



Annual Report 2023

Tables and Figures

*Australian and New Zealand Islet
and Pancreas Transplant Registry*

Table 1.1

Waitlist activity in Australia for the last three years



Activity	Patients (n)		
	2020	2021	2022
Active on list at beginning of year	84	78	102
Added to active list during the year	47	66	56
Removed from active list during year	2	5	9
Pancreas transplants to patients on waiting list	47	34	45
Kidney only transplants to patients on waiting list	2	3	2
Transplants performed outside Australia/New Zealand	0	0	0
Died while active on list	2	0	1
On active waiting list at the end of year	78	102	101
Died within 12 months of removal from list	0	0	0
Under consideration but not active on list	176	153	134
Referred, considered, but declined for pancreas transplantation	4	2	6



Figure 1.1

Distribution of people active on the waiting list by state of residence

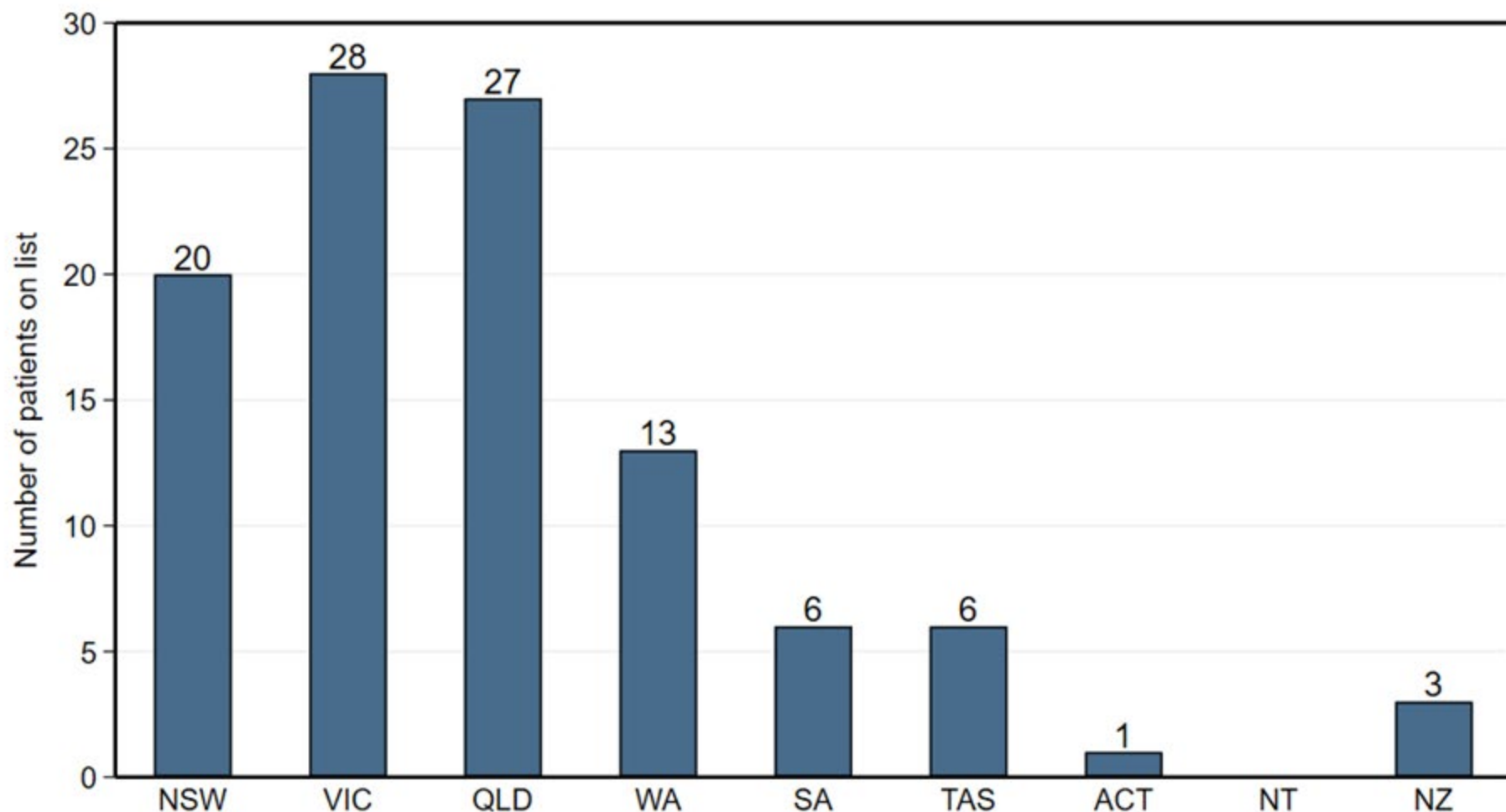
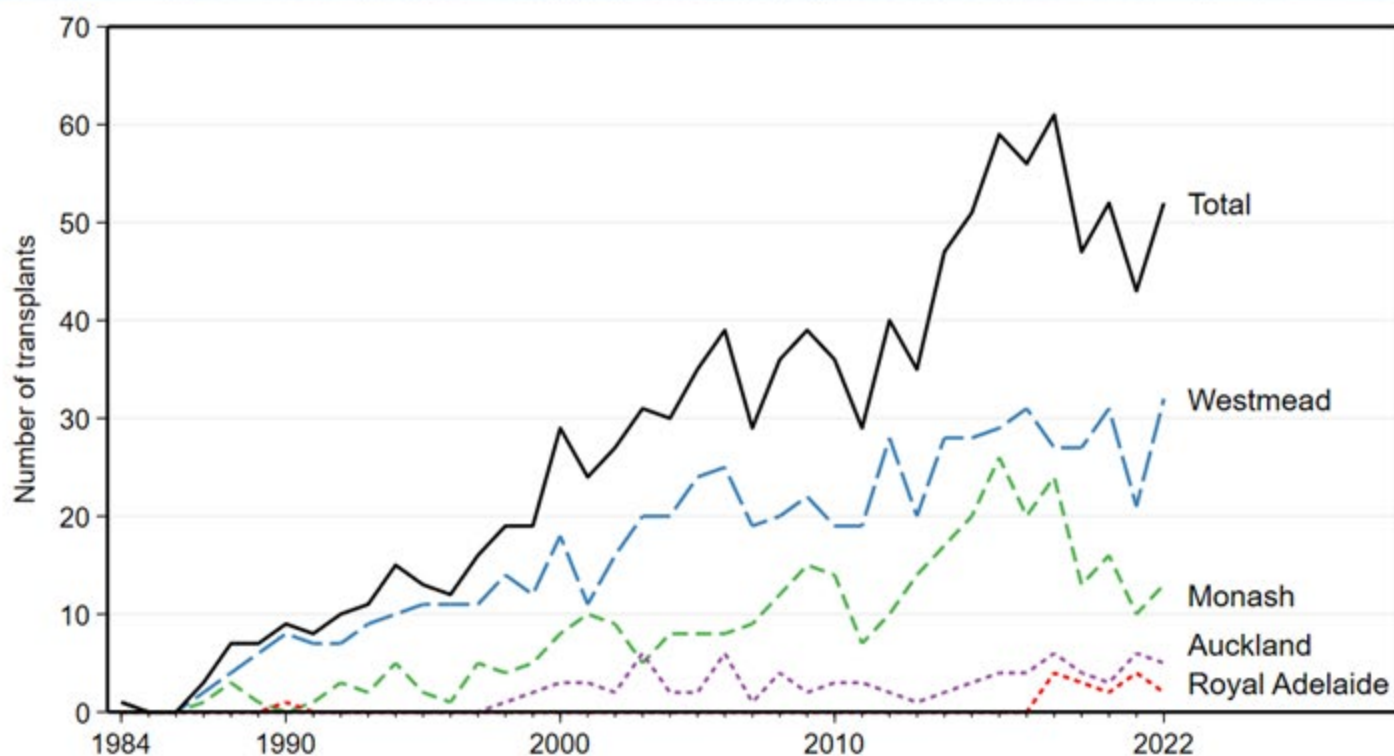


