaplan-Meier plot of kidney graft survival from SPK transplants (censored at death)**

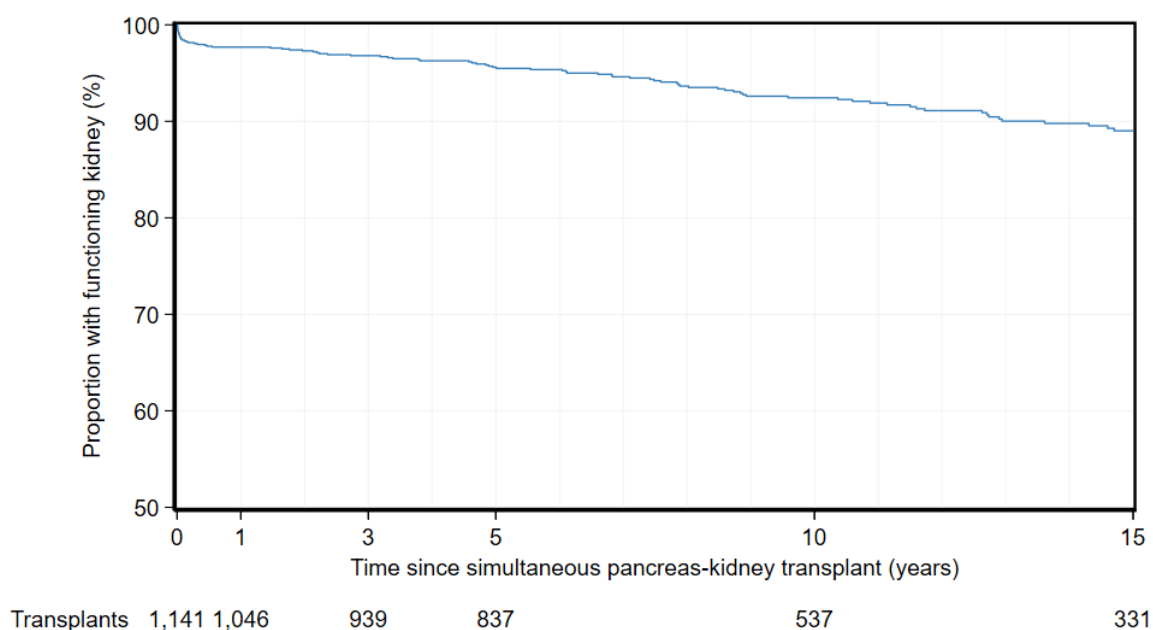
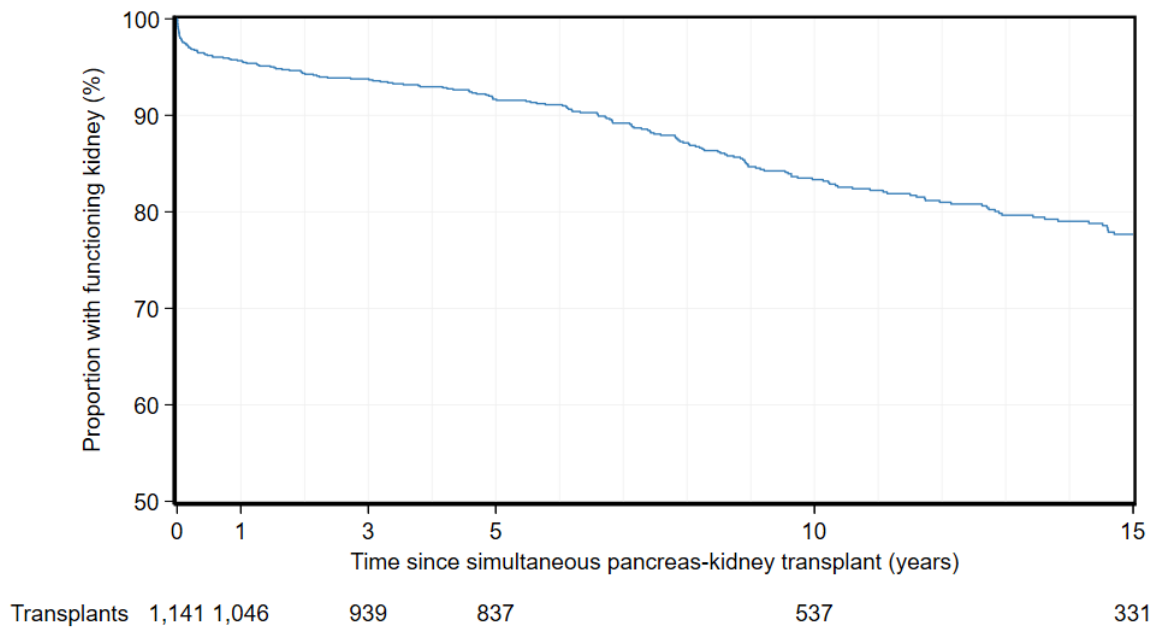


