



Annual Report 2022

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)		
	2019	2020	2021
On active list at beginning of year	82	85	77
Added to active list during the year	60	46	65
Removed from active list during year	8	3	4
Pancreas transplants to patients on waiting list	40	47	34
Kidney only transplants to patients on waiting list	3	2	3
Transplants performed outside Australia/New Zealand	0	0	0
Died while active on list	6	2	0
On active waiting list at the end of year	85	77	101
Died within 12 months of removal from list	0	0	0
Under consideration but not active on list	192	190	164
Referred but declined for pancreas transplantation	2	2	2

Figure 1.1

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

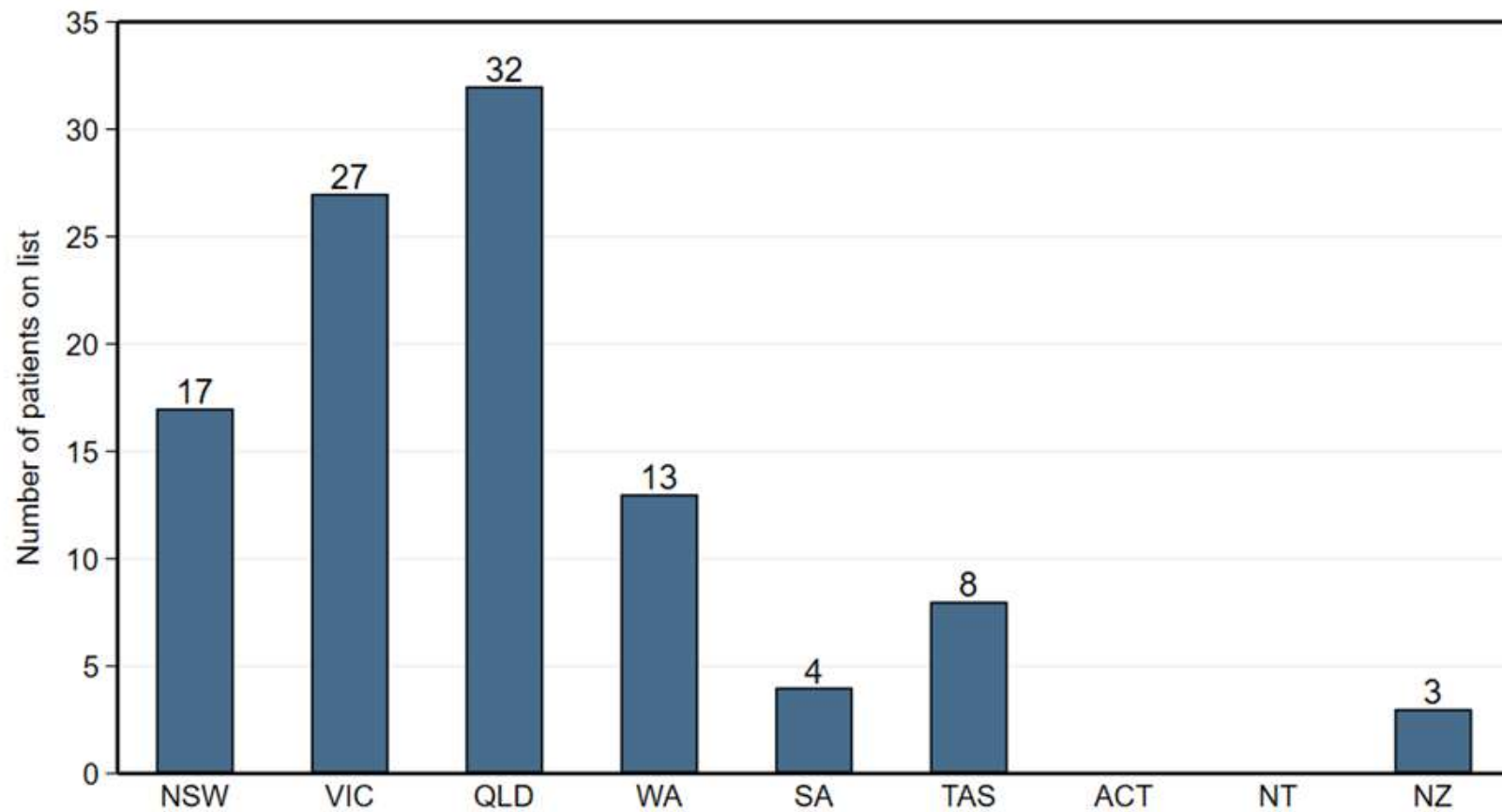
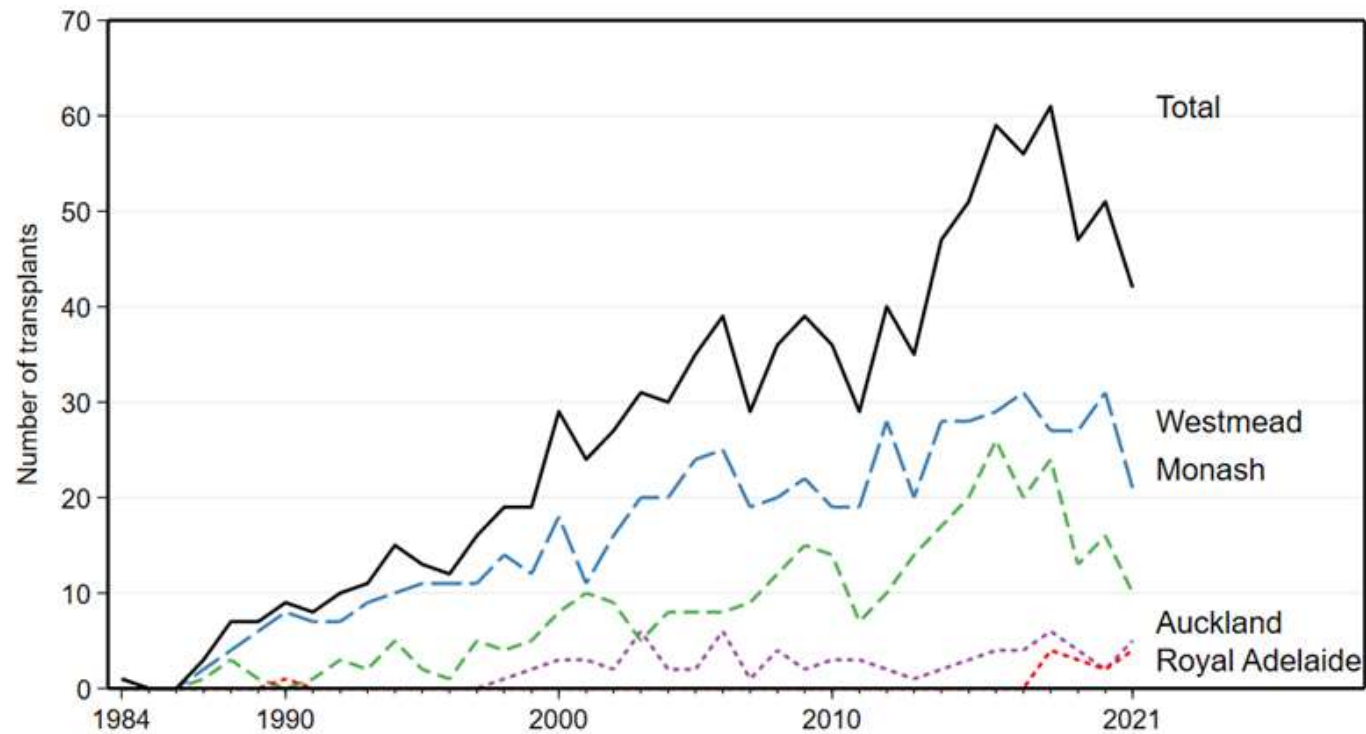