Figure 2.1

Pancreas transplants by hospital,
1984-2022



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

Figure 2.2

Pancreas transplant by type over time

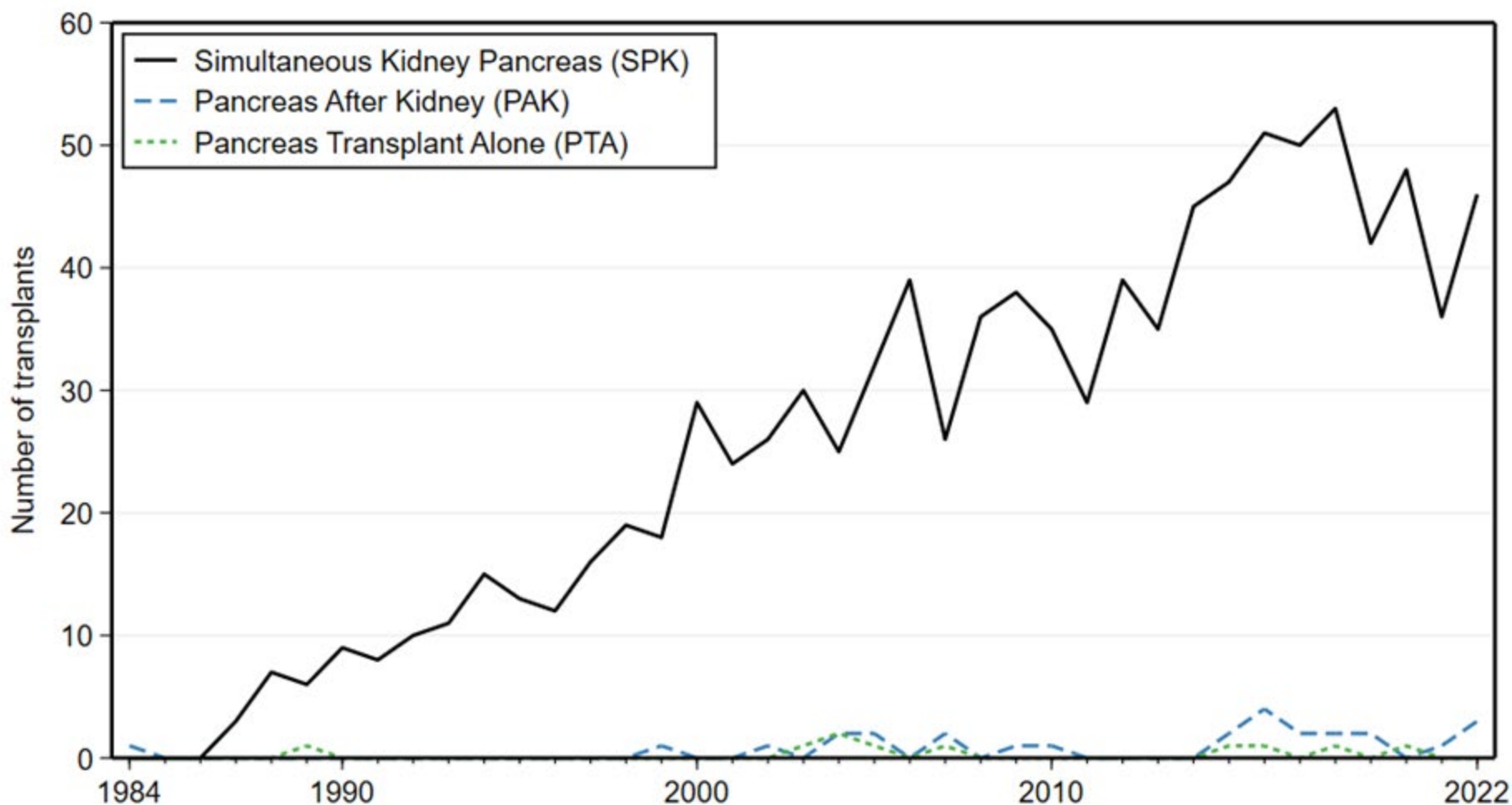


Table 2.3

Demographics and characteristics of pancreas transplant recipients



Patients, n (column %)	2022	1984-2021	Total
Age category			
Median (IQR)	40.5 (37, 48)	39 (33, 44)	39 (33, 44)
0-34	8 (16)	306 (30)	314 (29)
35-44	24 (48)	457 (45)	481 (45)
45-50	8 (16)	165 (16)	173 (16)
50+	10 (20)	73 (7)	83 (7)
Not reported	0 (0)	1 (<1)	1 (<1)
Sex			
Female	25 (50)	463 (46)	488 (46)
Male	25 (50)	539 (53)	564 (53)
Not reported	0 (0)	0 (0)	0 (0)
Cause of end stage kidney disease			
Diabetes type 1	49 (98)	527 (52)	576 (54)
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)
Focal segmental glomerulosclerosis	0 (0)	1 (<1)	1 (<1)
No kidney disease	1 (2)	21 (2)	22 (2)
Not reported	0 (0)	448 (44)	448 (42)

Table 2.3 (Cont'd)

