



Annual Report 2020

Chapters 1-3 (pancreas)
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)		
	2017	2018	2019
On active list at beginning of year	51	75	47
Added to active list during the year	83	36	51
Removed from active list during year	6	6	1
Pancreas transplants to patients on waiting list ¹	48	50	40
Kidney only transplants to patients on waiting list	3	5	2
Transplants performed outside Australia/New Zealand	0	0	0
Died while active on list	2	3	6
On active waiting list at the end of year	75	47	49
Died within 12 months of removal from list	0	0	0
Under consideration but not active on list	186	203	176
Referred but declined for pancreas transplantation	57	60	63

¹ Includes one combined kidney islet transplant performed in 2017



Figure 1.1

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

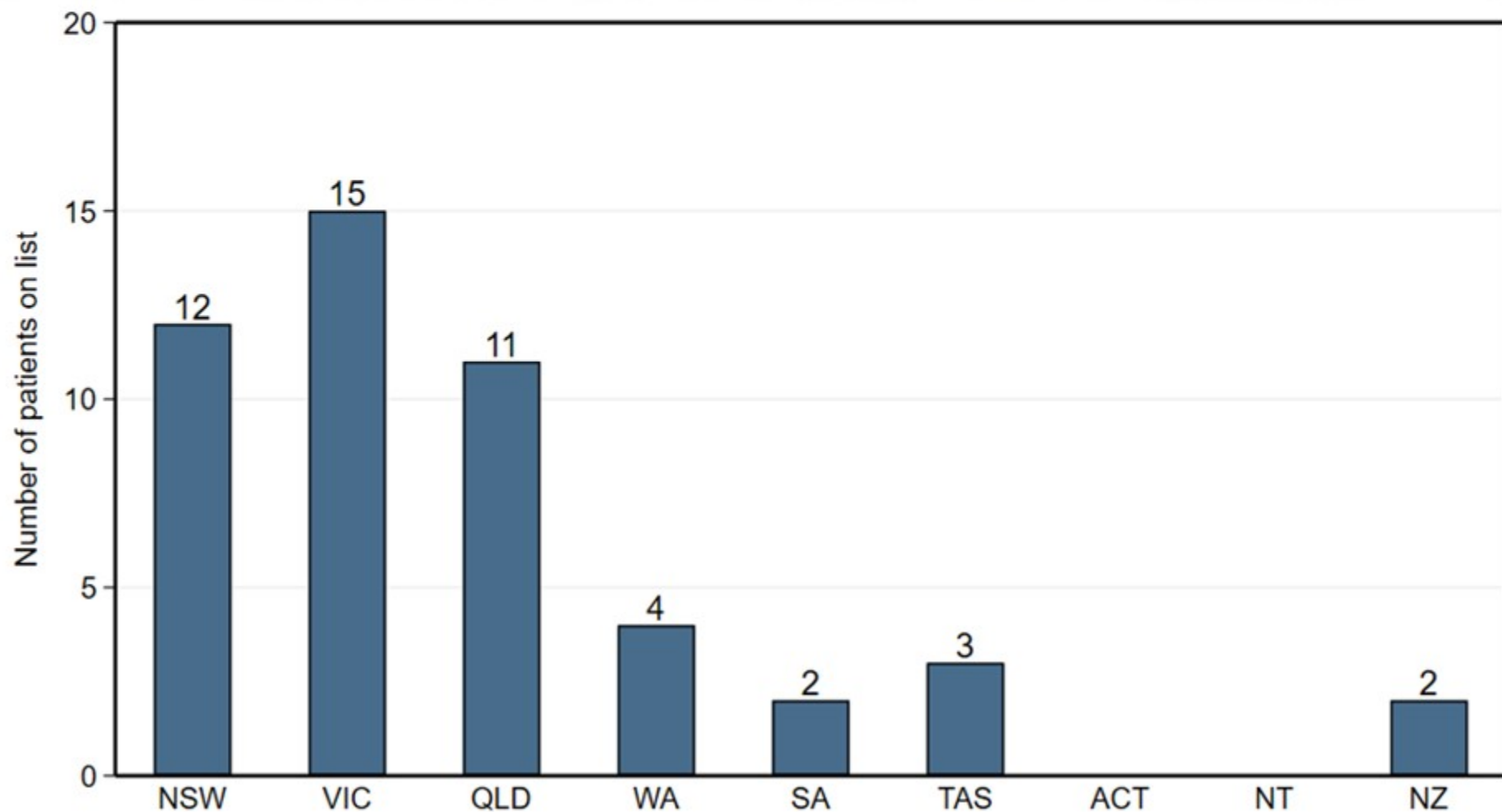
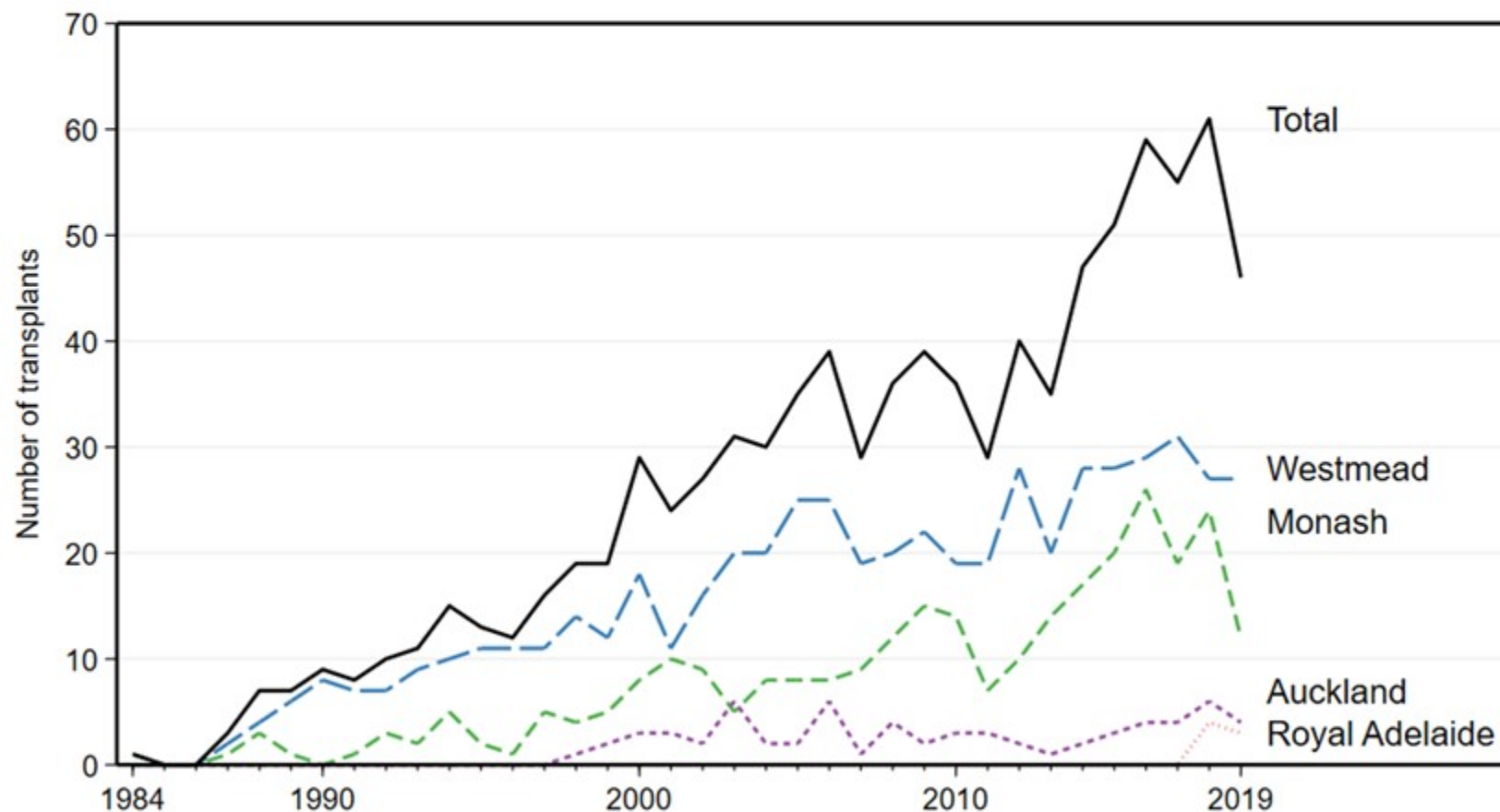