Figure 2.13 shows kidney survival including death with a functioning kidney as graft failure. Over the same observation time there were 210 recipients who either died with kidney graft function or experienced kidney graft failure. Overall, 1-year kidney transplant survival including death as graft failure was 95.7%, 5-year survival 91.7%, 10-year survival 83.3%, and 15-year survival was 77.7%.

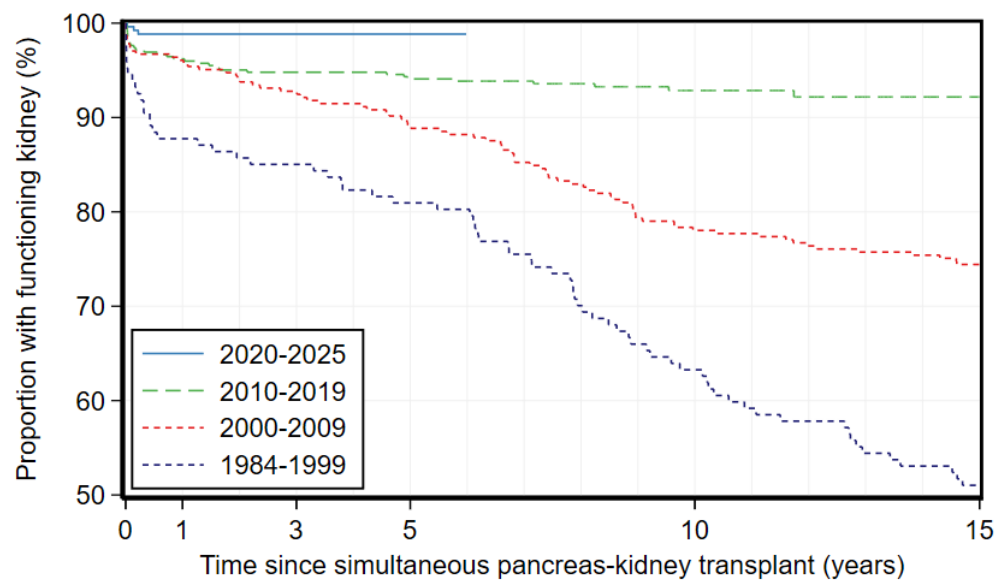
**Figure 2.13: Kaplan-Meier plot of kidney graft survival from SPK transplants (including death as graft failure)**





The era effect was even stronger when considering kidney failure including death with kidney function ( $p < 0.001$ ). For those transplanted 1984-1999, survival was 87.8% at 1 year and 81.0% at 5 years but was 96.2% at 1 year and 94.1% at 5 years for those transplanted in 2010-2019. For those transplanted 2020-2019, survival was 98.8% at 1 year, and 98.8% at 5 years (Figure 2.15).

**Figure 2.15: Kaplan-Meier plot of kidney graft survival from SPK transplants by era (including death as graft failure)**



Year of transplant	2020-2025	2010-2019	2000-2009	1984-1999
2020-2025	266	217	130	48
2010-2019	423	407	401	398
2000-2009	305	293	283	272
1984-1999	147	129	125	119

## Pancreas transplant operative data

Characteristics of the pancreas transplant operations for 2025, previous years, and overall are shown in Table 2.9 below.