Demographics and characteristics of pancreas transplant recipients

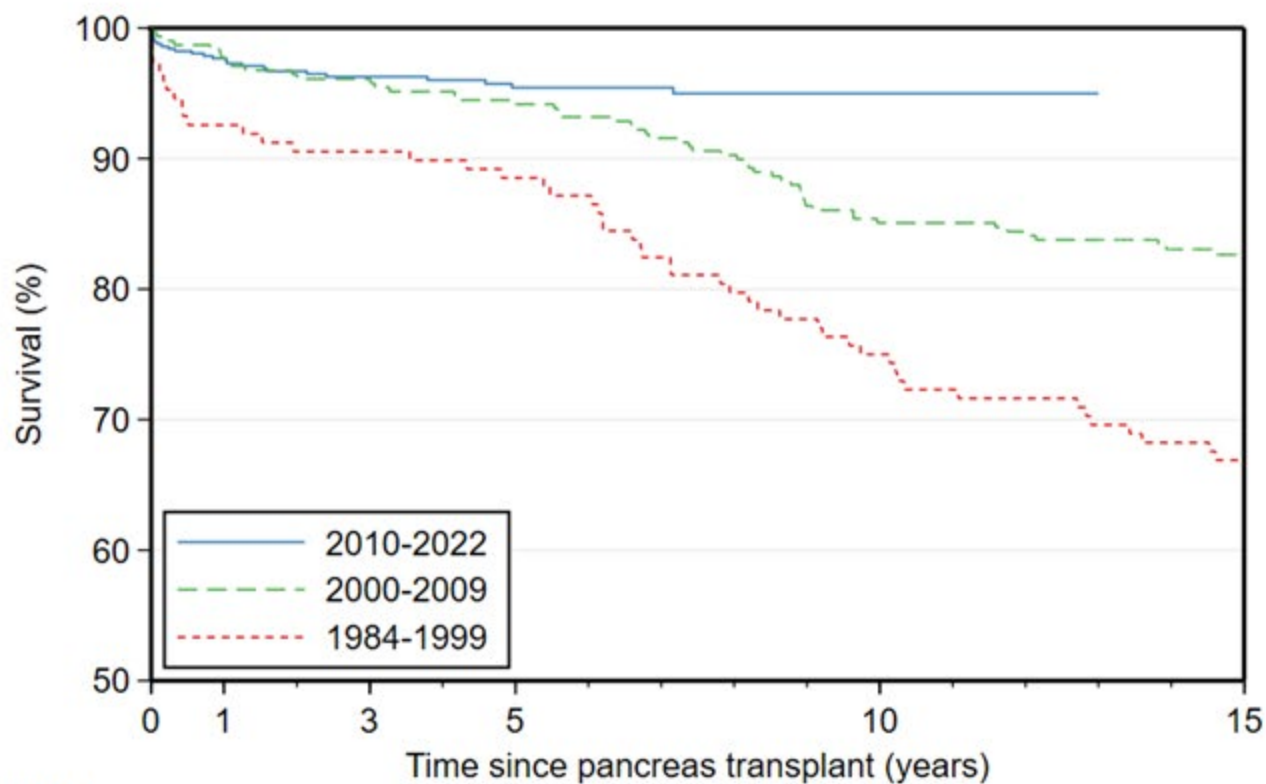


Patients, n (column %)	2022	1984-2021	Total
Ethnicity¹			
Indigenous Australian	1 (2)	2 (<1)	3 (<1)
Maori	2 (4)	8 (<1)	10 (<1)
Pacific islander	1 (2)	11 (1)	12 (1)
White	43 (86)	941 (93)	984 (93)
North Asian	1 (2)	4 (<1)	5 (<1)
South-East Asian	0 (0)	1 (<1)	1 (<1)
Southern and Central Asian	2 (4)	19 (1)	21 (1)
North African and Middle Eastern	0 (0)	14 (1)	14 (1)
Other	0 (0)	1 (<1)	1 (<1)
Not reported	0 (0)	1 (<1)	1 (<1)
Blood group			
O	20 (40)	452 (45)	472 (44)
A	25 (50)	408 (40)	433 (41)
B	3 (6)	95 (9)	98 (9)
AB	2 (4)	46 (4)	48 (4)
Not reported	0 (0)	1 (<1)	1 (<1)
Total	50	1002	1052

¹ Ethnicity classified according to the Australian Bureau of Statistics standard classification, 2nd Edition;

