



# Annual Report 2020

## Chapter 4 (Islets) Tables and Figures

*Australian and New Zealand Islet  
and Pancreas Transplant Registry*

# Table 4.3

Islet waiting list status over time, all centres in Australia



	Patients (n)				
	2019	2018	2017	2016	2015
<b>Waiting list activity</b>					
Active list at beginning of year	12	14	8	3	6
Added to active list during the year	1	14	17	16	17
<i>First transplant</i>	-	10	11	9	13
<i>Second transplant</i>	-	6	4	8	7
<i>Third transplant</i>	-	0	3	0	1
Removed from active list during year	16	10	10	10	19
<i>First transplant</i>	-	8	5	4	16
<i>Second transplant</i>	-	6	4	8	7
<i>Third transplant</i>	-	0	3	0	1
Death while active on list	0	0	0	0	0
Death within 12 months of removal from list	0	0	0	0	0
Active waiting list at the end of year	-3	16	14	8	3
<b>Transplants to waiting list</b>					
Recipients	6	10	10	10	19
Transplants	9	14	12	12	24
<b>Under consideration but not active on list</b>	4	10	1	1	1
<b>Referred but declined for islet transplantation</b>	12	0	0	0	0





## Table 4.4

Summary of allogenic islet cell activity, all centres in Australia

Activity	2019	2002-2018	Total
<b>Westmead (NSW)</b>			
Pancreata donations discarded before isolation	0	9	9
Islet isolations			
<i>Islet isolations used for transplant</i>	9	54	63
<i>Islet isolations discarded</i>	0	181	181
Islet recipients	6	28-33	34-39
<b>St. Vincent's (VIC)</b>			
Pancreata donations discarded before isolation	0	59	59
Islet isolations			
<i>Islet isolations used for transplant</i>	7	52	59
<i>Islet isolations discarded</i>	8	154	162
Islet recipients	6	24-30	24-30

# Table 4.7a

## Donor characteristics for allogenic islet isolations



	Donors (n)		
	2019	2002 - 2018	Total
<b>Age</b>			
Mean (SD)	48.8 (11.3)	46.5 (12.9)	46.7 (12.8)
0-24	1	33	34
25-34	2	48	50
35-44	8	77	85
45+	19	259	278
Not reported	0	1	1
<b>Sex</b>			
Female	12	184	196
Male	11	153	164
<b>BMI kg/m<sup>2</sup></b>			
Mean (SD)	30.1 (3.9)	28.7 (6.4)	28.8 (6.3)
Underweight (<18.5)	3	54	57
Normal weight (18.5-24)	6	138	144
Overweight (25-29)	13	138	151
Obese (30+)	8	87	95
Not reported	3	14	17
<b>Total</b>	<b>30</b>	<b>418</b>	<b>448</b>

# Table 4.7b

## Donor characteristics for allogenic islet isolations



	Donors (n)		
	2019	2002 - 2018	Total
<b>State of residence</b>			
New South Wales	7	122	129
Victoria	4	52	56
Queensland	7	75	82
Western Australia	1	44	45
South Australia	0	15	15
Tasmania	1	10	11
Australian Capital Territory	1	4	5
Northern Territory	0	0	0
Not reported	15	150	165
<b>Cultural and ethnic group</b>			
Indigenous Australian or Torres Strait Islander	0	1	1
Maori or Pacific Islander	0	1	1
White	15	212	227
North East Asian (Chinese)	0	1	1
South East Asian	0	5	5
South and Central Asian (Indian)	0	90	90
Middle Eastern or North African	0	0	0
Other	8	94	102
Not reported	3	85	88
<b>Total</b>	<b>30</b>	<b>418</b>	<b>448</b>