Figure 2.1

Pancreas transplants by hospital,
1984-2019



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

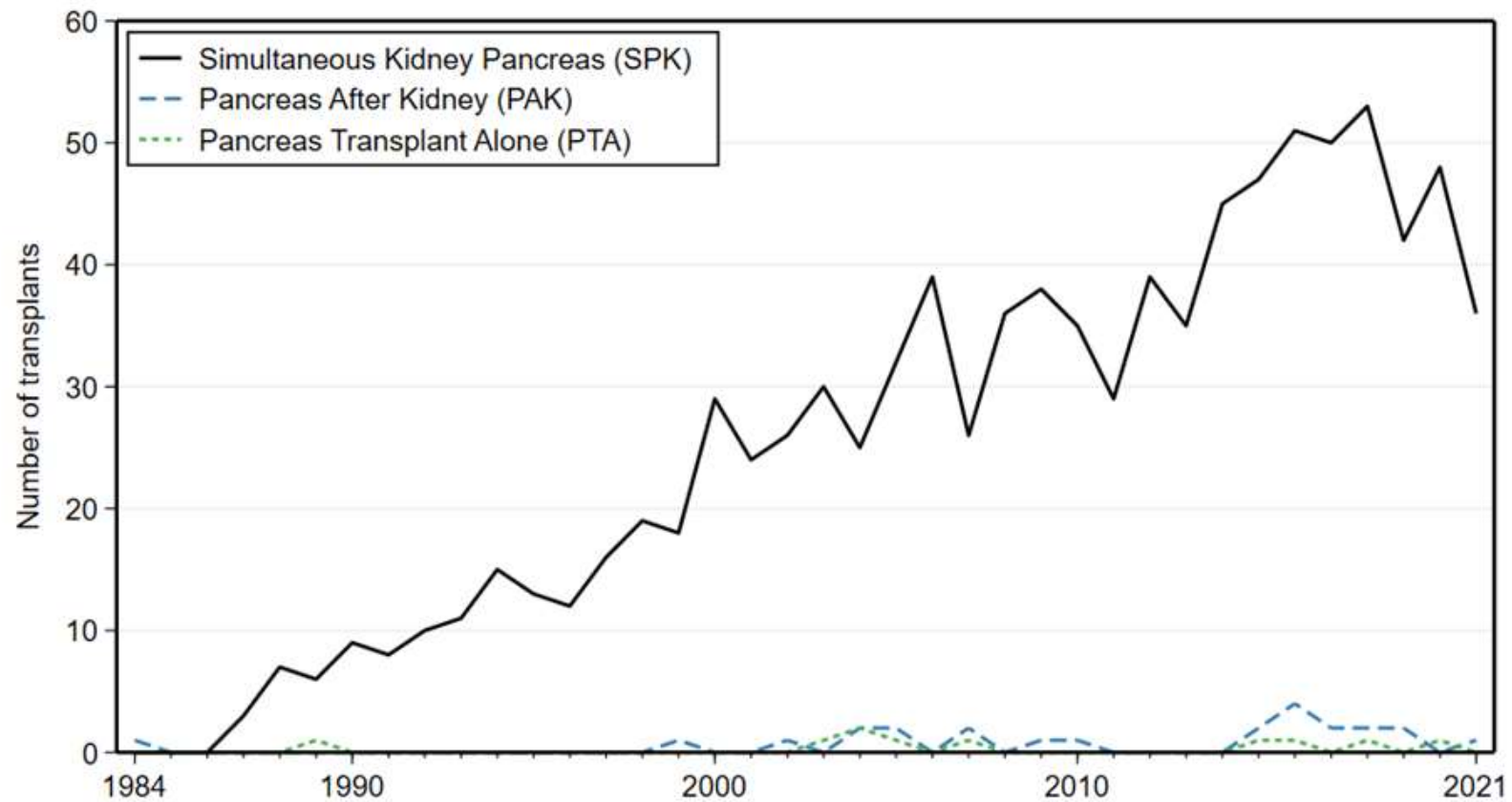


Table 2.3a

Demographics and characteristics of pancreas transplant recipients



Patients, n (column %)	2021	1984-2020	Total
Age category			
Median (IQR)	42 (15)	39 (11)	39 (11)
0-34	11 (28)	293 (30)	304 (30)
35-44	14 (36)	443 (46)	457 (46)
45-50	8 (21)	157 (16)	165 (17)