Figure 2.4

Patient survival by era of transplantation

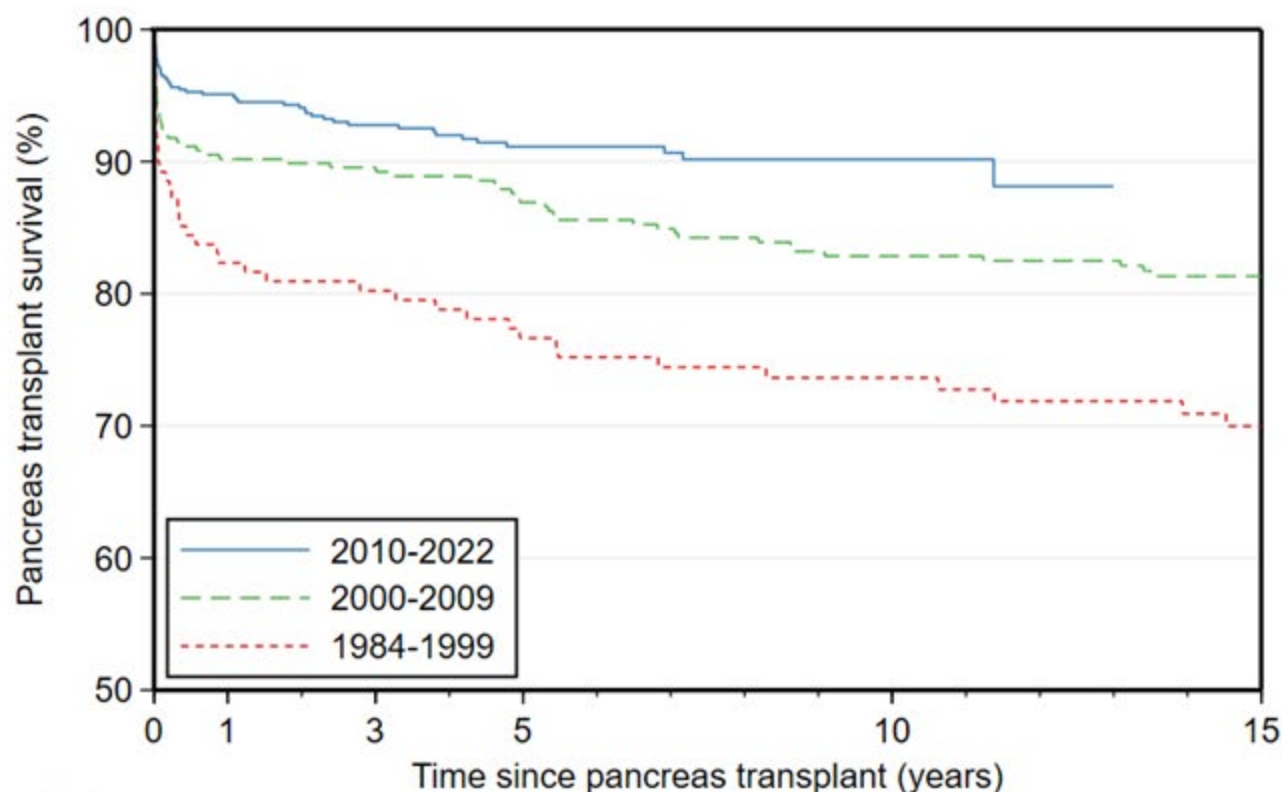


Year of transplant

2010-2022	570	511	416	318	96	0
2000-2009	308	301	296	290	262	194
1984-1999	148	137	134	131	111	99

Figure 2.8

Pancreas transplant survival by era of transplantation (censored at death)



Year of transplant

2010-2022	580	493	390	288	81	0
2000-2009	317	282	276	262	230	159
1984-1999	150	118	113	106	87	73

Table 2.7

Pancreas graft survival censored at death,
by country and era



Year of transplant	Australia					New Zealand				
	1-year		5-year			1-year		5-year		
	N	<i>n</i>	%	<i>n</i>	%	<i>N</i>	<i>n</i>	%	<i>n</i>	%
2013-2018	252	236	94.1%	185	90.7%	20	19	95.0%	12	90.0%
2014-2019	260	246	95.0%	162	92.7%	23	22	95.7%	11	91.3%
2015-2020	270	260	96.5%	131	94.9%	0	0	100.0%	10	95.8%
2016-2021	259	251	97.0%	88	95.6%	27	26	96.3%	9	96.3%
2017-2022	209	203	97.7%	41	96.6%	23	22	96.3%	5	96.3%