**Table 2.9: Descriptive characteristics of pancreas transplant operations**

	2025		1984-2024		Overall	
<b>Pancreas</b>						
<b>Pancreas transplants, n (row %)</b>	50	(4)	1,138	(96)	1,188	(100)
<b>Cold ischaemic time (hours)</b>						
N (%)	46	(92)	950	(83)	996	(84)
Mean (SD)	8.6	(2.6)	11.7	(30.7)	11.6	(29.9)
Median (IQR)	8.0	(6.0, 10.5)	10.0	(7.5, 12.3)	10.0	(7.5, 12.2)
<b>Anastomosis time (minutes)</b>						
N (%)	29	(58)	867	(76)	896	(75)
Mean (SD)	20.8	(5.5)	27.8	(8.7)	27.6	(8.7)
Median (IQR)	19.0	(17.0, 22.0)	28.0	(22.0, 33.0)	28.0	(22.0, 33.0)
<b>Exocrine drainage</b>						
Enteric, n (%)	48	(96)	901	(79)	949	(80)
Bladder, n (%)	0	(0)	164	(14)	164	(14)
Not reported, n (%)	2	(4)	73	(6)	75	(6)
<b>Kidney</b>						
<b>SPK transplants, n (row %)</b>	47	(4)	1,094	(96)	1,141	(100)
<b>Cold ischaemic time (hours)</b>						
N (%)	46	(92)	917	(81)	963	(81)
Mean (SD)	8.6	(2.6)	11.8	(31.2)	11.7	(30.4)
Median (IQR)	8.0	(6.0, 10.5)	10.0	(7.5, 12.3)	10.0	(7.5, 12.2)
<b>Anastomosis time (minutes)</b>						
N (%)	29	(58)	836	(73)	865	(73)
Mean (SD)	20.8	(5.5)	27.9	(8.6)	27.7	(8.6)
Median (IQR)	19.0	(17.0, 22.0)	28.0	(23.0, 33.0)	28.0	(22.0, 33.0)
<b>Kidney donor arteries</b>						
None, n (%)	0	(0)	2	(<1)	2	(<1)
One, n (%)	20	(43)	804	(73)	824	(72)
Two, n (%)	2	(4)	93	(9)	95	(8)
Three, n (%)	0	(0)	5	(<1)	5	(<1)
Not reported, n (%)	25	(53)	190	(17)	215	(19)

SPK, simultaneous pancreas-kidney

<sup>1</sup> Anastomosis time is not routinely recorded in New Zealand

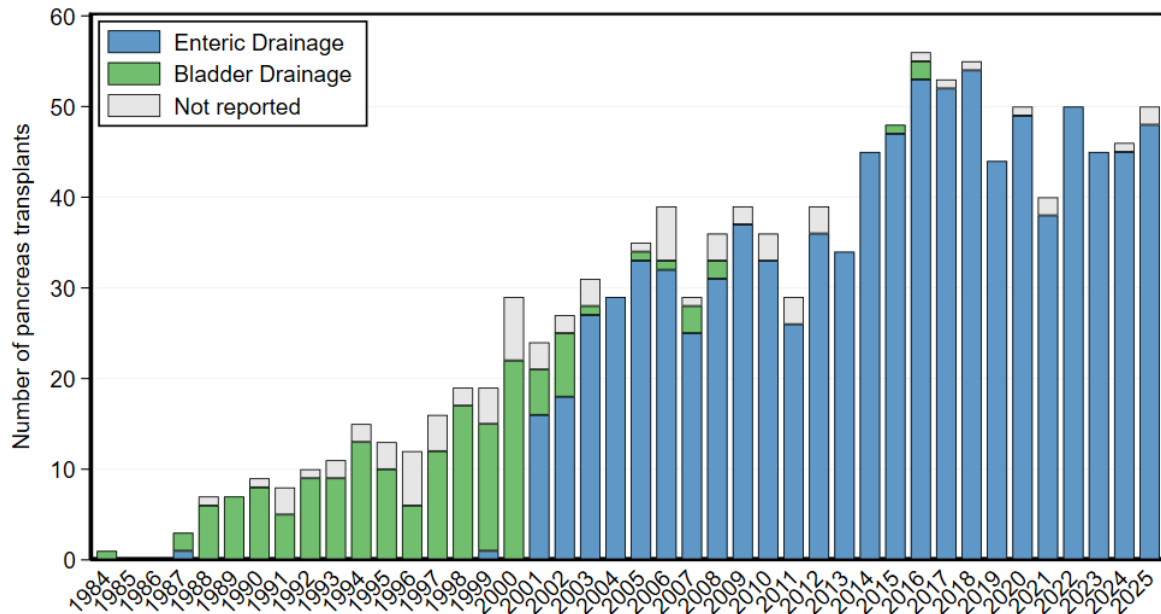
To investigate variations in total cold ischaemic time in Australia by donor state and distance travelled to the transplanting centre, Table 2.10 displays a cross tabulation of donor state of origin with transplanting centre.