50+	6 (15)	67 (7)	73 (7)
Not reported	0 (0)	1 (<1)	1 (<1)
Sex			
Female	18 (46)	445 (46)	463 (46)
Male	21 (54)	516 (54)	537 (54)
Blood group			
O	9 (23)	443 (46)	452 (45)
A	25 (64)	382 (40)	407 (41)
B	4 (10)	90 (9)	94 (9)
AB	1 (3)	45 (5)	46 (5)
Not reported	0 (0)	1 (<1)	1 (<1)

Table 2.3b

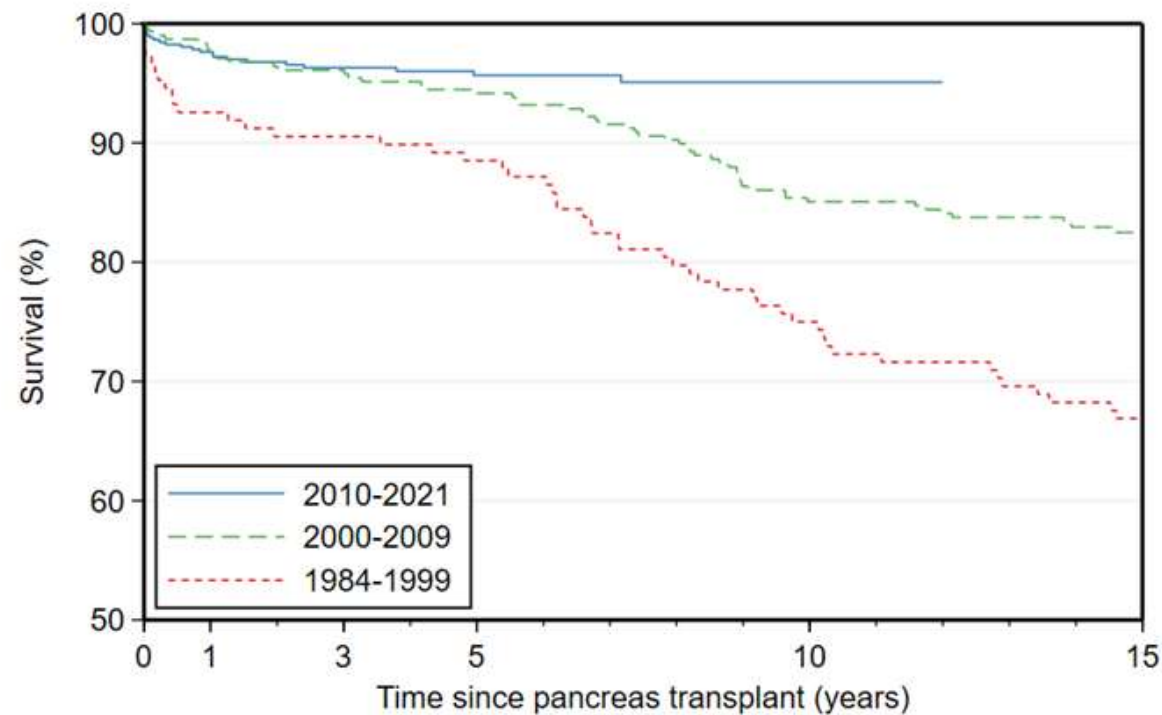
Demographics and characteristics of pancreas transplant recipients



