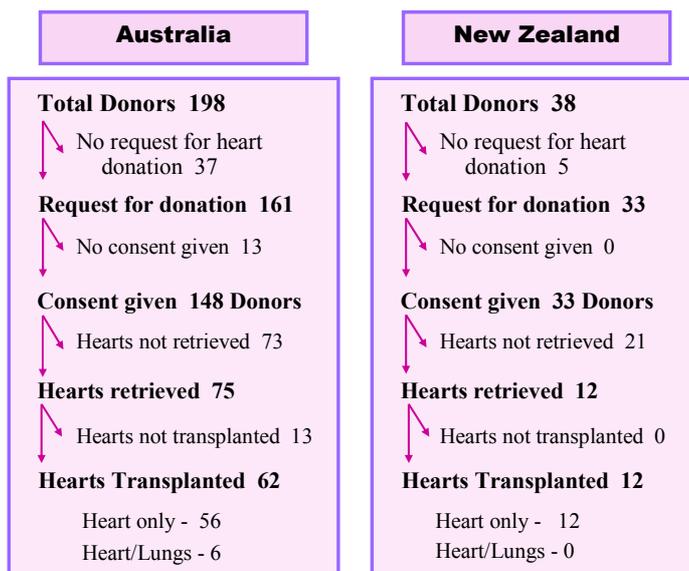


**Figure 80**

**Outcome of Request for Heart Donation 2007**



Refer to Appendices for reasons hearts were not requested, not retrieved and not transplanted

**Figure 81**

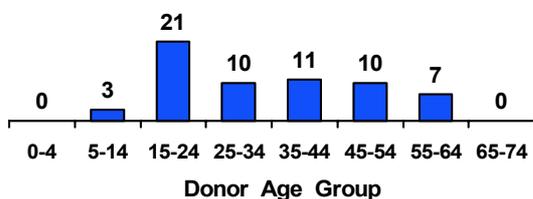
		Age Groups								Total	
		00-04	05-14	15-24	25-34	35-44	45-54	55-64	65-74		
Australia	Year	2002	1	8	29	10	15	14	3	0	<b>80</b>
	2003	0	3	21	8	17	17	2	0	<b>68</b>	
	2004	0	1	28	16	11	17	5	0	<b>78</b>	
	2005	0	3	21	12	17	20	5	0	<b>78</b>	
	2006	0	6	28	12	10	18	2	0	<b>76</b>	
	2007	0	3	21	10	11	10	7	0	<b>62</b>	
New Zealand	2002	0	1	1	0	4	2	1	0	<b>9</b>	
	2003	0	2	8	3	6	3	3	0	<b>25</b>	
	2004	0	0	3	1	1	0	1	0	<b>6</b>	
	2005	0	0	2	2	2	6	4	0	<b>16</b>	
	2006	0	0	3	3	2	1	0	0	<b>9</b>	
	2007	0	1	1	1	2	6	1	0	<b>12</b>	