Figure 2.1

Pancreas transplants by hospital,
1984-2019



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

Figure 2.2

Pancreas transplant by type over time

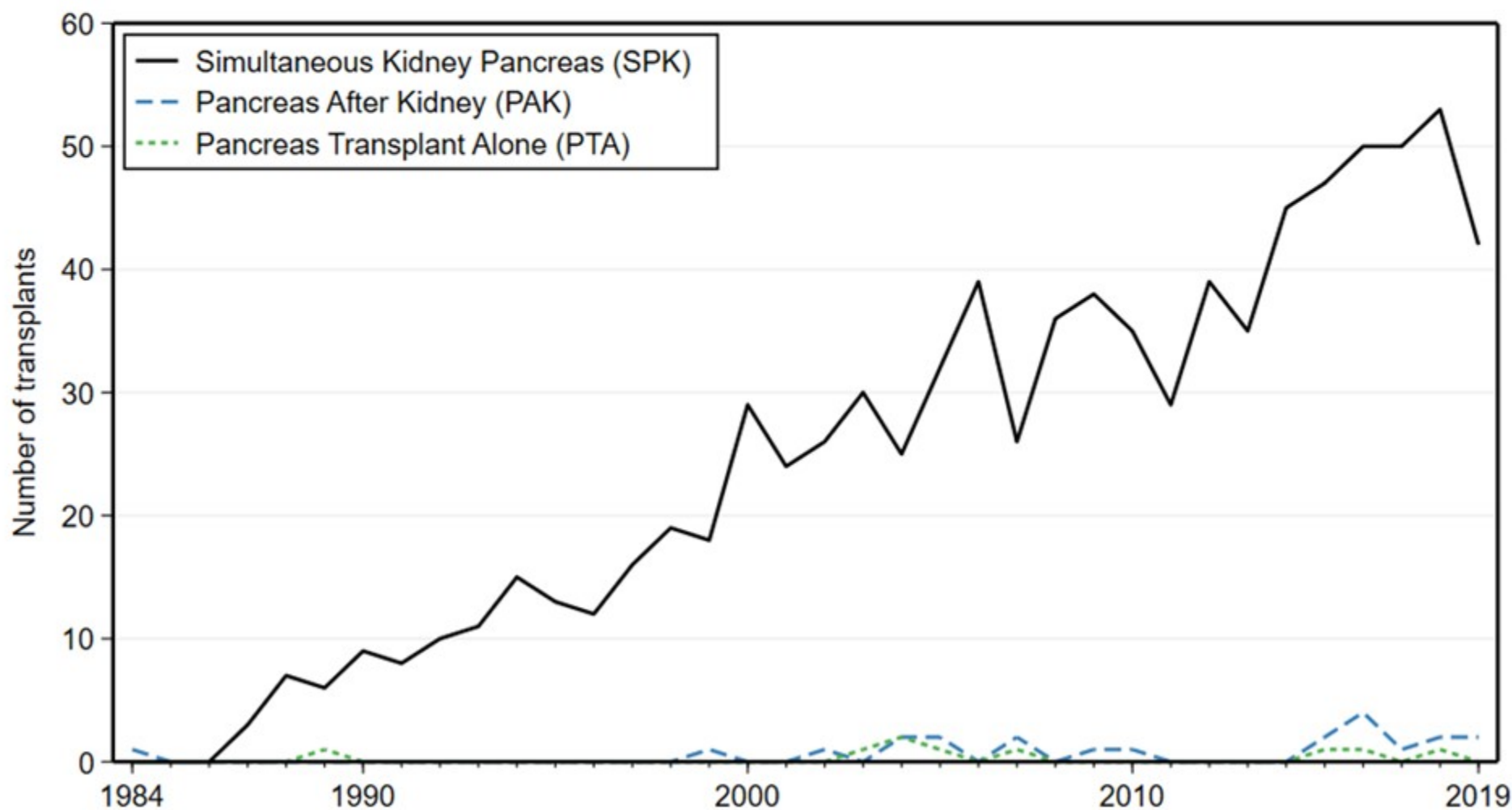


Table 2.3a

Demographics and characteristics of pancreas transplant recipients



Patients, n (column %)	2019	1984-2018	Total
Age category			
Median (IQR)	39 (35, 44)	39 (33, 44)	39 (33, 44)
0-34	9 (20)	276 (34)	285 (33)