Patients, n (column %)	2021	1984-2020	Total
Cause of end stage kidney disease			
Diabetes type 1	36 (92)	491 (51)	527 (53)
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)
Glomerulonephritis	1 (3)	0 (0)	1 (<1)
No kidney disease ¹	1 (3)	18 (2)	19 (2)
Not reported	1 (3)	447 (47)	448 (45)
Ethnicity²			
Indigenous Australian	0 (0)	2 (<1)	2 (<1)
Maori	0 (0)	8 (<1)	8 (<1)
Pacific Islander	1 (3)	10 (1)	11 (1)
White	37 (95)	902 (94)	939 (94)
North Asian	0 (0)	4 (<1)	4 (<1)
South-East Asian	0 (0)	1 (<1)	1 (<1)
Southern and Central Asian	0 (0)	19 (2)	19 (2)
North African and Middle Eastern	1 (3)	13 (1)	14 (1)
Other	0 (0)	1 (<1)	1 (<1)
Not reported	0 (0)	1 (<1)	1 (<1)

Figure 2.4

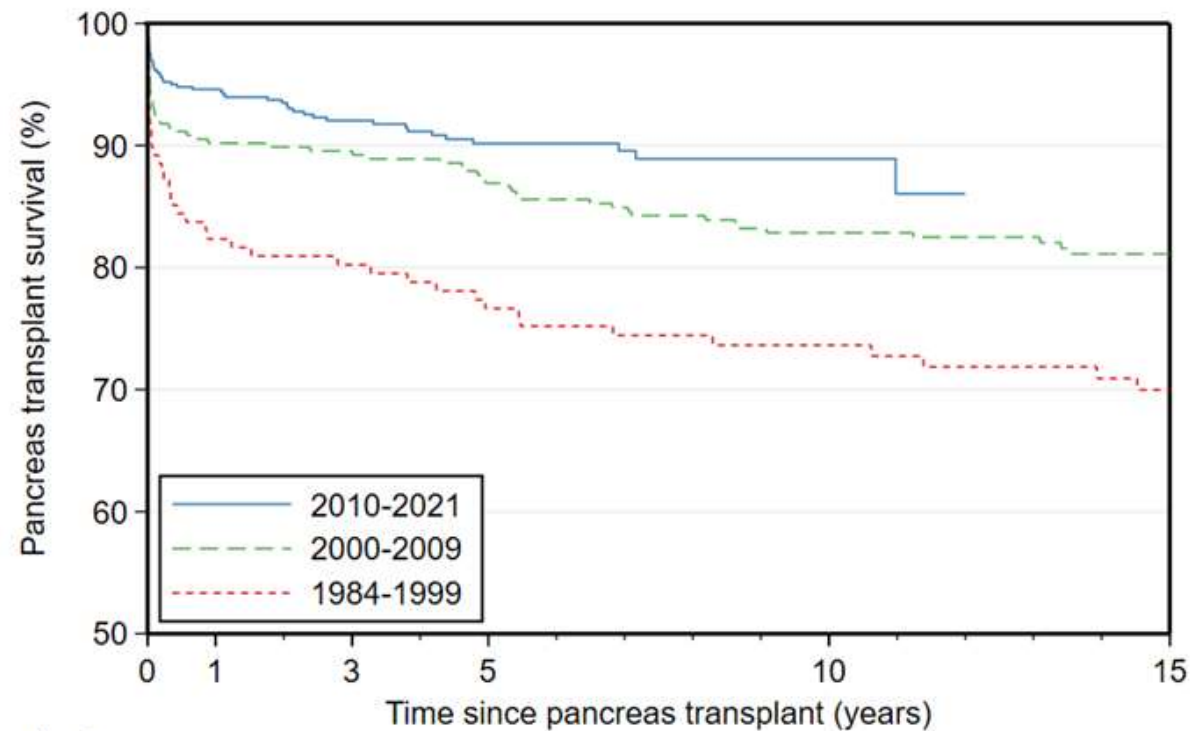
Patient survival by era of transplantation



Year of transplant	0	1	3	5	10	15
2010-2021	521	470	373	271	59	0
2000-2009	308	301	296	290	262	172
1984-1999	148	137	134	131	111	99