**Table 2.10: Pancreas cold ischaemic time by donor state, for Australian pancreas transplants 2025**

<b>Donor state/territory</b>	<b>Cold ischaemic time (hours)</b>								
	<b>Westmead (NSW)</b>			<b>Monash (VIC)</b>			<b>Royal Adelaide (SA)</b>		
	<i>N</i>	<i>Mean</i>	<i>(SD)</i>	<i>N</i>	<i>Mean</i>	<i>(SD)</i>	<i>N</i>	<i>Mean</i>	<i>(SD)</i>
New South Wales	14	6.3	(1.0)	1	10.0	-	0	-	-
Victoria	1	10.0	-	9	7.6	(1.3)	1	9	-
Queensland	4	9.0	(0.8)	1	13.0	-	0	-	-
Western Australia	4	11.8	(0.5)	0	-	-	0	-	-
South Australia	0	-	-	1	10.5	-	1	6	-
Tasmania	0	-	-	2	12.0	(2.8)	0	-	-
Australian Capital Territory	1	7.0	-	0	-	-	0	-	-
Northern Territory	0	-	-	0	-	-	0	-	-
<b>Total</b>	24	7.8	(2.3)	14	9.0	(2.5)	2	8	(2.1)

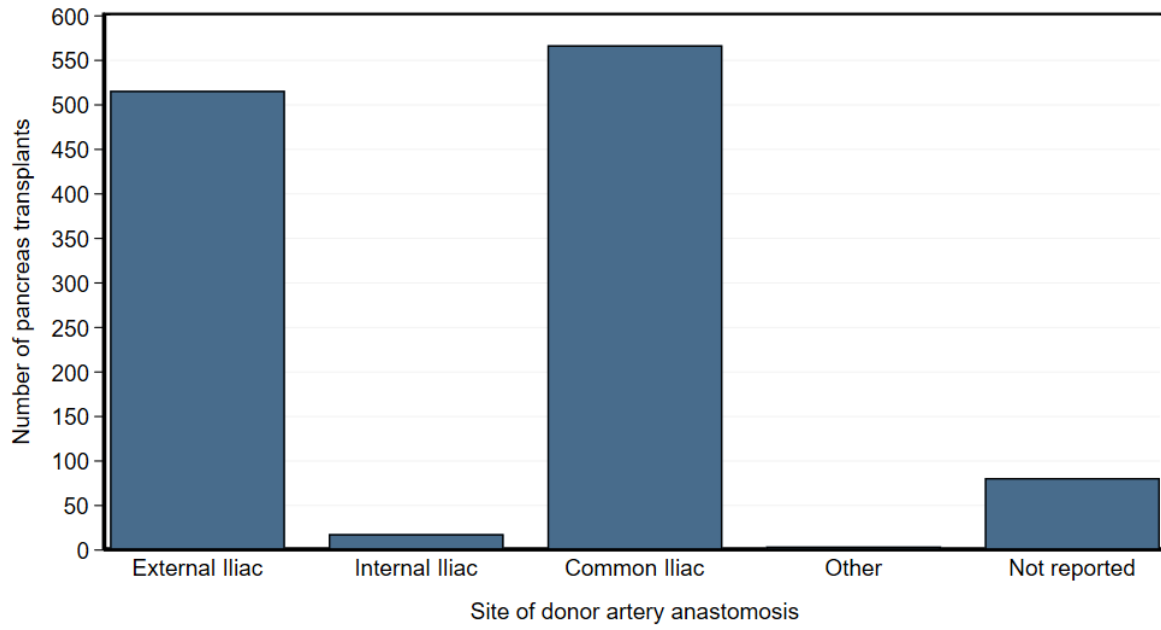
## Surgical technique

Exocrine drainage of the pancreas has changed over time. Enteric drainage of the pancreas was first used in Australia and New Zealand during 2001. Figure 2.16 illustrates the number of transplants by pancreas duct management. Since 2001, most pancreas transplants have used enteric drainage of the pancreas duct.