35-44	25 (56)	391 (48)	416 (48)
45-50	9 (20)	140 (17)	149 (17)
50+	1 (2)	59 (7)	60 (7)
Sex			
Female	23 (52)	403 (49)	426 (49)
Male	21 (47)	463 (57)	484 (56)
Blood group			
O	19 (43)	406 (50)	425 (49)
A	20 (45)	339 (41)	359 (42)
B	4 (9)	80 (9)	84 (9)
AB	1 (2)	41 (5)	42 (4)
Total	44	866	910

Table 2.3b

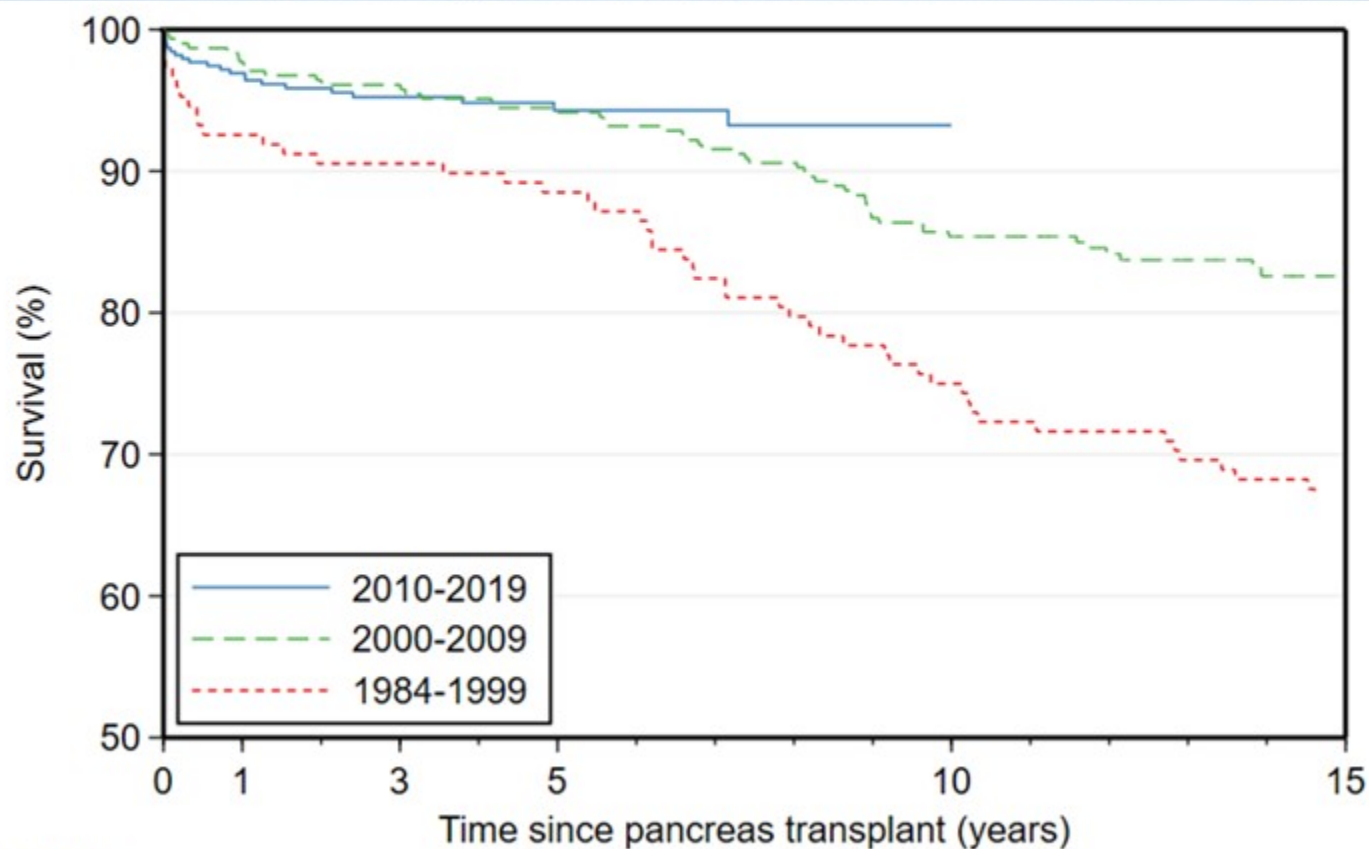
Demographics and characteristics of pancreas transplant recipients