Figure 2.8

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



Year of transplant

2010-2021	528	453	348	242	51	0
2000-2009	317	282	276	262	230	140
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>	%	N	<i>n</i>	%	<i>n</i>	%
2012-2017	263	237	93.03	179	88.23	16	15	93.75	10	87.5
2013-2018	276	251	94.11	151	90.5	20	19	95	8	90
2014-2019	282	259	94.96	125	92.54	23	22	95.65	7	90.62
2015-2020	286	269	96.47	92	94.54	23	23	100	6	94.44
2016-2021	273	224	96.93	48	94.99	25	20	96	4	96

Table 2.8

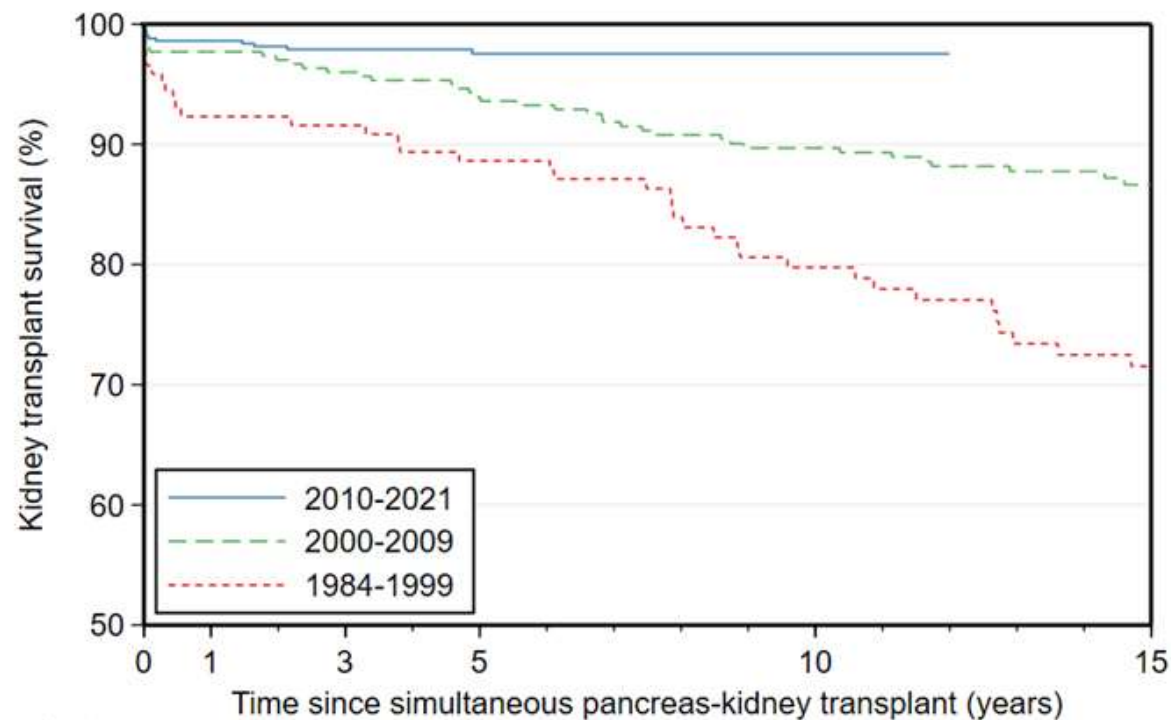
People alive with a functioning pancreas graft by year and state of residence



State/country of residence	2017	2018	2019	2020	2021
New South Wales	140	153	167	183	193
Victoria	167	184	191	205	215
Queensland	109	116	126	137	148
Western Australia	28	30	32	35	36
South Australia	40	47	50	53	57
Tasmania	25	27	29	29	29
Australian Capital Territory	15	15	15	15	15
Northern Territory	4	4	4	4	4
New Zealand	38	44	48	48	52
Total	566	620	662	709	749