Table 2.8

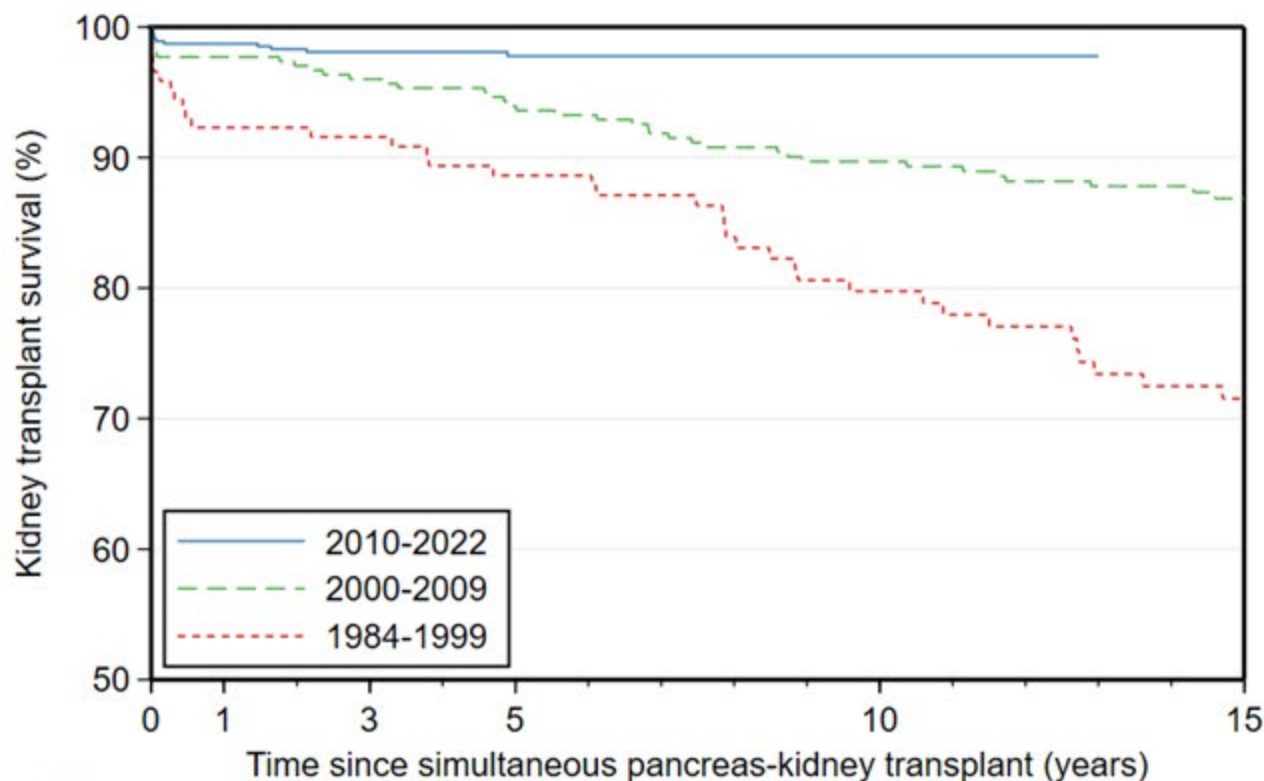
People alive with a functioning pancreas graft by year and residence, at year end



State/country of residence	2018	2019	2020	2021	2022
New South Wales	153	167	183	193	204
Victoria	184	191	205	215	223
Queensland	116	126	136	147	164
Western Australia	30	32	35	36	40
South Australia	47	50	53	57	59
Tasmania	27	29	29	29	32
Australian Capital Territory	15	15	15	15	15
Northern Territory	4	4	4	4	4
New Zealand	44	48	49	54	59
Total	620	662	709	750	800

Figure 2.13

Kidney graft survival among SPK recipients
by era of transplantation (censored at death)



Year of transplant

2010-2022	556	494	404	309	93	0
2000-2009	305	293	283	272	238	165
1984-1999	147	129	125	119	93	75

Table 3.1

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2022	1984-2021	Total
Total (row %)	50 (100)	1002 (100)	1052 (100)
Age category			
0-24	28 (56)	471 (47)	499 (47)
25-34	14 (28)	270 (27)	284 (27)
35-44	7 (14)	210 (21)	217 (21)
45+	1 (2)	35 (3)	36 (3)
Not reported	0 (0)	16 (2)	16 (2)
Sex			
Female	22 (44)	553 (55)	575 (55)
Male	28 (56)	436 (44)	464 (44)
Not reported	0 (0)	13 (1)	13 (1)
BMI (kg/m2)			
Underweight/Normal (<24.9)	38 (76)	633 (63)	671 (64)
Overweight (25-29.9)	9 (18)	310 (31)	319 (30)
Obese (30+)	3 (6)	39 (4)	42 (4)
Not reported	0 (0)	20 (2)	20 (2)