# Table 4.7c

## Donor characteristics for allogenic islet isolations



	Donors (n)		
	2019	2002 - 2018	Total
<b>Donor type</b>			
Brain dead (DBD)	13	242	255
Circulatory death (DCD)	5	40	45
Not reported	6	11	17
<b>Donor mode of death</b>			
Cerebral hypoxia/ischaemia	2	33	35
Cerebral infarct	0	22	22
Intracranial haemorrhage	13	135	148
Non-neurological condition	0	52	52
Other neurological condition	0	3	3
Traumatic brain injury	4	23	27
Not reported	0	40	40
<b>Days ventilated prior to donation</b>			
Mean (SD)	3.5 (2.3)	2.9 (2.3)	2.9 (2.3)
<b>Blood group</b>			
O	8	134	142
A	7	112	119
B	1	17	18
AB	4	54	58
Not reported	11	56	67
<b>Total</b>	<b>30</b>	<b>418</b>	<b>448</b>

# Table 4.7d

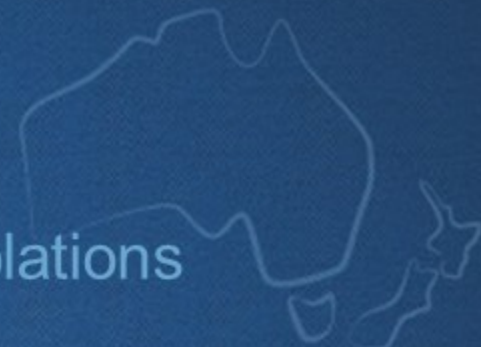
## Donor characteristics for allogenic islet isolations



	Donors (n)		
	2019	2002 - 2018	Total
<b>Alcohol consumption</b>			
Never	5	54	59
Former	0	2	2
Current	13	182	195
Not reported	4	127	131
<b>Smoking history</b>			
Never	3	89	92
Former	1	3	4
Current	10	136	146
Not reported	0	72	72
<b>CMV serology</b>			
Negative	4	116	120
Positive	11	85	96
Not reported	0	20	20
<b>Total</b>	<b>30</b>	<b>418</b>	<b>448</b>

# Table 4.8a

Donor characteristics for allogenic islet isolations which resulted in transplantation in 2019

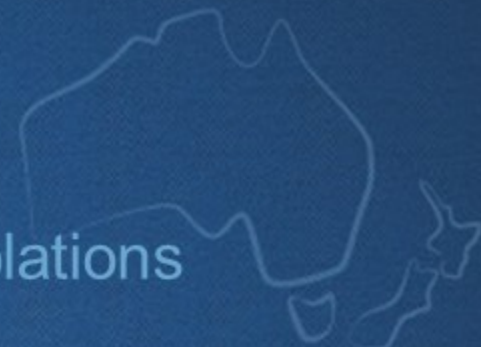


	Donors (n)		
	<i>Westmead</i>	<i>St Vincent's</i>	<i>Total</i>
<b>Total</b>	9	7	16
<b>Age</b>			
Mean (SD)	39.0 (9.2)	50.9 (12.3)	44.2 (12.0)
0-24	1	0	1
25-34	1	1	2
35-44	4	1	5
45+	3	5	8
<b>Sex</b>			
Female	1	3	4
Male	8	4	12
<b>BMI kg/m<sup>2</sup></b>			
Mean (SD)	30.9 (3.6)	30.3 (5.3)	30.6 (4.3)
Underweight (<18.5)	0	0	0
Normal weight (18.5-24)	0	2	2
Overweight (25-29)	4	1	5
Obese (30+)	5	4	9
<b>Total</b>	9	7	16



# Table 4.8b

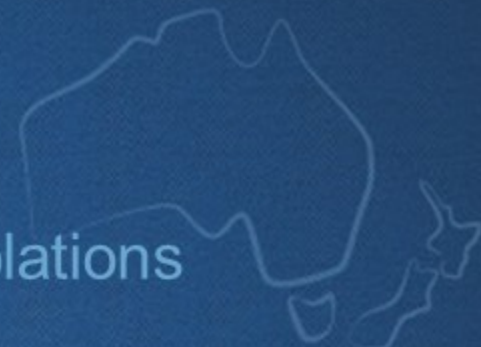
Donor characteristics for allogenic islet isolations which resulted in transplantation in 2019