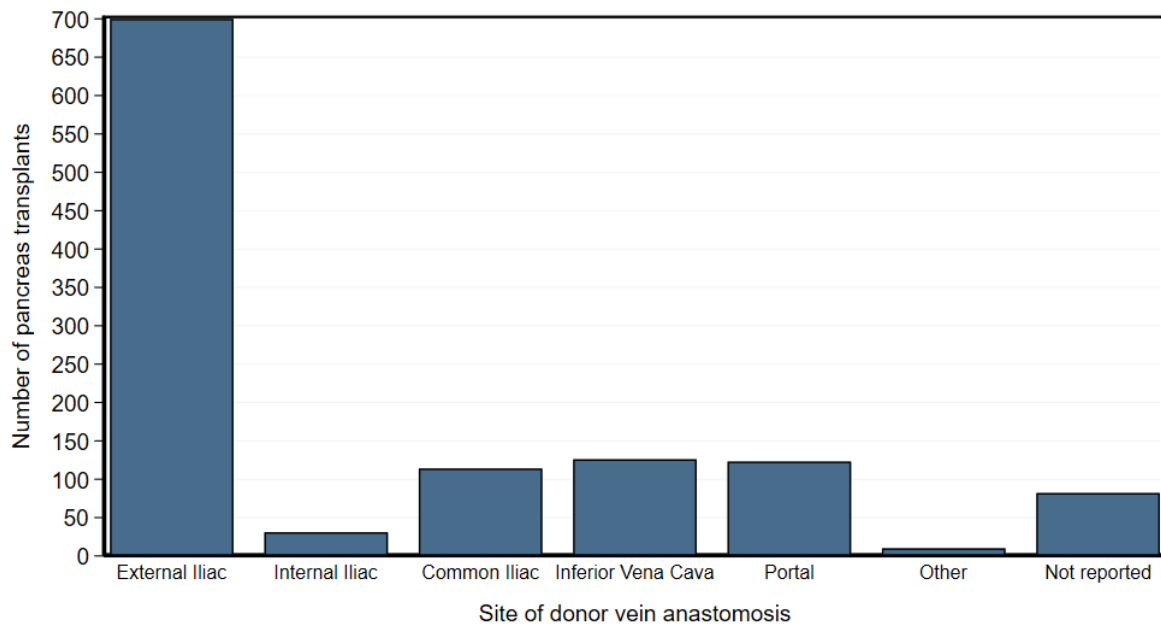
**Figure 2.16: Change in management of exocrine drainage of the pancreas over time**

The site of donor vessel anastomoses onto the recipient vessels is dependent on many things, including but not limited to surgeon's preference, surgical ease of access, length and relative calibre of donor vessels. The sites of anastomosis for donor arteries and veins are displayed in Figure 2.17 and Figure 2.18 below.

**Figure 2.17: Site of donor artery anastomosis onto recipient vessel**



**Figure 2.18: Site of donor vein anastomosis onto recipient vessel**



The immunological matching of donor-recipient pairs is shown in Table 2.11, and the cytomegalovirus (CMV) and Epstein-Barr virus (EBV) matching is illustrated in Table 2.12.

**Table 2.11: Immunological cross-matching of donor recipient pairs**

	Donor-recipient pairs, n (column %)	
	Current	Peak
<b>Crossmatch</b>		
T and B cell Negative	924 (78)	880 (74)
T-cell Positive	0 (0)	3 (<1)
B-cell Positive	7 (<1)	9 (<1)
<i>DTT Negative</i>	3 (<1)	5 (<1)
None	17 (1)	22 (2)
Not reported	240 (20)	274 (23)
<b>Recipient Panel Reactive Antibodies (%)</b>		
0-49	158 (13)	151 (13)
50+	4 (<1)	13 (1)
Not reported	1,026 (86)	1,024 (86)

**Table 2.12: Infectious disease serology cross-tabulation of donor-recipient pairs**

Recipient serology	Donor serology, n (column %)		
	<i>Positive</i>	<i>Negative</i>	<i>Not reported</i>
<b>Cytomegalovirus (CMV)</b>			
Positive	270 (36)	88 (23)	5 (9)
Negative	45 (6)	27 (7)	4 (8)
Not reported	435 (58)	270 (70)	44 (83)
<b>Epstein-Barr virus (EBV)</b>			
Positive	324 (42)	39 (37)	43 (14)
Negative	22 (3)	3 (3)	5 (2)
Not reported	421 (55)	64 (60)	267 (85)