Figure 2.13

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



Year of transplant	5	10	15			
2010-2021	510	458	362	262	57	0
2000-2009	305	293	283	272	238	145
1984-1999	147	129	125	119	93	75

Table 3.1a

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2021	1984-2020	Total
Age category			
0-24	19 (49)	450 (47)	469 (47)
25-34	13 (33)	257 (27)	270 (27)
35-44	2 (5)	207 (22)	209 (21)
45+	2 (5)	33 (3)	35 (4)
Not reported	3 (8)	14 (1)	17 (2)
Sex			
Female	17 (44)	534 (56)	551 (55)
Male	19 (49)	416 (43)	435 (44)
Not reported	3 (8)	11 (1)	14 (1)
BMI (kg/m²)			
Underweight/Normal (<24.9)	22 (56)	605 (63)	627 (63)
Overweight (25-29.9)	7 (18)	300 (31)	307 (31)
Obese (30+)	1 (3)	38 (4)	39 (4)
Not reported	9 (23)	18 (2)	27 (3)

Table 3.1b

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2021	1984-2020	Total
Donor type			
Brain death (DBD)	36 (92)	938 (98)	974 (97)
Circulatory death (DCD)	0 (0)	21 (2)	21 (2)
Not reported	3 (8)	2 (<1)	5 (<1)
Donor mode of death			
Cerebral hypoxia/ischaemia	24 (62)	135 (14)	159 (16)
Cerebral infarction	0 (0)	18 (2)	18 (2)
Intracranial haemorrhage	9 (23)	250 (26)	259 (26)
Non-neurological condition	0 (0)	195 (20)	195 (20)
Other neurological condition	1 (3)	20 (2)	21 (2)
Traumatic brain injury	3 (8)	329 (34)	332 (33)
Not reported	2 (5)	14 (1)	16 (2)

Table 3.1c

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2021	1984-2020	Total
Alcohol consumption			
Never	28 (72)	882 (92)	910 (91)
Former	2 (5)	7 (<1)	9 (<1)
Current	9 (23)	72 (7)	81 (8)
Smoking history			
Never	25 (64)	684 (71)	709 (71)
Former	3 (8)	39 (4)	42 (4)
Current	11 (28)	238 (25)	249 (25)

Table 3.1d

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2021	1984-2020	Total
Donor's blood group			
O	12 (31)	480 (50)	492 (49)
A	21 (54)	360 (37)	381 (38)
B	3 (8)	92 (10)	95 (10)
AB	1 (3)	24 (3)	25 (3)
Not reported	2 (5)	5 (<1)	7 (<1)
Kidney biopsy			
Performed	6 (15)	215 (22)	221 (22)
Not performed	22 (56)	713 (74)	735 (74)
Not reported	11 (28)	33 (3)	44 (4)

Table 3.1e

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2021	1984-2020	Total
Cytomegalovirus (CMV)			
Positive	22 (56)	582 (61)	604 (60)
Negative	12 (31)	330 (34)	342 (34)
Not reported	5 (13)	49 (5)	54 (5)
Epstein-Barr virus (EBV)			
Positive	21 (54)	572 (60)	593 (59)
Negative	3 (8)	87 (9)	90 (9)
Not reported	15 (38)	302 (31)	317 (32)

Table 3.3

Number of pancreas transplants by donor and recipient state of residence in Australia



Recipient state	Donor state (number of transplants)									Total
	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Not reported	
All years (1984-2021)	341	263	94	65	84	28	40	3	7	925
NSW	165	14	34	22	22	5	18	0	0	280
VIC	23	201	3	5	8	19	2	0	0	268
QLD	82	10	37	18	25	0	12	1	0	185
WA	21	5	13	12	5	1	3	0	0	60
SA	17	20	3	5	20	1	5	2	0	73
TAS	16	12	1	0	1	2	0	0	0	32
ACT	16	1	3	1	2	0	0	0	0	23
NT	1	0	0	2	1	0	0	0	0	4