Patients, n (column %)	2019	1984-2018	Total
Cause of end stage kidney disease			
Diabetes type 1	43 (97)	843 (97)	886 (97)
Diabetes type 2	0 (0)	1 (<1)	1 (<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)
No kidney disease	1 (2)	17 (1)	18 (1)
Not reported	0 (0)	2 (<1)	2 (<1)
Ethnicity			
Indigenous Australian	0 (0)	2 (<1)	2 (<1)
Maori	3 (6)	5 (<1)	8 (<1)
Pacific islander	1 (2)	9 (1)	10 (1)
White	37 (84)	820 (94)	857 (94)
North Asian	0 (0)	3 (<1)	3 (<1)
South-East Asian	0 (0)	0 (0)	0 (0)
Southern and Central Asian	0 (0)	17 (1)	17 (1)
North African and Middle Eastern	3 (6)	9 (1)	12 (1)
Not reported	0 (0)	1 (<1)	1 (<1)
Total	44	866	910

Figure 2.4

Patient survival by era of transplantation

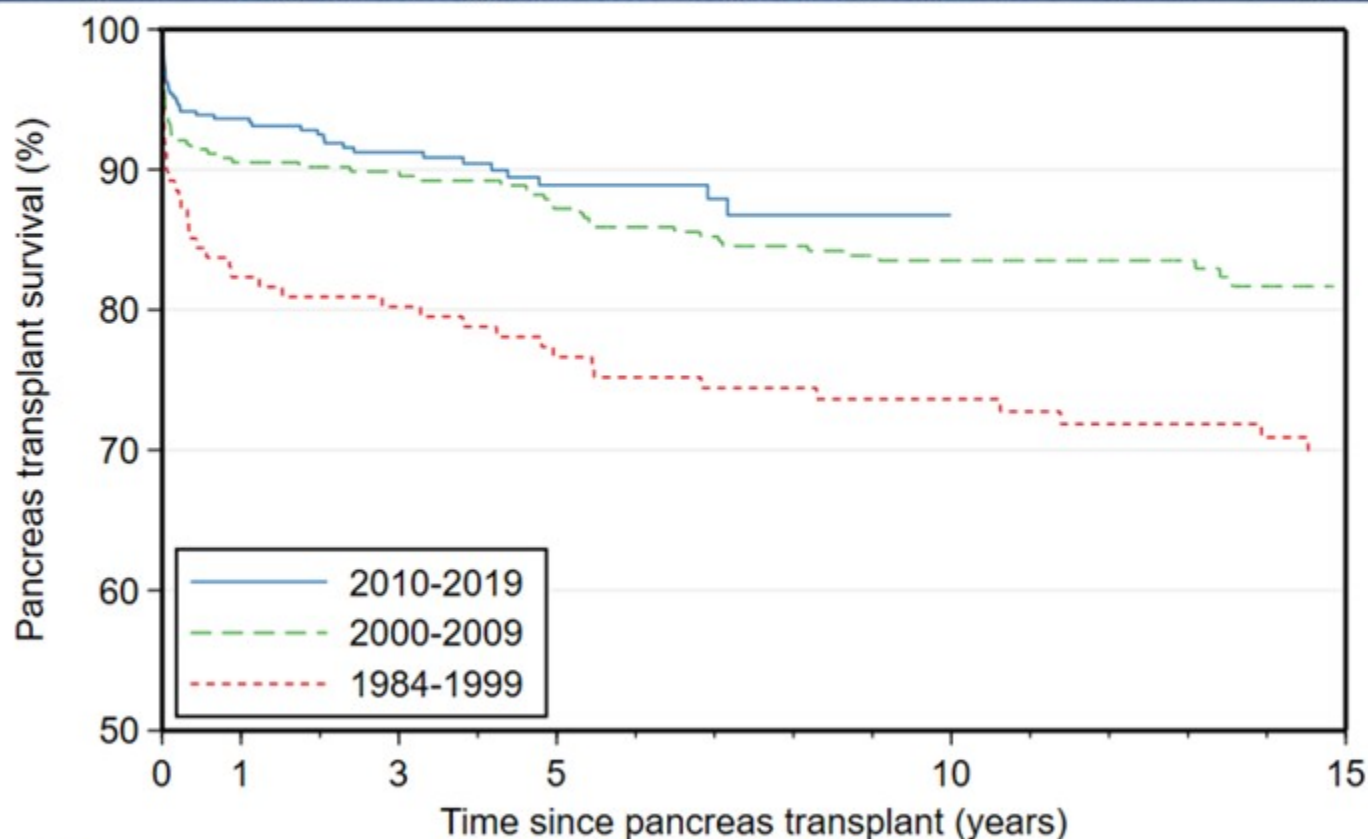


Year of transplant

2010-2019	390	378	272	172	0	0
2000-2009	308	301	296	290	263	112
1984-1999	148	137	134	131	111	99

Figure 2.8

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



Year of transplant

2010-2019	396	362	251	145	0	0
2000-2009	317	283	277	263	233	90
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				
	<i>1-year</i>		<i>5-year</i>			<i>1-year</i>		<i>5-year</i>		
	<i>N</i>	<i>n</i>	%	<i>n</i>	%	<i>N</i>	<i>n</i>	%	<i>n</i>	%
2011-2016	239	215	91.60%	109	86.50%	15	14	93.30%	7	93.30%
2012-2017	261	236	92.60%	88	87.60%	16	15	93.80%	4	93.80%
2013-2018	274	250	93.70%	60	89.90%	20	19	95.00%	2	95.00%
2014-2019	280	220	94.50%	34	92.30%	23	18	95.70%	1	95.70%