## Chapter 3: Pancreas donors

*Authors: Angela Webster, James Hedley. Data contributors: Paul Robertson, Tia Mark, Helen Pilmore, Danielle Stephenson*

This chapter gives an overview of donors in 2025 and over time. Donor eligibility criteria guidelines are available in the TSANZ consensus statement <https://tsanz.com.au/guidelinesethics-documents/tsanz-clinical-guidelines.htm>, but briefly require donors to be over 25kg, and up to the age of 45, without known diabetes mellitus, or history of alcoholism, or pancreatic trauma. Donation after circulatory death may be considered up to the age of 35. As these are guidelines, there may be occasions when there is minor deviation from these criteria.

Donor BMI is perceived as impacting recipient outcomes. Obese donors are more likely to have a fatty pancreas, which results in more difficult surgery and increased postoperative complications, and suboptimal insulin secretion. Alcohol consumption is defined by a history of consumption of more than 40g/day. Table 3.1 describes pancreas donor characteristics in Australia and New Zealand to date.

## Pancreas donor characteristics

**Table 3.1: Demographics and characteristics of pancreas transplant donors**

	Donors, n (column %)					
	2025		1984-2024		Overall	
<b>Total (row %)</b>	50	(4)	1,138	(96)	1,188	(100)
<b>Age</b>						
0-24	18	(36)	535	(47)	553	(47)
25-34	20	(40)	315	(28)	335	(28)
35-44	9	(18)	233	(20)	242	(20)
45+	0	(0)	40	(4)	40	(3)
Not reported	3	(6)	15	(1)	18	(2)
<b>Sex</b>						
Female	14	(28)	610	(54)	624	(53)
Male	33	(66)	516	(45)	549	(46)
Not reported	3	(6)	12	(1)	15	(1)
<b>BMI (kg/m<sup>2</sup>)</b>						
Underweight/Normal (<24.9)	28	(56)	729	(64)	757	(64)
Overweight (25-29.9)	19	(38)	342	(30)	361	(30)
Obese (30+)	1	(2)	45	(4)	46	(4)
Not reported	2	(4)	22	(2)	24	(2)
<b>Pathway</b>						
Brain death (DBD)	39	(78)	1,103	(97)	1,142	(96)
Circulatory death (DCD)	6	(12)	31	(3)	37	(3)
Not reported	5	(10)	4	(<1)	9	(<1)
<b>Mode of death</b>						
Cerebral hypoxia/ischaemia	30	(60)	222	(20)	252	(21)
Cerebral infarct	0	(0)	22	(2)	22	(2)
Intracranial haemorrhage	7	(14)	283	(25)	290	(24)
Non-neurological condition	0	(0)	195	(17)	195	(16)
Other neurological condition	2	(4)	26	(2)	28	(2)
Traumatic brain injury	9	(18)	373	(33)	382	(32)
Not reported	2	(4)	17	(1)	19	(2)
<b>Alcohol consumption</b>						
Never	31	(62)	827	(73)	858	(72)
Former	3	(6)	10	(<1)	13	(1)
Current	14	(28)	120	(11)	134	(11)
Not reported	2	(4)	181	(16)	183	(15)
<b>Smoking history</b>						
Never	29	(58)	678	(60)	707	(60)
Former	2	(4)	53	(5)	55	(5)
Current	17	(34)	286	(25)	303	(26)
Not reported	2	(4)	121	(11)	123	(10)

	Donors, n (column %)					
	2025		1984-2024		Overall	
<b>Blood group</b>						
O	23	(46)	542	(48)	565	(48)
A	20	(40)	454	(40)	474	(40)
B	6	(12)	110	(10)	116	(10)
AB	1	(2)	29	(3)	30	(3)
Not reported	0	(0)	3	(<1)	3	(<1)
<b>Kidney biopsy</b>						
Not performed	18	(36)	789	(69)	807	(68)
Performed	25	(50)	298	(26)	323	(27)
Not reported	7	(14)	51	(4)	58	(5)
<b>Cytomegalovirus (CMV)</b>						
Positive	38	(76)	712	(63)	750	(63)
Negative	9	(18)	376	(33)	385	(32)
Not reported	3	(6)	50	(4)	53	(4)
<b>Epstein-Barr virus (EBV)</b>						
Positive	44	(88)	723	(64)	767	(65)
Negative	3	(6)	103	(9)	106	(9)
Not reported	3	(6)	312	(27)	315	(27)

The distribution of donor state/territory by transplanting unit for Australian pancreas donors is shown in Table 3.2.