	Donors (n)		
	<i>Westmead</i>	<i>St Vincent's</i>	<i>Total</i>
<b>State of residence</b>			
New South Wales	5	2	7
Victoria	2	3	5
Queensland	1	0	1
Western Australia	0	0	0
South Australia	0	2	2
Tasmania	1	0	1
Australian Capital Territory	0	0	0
Northern Territory	0	0	0
<b>Cultural and ethnic group</b>			
Indigenous Australian or Torres Strait Islander	0	0	0
Maori or Pacific Islander	0	0	0
White	9	7	16
North East Asian (Chinese)	0	0	0
South East Asian	0	0	0
South and Central Asian (Indian)	0	0	0
Middle Eastern or North African	0	0	0
Other	0	0	0
<b>Total</b>	<b>9</b>	<b>7</b>	<b>16</b>

# Table 4.8c

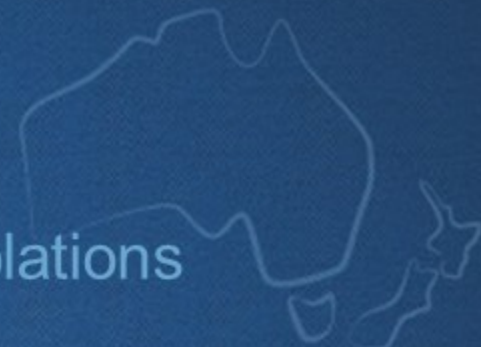
Donor characteristics for allogenic islet isolations which resulted in transplantation in 2019



	Donors (n)		
	<i>Westmead</i>	<i>St Vincent's</i>	<i>Total</i>
<b>Donor type</b>			
Brain dead (DBD)	8	7	15
Circulatory death (DCD)	1	0	1
<b>Donor mode of death</b>			
Cerebral hypoxia/ischaemia	1	0	1
Cerebral infarct	0	3	3
Intracranial haemorrhage	5	0	5
Non-neurological condition	0	0	0
Other neurological condition	0	0	0
Traumatic brain injury	3	4	7
<b>Days ventilated prior to donation</b>			
Mean (SD)	3.6 (2.9)	3.0 (1.2)	3.3 (2.3)
<b>Blood group</b>			
O	4	5	9
A	4	1	5
B	1	0	1
AB	0	1	1
<b>Total</b>	9	7	16

# Table 4.8d

Donor characteristics for allogenic islet isolations which resulted in transplantation in 2019