Table 3.1 (Cont'd)

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2022	1984-2021	Total
Donor type			
Brain death (DBD)	46 (92)	976 (97)	1022 (97)
Circulatory death (DCD)	4 (8)	21 (2)	25 (2)
Not reported	0 (0)	5 (<1)	5 (<1)
Donor mode of death			
Cerebral hypoxia/ischaemia	20 (40)	159 (16)	179 (17)
Cerebral infarction	3 (6)	18 (2)	21 (2)
Intracranial haemorrhage	8 (16)	261 (26)	269 (26)
Non-neurological condition	0 (0)	195 (19)	195 (19)
Other neurological condition	1 (2)	21 (2)	22 (2)
Traumatic brain injury	18 (36)	332 (33)	350 (33)
Not reported	0 (0)	16 (2)	16 (2)
Alcohol consumption			
Never	36 (72)	730 (73)	766 (73)
Former	1 (2)	9 (<1)	10 (<1)
Current	13 (26)	81 (8)	94 (9)
Not reported	0 (0)	182 (18)	182 (17)

Table 3.1 (Cont'd)

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2022	1984-2021	Total
Smoking history			
Never	32 (64)	589 (59)	621 (59)
Former	3 (6)	42 (4)	45 (4)
Current	15 (30)	249 (25)	264 (25)
Donor's blood group			
O	20 (40)	492 (49)	512 (49)
A	27 (54)	382 (38)	409 (39)
B	2 (4)	96 (10)	98 (9)
AB	1 (2)	25 (2)	26 (2)
Not reported	0 (0)	7 (<1)	7 (<1)
Kidney biopsy			
Performed	18 (36)	741 (74)	759 (72)
Not performed	27 (54)	222 (22)	249 (24)
Not reported	5 (10)	39 (4)	44 (4)

Table 3.1 (Cont'd)

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2022	1984-2021	Total
Cytomegalovirus (CMV)			
Positive	39 (78)	607 (61)	646 (61)
Negative	11 (22)	343 (34)	354 (34)
Not reported	0 (0)	52 (5)	52 (5)
Epstein-Barr virus (EBV)			
Positive	46 (92)	600 (60)	646 (61)
Negative	4 (8)	91 (9)	95 (9)
Not reported	0 (0)	311 (31)	311 (30)

DBD, donor after brain death; DCD, donor after circulatory death

Table 3.3

Number of pancreas transplants by donor and recipient state of residence in Australia for 2022 only and all years



Recipient state	Donor state								Total	
	NSW	VIC	QLD	WA	SA	TAS	ACT	NT		Not reported
2022 only										
NSW	6	0	2	1	1	0	1	0	0	11
VIC	0	7	0	0	0	1	0	0	0	8
QLD	5	2	5	3	1	0	1	0	0	17
WA	1	0	0	3	0	0	0	0	0	4
SA	0	0	0	0	1	0	0	0	0	1
TAS	0	3	0	0	0	1	0	0	0	4
ACT	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0
Total	12	12	7	7	3	2	2	0	0	45

Table 3.3 (Cont'd)

Number of pancreas transplants by donor and recipient state of residence in Australia for 2022 only and all years



Recipient state	Donor state								Total	
	NSW	VIC	QLD	WA	SA	TAS	ACT	NT		Not reported
All years (1984-2022)										
NSW	171	14	36	23	23	5	19	0	0	291
VIC	23	211	3	7	8	20	3	0	1	276
QLD	87	12	42	21	26	0	13	1	0	202
WA	22	5	13	15	5	1	3	0	0	64
SA	17	20	3	5	21	1	5	2	0	74
TAS	16	15	1	0	1	3	0	0	0	36
ACT	16	1	3	1	2	0	0	0	0	23
NT	1	0	0	2	1	0	0	0	0	4
Total	353	278	101	74	87	30	43	3	1	970