**Table 3.2: Pancreas donors in Australia by transplant unit and state of residence over time**

State	Donors, n (column %)				
	2025	2024	2023	2022	2021
<b>Westmead (NSW)</b>	25	27	27	32	21
NSW	14 (56)	11 (41)	12 (44)	12 (38)	7 (33)
VIC	2 (8)	1 (4)	1 (4)	2 (6)	1 (5)
QLD	4 (16)	7 (26)	8 (30)	7 (22)	8 (38)
WA	4 (16)	4 (15)	2 (7)	7 (22)	2 (10)
SA	0 (0)	3 (11)	3 (11)	2 (6)	2 (10)
TAS	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
ACT	1 (4)	1 (4)	1 (4)	2 (6)	1 (5)
NT	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Not reported	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<b>Monash (VIC)</b>	15	11	12	12	7
NSW	1 (7)	0 (0)	2 (17)	0 (0)	1 (14)
VIC	10 (67)	9 (82)	6 (50)	10 (83)	5 (71)
QLD	1 (7)	0 (0)	1 (8)	0 (0)	0 (0)
WA	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
SA	1 (7)	1 (9)	1 (8)	0 (0)	1 (14)
TAS	2 (13)	1 (9)	2 (17)	2 (17)	0 (0)
ACT	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
NT	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Not reported	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<b>Royal Adelaide (SA)</b>	2	4	3	1	4
NSW	0 (0)	0 (0)	1 (33)	0 (0)	0 (0)
VIC	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)
QLD	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
WA	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
SA	1 (50)	3 (75)	2 (67)	1 (100)	4 (100)
TAS	0 (0)	1 (25)	0 (0)	0 (0)	0 (0)
ACT	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
NT	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Not reported	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Excludes four liver-pancreas transplants performed at Austin hospital (two in 2021, and two in 2025)

## Donor and recipient state/territory

Table 3.3 shows the distribution of donor organs according to state of origin, cross-tabulated with the state of origin of the recipients who received those organs, for 2025, and from inception of the pancreas program. Note, these tables include Australian donors and recipients only.

**Table 3.3: Pancreas transplants in Australia by donor and recipient state of residence for 2025 and all years**

Recipient state	Donor state, n (row %)								Total	
	NSW	VIC	QLD	WA	SA	TAS	ACT	NT		Not reported
<b>2025 only</b>	15	13	5	4	2	2	1	0	2	44
NSW	9	1	4	0	0	0	1	0	0	15
VIC	0	8	1	0	1	2	0	0	2	14
QLD	2	1	0	2	0	0	0	0	0	5
WA	2	0	0	2	0	0	0	0	0	4
SA	0	1	0	0	1	0	0	0	0	2
TAS	0	2	0	0	0	0	0	0	0	2
ACT	2	0	0	0	0	0	0	0	0	2
NT	0	0	0	0	0	0	0	0	0	0
Not reported	0	0	0	0	0	0	0	0	0	0
<b>1984-2025</b>	393	306	122	83	101	36	46	3	3	1,093
NSW	191	17	46	26	25	5	21	0	0	331
VIC	24	230	5	6	11	24	3	0	3	306
QLD	96	13	48	25	27	0	14	1	0	224
WA	29	5	16	17	6	1	3	0	0	77
SA	18	22	3	5	27	2	5	2	0	84
TAS	16	18	1	0	1	4	0	0	0	40
ACT	18	1	3	2	3	0	0	0	0	27
NT	1	0	0	2	1	0	0	0	0	4
Not reported	0	0	0	0	0	0	0	0	0	0

---

# Appendices

## **Previous ANZIPTR Reports, other abstracts, and publications**

We have not been notified of any publications or abstracts using ANZIPTR data within the past year.