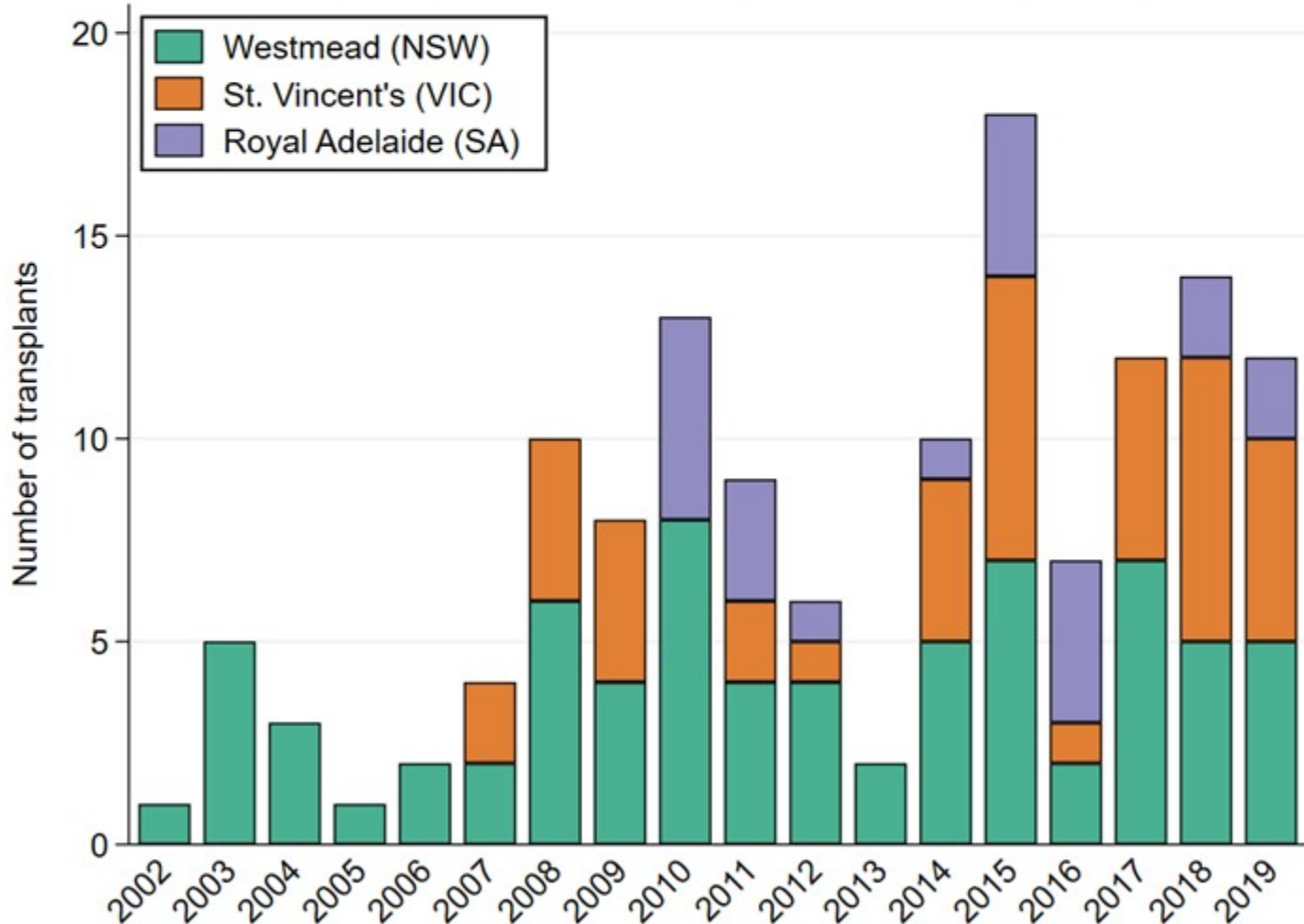
	Donors (n)		
	<i>Westmead</i>	<i>St Vincent's</i>	<i>Total</i>
<b>Alcohol consumption</b>			
Never	5	1	6
Former	0	0	0
Current	4	6	10
<b>Smoking history</b>			
Never	2	4	6
Former	1	2	3
Current	6	1	7
<b>CMV serology</b>			
Negative	2	1	3
Positive	7	6	13
<b>Total</b>	9	7	16





# Figure 4.1

Allogeneic islet transplant activity  
2002-2019, by centre



# Table 4.17a

Characteristics of allogenic islet cell transplant recipients in Australia by year of first transplant



	Patients (n)		
	2019	2002-2018	Total
<b>Total</b>	7	58	65
<b>Age</b>			
Mean (SD)	56.5 (11.9)	47.2 (11.5)	48.2 (11.8)
0-24	0	2	2
25-34	1	5	6
35-44	0	15	15
45+	6	36	42
<b>Sex</b>			
Female	5	39	44
Male	2	19	21
<b>State of residence</b>			
New South Wales	3	26	29
Victoria	3	15	18
Queensland	1	2	3
Western Australia	0	4	4
South Australia	0	10	10
Tasmania	0	0	0
Australian Capital Territory	0	1	1
Northern Territory	0	0	0
<b>Total</b>	7	58	65

# Table 4.17b

Characteristics of allogenic islet cell transplant recipients in Australia by year of first transplant