Table 2.8

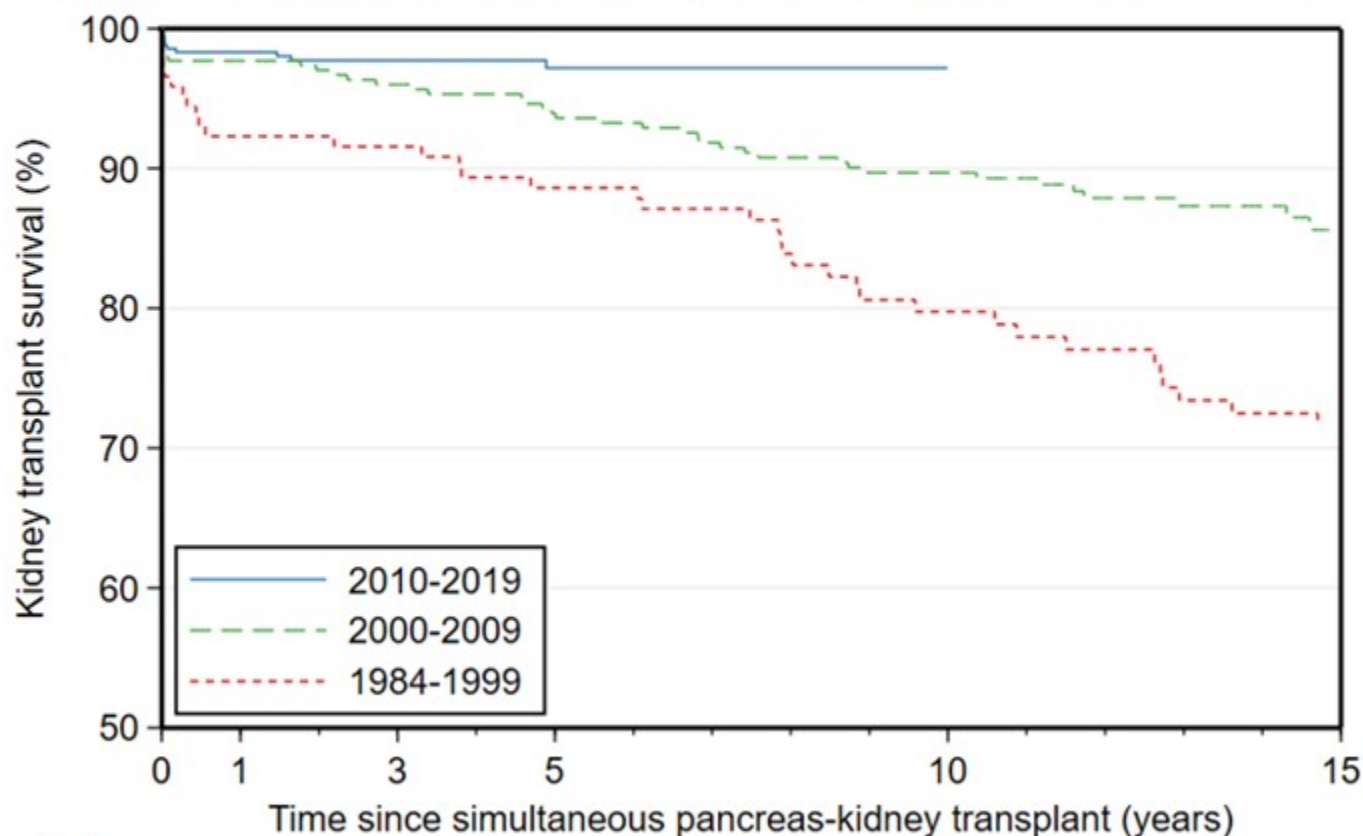
People alive with a functioning pancreas graft by year and state of residence



State/country of residence	2015	2016	2017	2018	2019
New South Wales	171	168	164	163	162
Victoria	184	184	181	179	177
Queensland	129	126	122	122	122
Western Australia	36	35	32	31	31
South Australia	53	52	52	51	50
Tasmania	27	27	27	27	27
Australian Capital Territory	14	13	12	12	12
Northern Territory	4	4	4	4	4
New Zealand	52	52	52	52	52
Total	670	661	646	641	637

Figure 2.13

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



Year of transplant

2010-2019	425	367	263	167	0	0
2000-2009	305	293	283	272	239	92
1984-1999	147	129	125	119	93	75