Also includes hearts used for heart/lung transplants

**Figure 82**

**Age of Donors Providing Transplanted Hearts - Australia 2007**

**Donors (62)**



**Age of Donors Providing Transplanted Hearts - New Zealand 2007**

**Donors (12)**

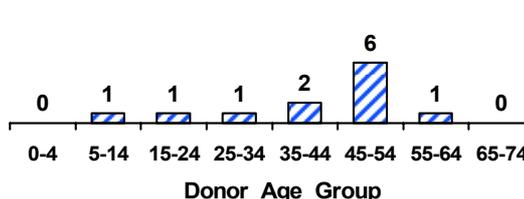


Figure 83

### Heart Transplants by Transplant State Australia and New Zealand 2006 - 2007

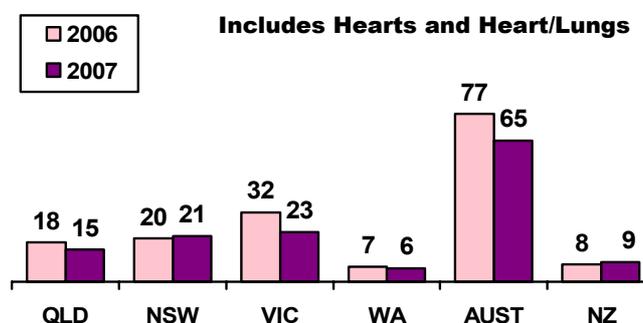


Figure 84

Heart and Lung Transplant Recipients By Transplant Country 2001 - 2007		2001	2002	2003	2004	2005	2006	2007
Australia	Heart/Lung							
	Heart	67	73	66	74	75	71	59
	Heart/lung	2	8	5	6	6	6	6
	Double Lung	47	66	58	82	71	79	69
	Single left lung	10	12	9	7	5	8	4
	Single right lung	16	13	7	6	5	8	4
	<b>Total</b>	<b>142</b>	<b>172</b>	<b>145</b>	<b>175</b>	<b>162</b>	<b>172</b>	<b>142</b>
New Zealand	Heart	15	8	22	4	13	8	9
	Heart/lung	0	0	0	0	0	0	0
	Double lung	9	5	10	9	8	9	9
	Single left lung	1	1	2	0	0	1	0
	Single right lung	1	2	2	0	0	0	0
		<b>Total</b>	<b>26</b>	<b>16</b>	<b>36</b>	<b>13</b>	<b>21</b>	<b>18</b>

Figure 85

Regional Outcome of Requests for Heart Donation 1989 - 2007										
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ *
<b>Total Donors</b>	<b>753</b>	<b>1163</b>	<b>87</b>	<b>854</b>	<b>63</b>	<b>495</b>	<b>40</b>	<b>324</b>	<b>3779</b>	<b>555</b>
Requested	711	955	77	741	56	369	34	257	3200	452
Consented	678	895	70	702	54	355	33	236	3023	440
Retrieved	366	511	49	416	37	192	14	133	1718	190
Transplanted	362	502	48	376	34	185	14	129	1649	189
* New Zealand 1993 - 2007 Includes Hearts only, Heart/Lungs and Heart / (L) Lung										

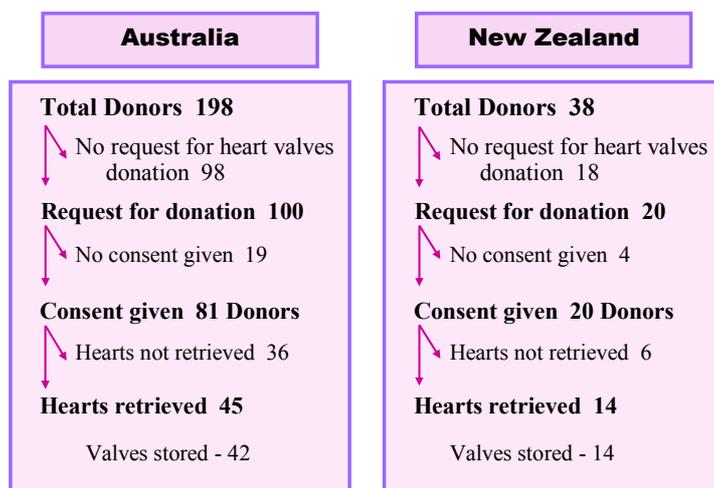
## HEART VALVE DONATION

The aortic and pulmonary heart valves can often be viable for transplantation when the whole heart is not suitable. Heart valves can be stored for up to five years.

This data relates only to heart valves retrieved from organ donors.

**Figure 86**

### Outcome of Request for Heart Valve Donation 2007



**Figure 87**

<b>Age of Heart Valve Donors 2002 - 2007</b>												
		Age Groups										
		Year	00-04	05-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	Total
<b>Australia</b>	2002	2	4	8	4	11	15	10	0	0		<b>54</b>
	2003	1	2	7	4	4	11	8	0	1		<b>38</b>
	2004	0	3	3	6	4	13	7	0	0		<b>36</b>
	2005	4	3	1	2	4	17	3	0	0		<b>34</b>
	2006	0	2	3	5	10	10	4	0	0		<b>34</b>
2007	3	1	6	8	6	10	8	0	0		<b>42</b>	
<b>New Zealand</b>	2002	0	2	1	2	6	7	2	0	0		<b>20</b>
	2003	0	0	4	1	4	0	0	0	0		<b>9</b>
	2004	0	0	4	3	3	3	8	0	0		<b>21</b>
	2005	0	0	1	1	2	1	0	0	0		<b>5</b>
	2006	0	0	3	0	1	1	1	0	0		<b>6</b>
2007	0	0	3	0	4	5	2	0	0		<b>14</b>	