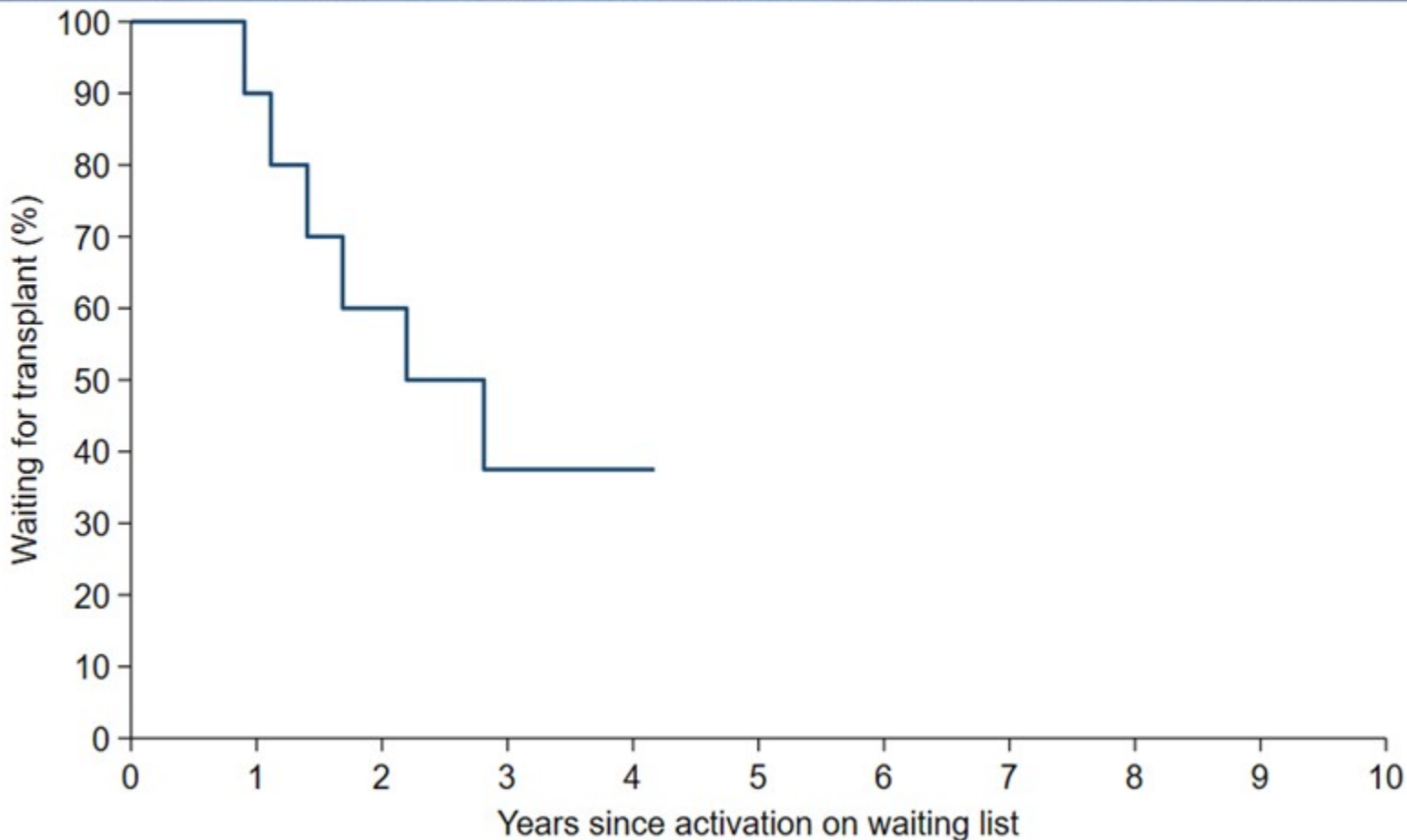
	Patients (n)		
	2019	2002-2018	Total
<b>Blood group</b>			
O	3	21	24
A	1	26	27
B	1	7	8
AB	2	4	6
<b>Number of transplants per recipient</b>			
1	1	15	16
2	4	26	30
3	2	17	19
<b>Wait time from listing to first transplant</b>			
0-1 years	1	16	17
1-2 years	3	3	6
2+ years	3	2	5
Not reported	0	37	37
<b>Insulin independent post-transplant</b>			
Yes	5	21	26
No	2	37	39
<b>Total</b>	<b>7</b>	<b>58</b>	<b>65</b>