Table 3.1a

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2019	1984-2018	Total
Age category			
0-24	13 (30)	412 (48)	425 (47)
25-34	14 (32)	226 (26)	240 (26)
35-44	7 (16)	192 (22)	199 (22)
45+	0 (0)	33 (4)	33 (4)
Not reported	10 (23)	3 (<1)	13 (1)
Sex			
Female	11 (25)	506 (58)	517 (57)
Male	24 (55)	359 (41)	383 (42)
Not reported	9 (20)	1 (<1)	10 (1)
BMI (kg/m2)			
Underweight/Normal (<24.9)	18 (41)	556 (64)	574 (63)
Overweight (25-29.9)	12 (27)	271 (31)	283 (31)
Obese (30+)	0 (0)	36 (4)	36 (4)
Not reported	14 (32)	3 (<1)	17 (2)
Total (row %)	44 (100)	866 (100)	910 (100)

Table 3.1b

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2019	1984-2018	Total
Donor type			
Brain death (DBD)	38 (86)	854 (99)	892 (98)
Circulatory death (DCD)	6 (14)	12 (1)	18 (2)
Donor mode of death			
Cerebral hypoxia/ischaemia	14 (32)	101 (12)	115 (13)
Cerebral infarct	0 (0)	17 (2)	17 (2)
Intracranial haemorrhage	7 (16)	231 (27)	238 (26)
Non-neurological condition	0 (0)	194 (22)	194 (21)
Other neurological condition	2 (5)	18 (2)	20 (2)
Traumatic brain injury	11 (25)	302 (35)	313 (34)
Not reported	10 (23)	3 (<1)	13 (1)
Total (row %)	44 (100)	866 (100)	910 (100)

Table 3.1c

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2019	1984-2018	Total
Alcohol consumption			
Never	16 (36)	653 (75)	669 (74)
Former	3 (7)	4 (<1)	7 (<1)
Current	11 (25)	49 (6)	60 (7)
Not reported	14 (32)	160 (18)	174 (19)
Smoking history			
Never	14 (32)	519 (60)	533 (59)
Former	3 (7)	34 (4)	37 (4)
Current	14 (32)	208 (24)	222 (24)
Not reported	14 (32)	105 (12)	119 (13)
Total (row %)	44 (100)	866 (100)	910 (100)

Table 3.1d

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2019	1984-2018	Total
Donor's blood group			
O	20 (45)	440 (51)	460 (51)
A	17 (39)	321 (37)	338 (37)
B	4 (9)	83 (10)	87 (10)
AB	0 (0)	21 (2)	21 (2)
Not reported	3 (7)	1 (<1)	4 (<1)
Kidney biopsy			
Performed	15 (34)	654 (76)	669 (74)
Not performed	24 (55)	187 (22)	211 (23)
Not reported	5 (11)	25 (3)	30 (3)
Total (row %)	44 (100)	866 (100)	910 (100)

Table 3.1e

Demographics and characteristics of pancreas donors



	Donors, n (column %)		
	2019	1984-2018	Total
Cytomegalovirus (CMV)			
Positive	26 (59)	511 (59)	537 (59)
Negative	5 (11)	320 (37)	325 (36)
Not reported	13 (30)	35 (4)	48 (5)
Epstein-Barr virus (EBV)			
Positive	24 (55)	507 (59)	531 (58)
Negative	2 (5)	81 (9)	83 (9)
Not reported	18 (41)	278 (32)	296 (33)
Total (row %)	44 (100)	866 (100)	910 (100)

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 (1984-2019)	318	248	77	58	74	23	38	3	3	842
NSW	151	11	28	19	22	4	18	0	0	253
VIC	22	190	1	5	7	16	2	0	3	246
QLD	74	9	29	16	23	0	11	1	0	163
WA	21	5	12	10	5	1	2	0	0	56
SA	17	20	3	5	13	1	5	2	0	66
TAS	16	12	1	0	1	1	0	0	0	31
ACT	16	1	3	1	2	0	0	0	0	23
NT	1	0	0	2	1	0	0	0	0	4