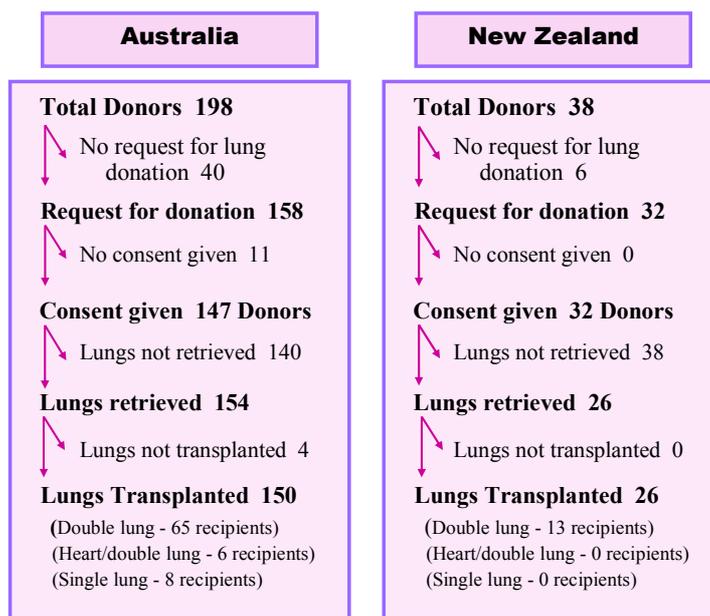
**Figure 88**

<b>Regional Outcome of Requests for Heart Valve Donation 1989 - 2007</b>										
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ *
<b>Total Donors</b>	<b>753</b>	<b>1163</b>	<b>87</b>	<b>854</b>	<b>63</b>	<b>495</b>	<b>40</b>	<b>324</b>	<b>3779</b>	<b>555</b>
Requested	255	264	17	168	11	90	5	71	<b>881</b>	<b>228</b>
Consented	242	255	16	156	11	85	5	67	<b>837</b>	<b>221</b>
Retrieved	194	193	14	98	8	62	3	57	<b>629</b>	<b>203</b>
Transplanted or Stored	192	183	14	96	8	60	3	56	<b>612</b>	<b>201</b>

\* New Zealand 1993 - 2007

**Figure 89**

**Outcome of Request for Lung Donation 2007**



Refer to Appendices for reasons lungs were not requested, not retrieved and not transplanted

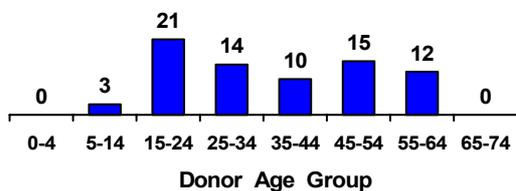
**Figure 90**

		Age Groups									
		Year	00-04	05-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84
<b>Australia</b>	2002	0	6	27	7	19	17	9	0	0	<b>85</b>
	2003	0	2	20	7	12	15	10	0	1	<b>67</b>
	2004	0	4	24	23	16	17	11	0	0	<b>95</b>
	2005	0	4	14	13	18	27	6	0	0	<b>82</b>
	2006	0	7	27	16	9	23	11	0	0	<b>93</b>
	2007	0	3	21	14	10	15	12	0	0	<b>75</b>
<b>New Zealand</b>	2002	0	0	0	0	8	2	2	0	0	<b>12</b>
	2003	0	1	5	3	8	0	2	0	0	<b>19</b>
	2004	0	0	3	1	1	0	6	0	0	<b>11</b>
	2005	0	0	2	0	2	5	2	0	0	<b>11</b>
	2006	0	1	1	3	5	1	2	0	0	<b>13</b>
	2007	0	0	1	0	3	7	2	0	0	<b>13</b>

**Figure 91**

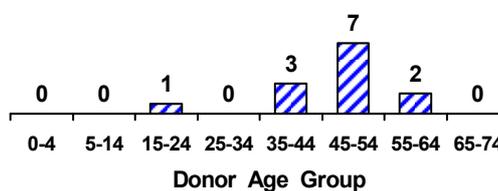
**Age of Donors Providing Transplanted Lungs - Australia 2007**