# Figure 4.2

Time from activation on a waiting list to first allogeneic islet transplant

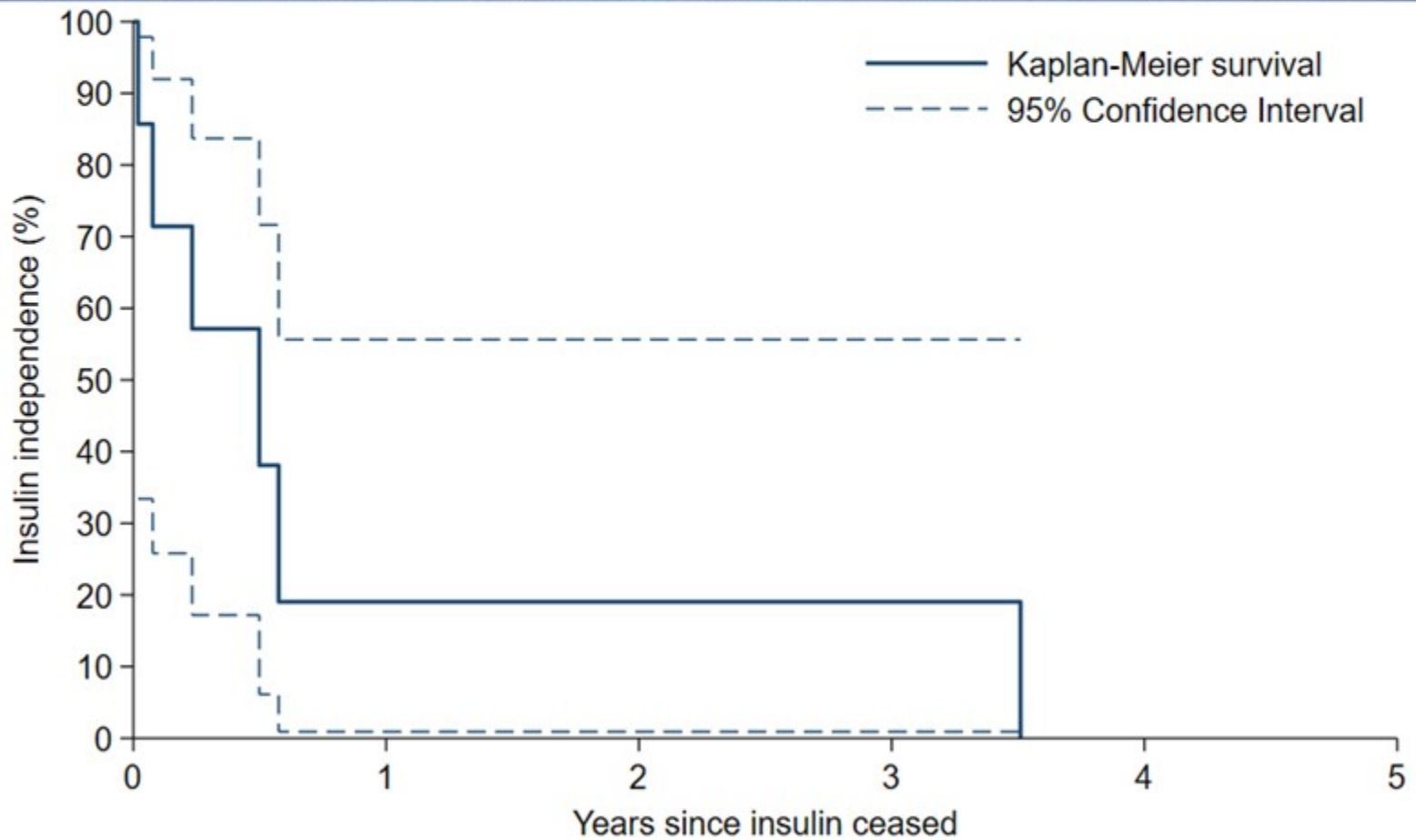


Patients at risk 10 9 6 3 2 1 1 1 1 1 1



# Figure 4.5

Duration of insulin independence from time first ceased



Patients at risk    7                    1                    1                    1                    0                    0