Donors (75)



**Age of Donors Providing Transplanted Lungs - New Zealand 2007**

Donors (13)

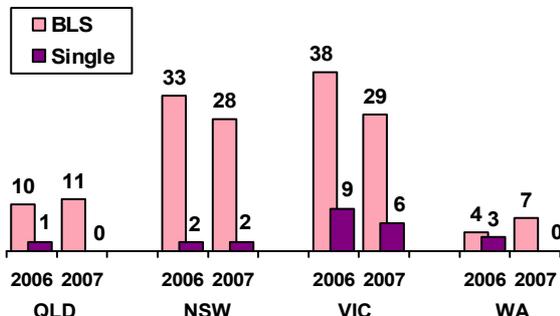


**Figure 92**

**Lung Transplant Recipients 2006 - 2007 by Transplant State - Australia and NZ**



**Bilateral Sequential (Double) and Single Lung Transplants by State 2006 - 2007**



**Figure 93**

Regional Outcome of Requests for Lung Donation 1989 - 2007										
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ **
<b>Total Donors</b>	<b>753</b>	<b>1163</b>	<b>87</b>	<b>854</b>	<b>63</b>	<b>495</b>	<b>40</b>	<b>324</b>	<b>3779</b>	<b>555</b>
Requested	676	923	77	684	52	325	33	228	2998	384
Consented	636	868	70	653	50	309	32	211	2829	378
Retrieved x	431	757	73	587	54	294	28	189	2413	297
Transplanted x	402	734	71	547	54	282	27	184	2301	278

X Number of Lungs (Includes Heart/Double Lungs and Heart/Single (L) Lung)  
 \*\* New Zealand 1993 - 2007

**DONOR LUNG FUNCTION**

**AUSTRALIA**

There were 46 Australian lung donors (60%) who had a bronchoscopy in 2007. Ten donors had chest trauma; these included contusions (3), chest drain (2), pneumothorax (2), fractured ribs, haemothorax and pneumocatheter each (1).

The arterial blood gases were taken on 100% FiO<sub>2</sub> and PEEP of 5 cm. Thirteen donors had a PEEP >5 cm. The results from 64 lung donors in 2007 show 14% (9) to be acidotic (pH < 7.35) and 34% (22) to be alkalotic (pH > 7.45).

Oxygenation measured as PaO<sub>2</sub> ranged from 239-584 mmHg with a median of 448 mmHg.

PaCO<sub>2</sub> ranged from 27.0-56.0 mmHg with a median of 36.0 mmHg.

**NEW ZEALAND**

There were four (31%) New Zealand lung donors who had a bronchoscopy in 2007. Two donors had contusions.

The arterial blood gas results from 13 lung donors in 2007 shows 15% (2) to be acidotic (pH < 7.35) and 23% (3) to be alkalotic (pH > 7.45).

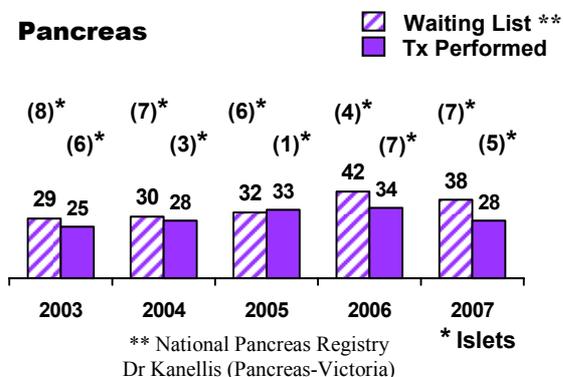
Oxygenation measured as PaO<sub>2</sub> ranged from 360-526 mmHg with a median of 439 mmHg.

PaCO<sub>2</sub> ranged from 24.4-47.0 mmHg with a median of 40.2 mmHg.

## PANCREAS DONATION

Figure 94

### Waiting List vs Deceased Transplants Australia 2003 - 2007



There were 25 combined kidney/pancreas transplants performed in 2007: sixteen at Westmead Hospital, NSW and nine at Monash Medical Centre, Victoria.

Three pancreas only and two islets transplant were performed at Westmead, two islets transplants at the Prince of Wales, NSW and one islets transplant at St Vincent's Hospital, Victoria in 2007.

In New Zealand there was only one combined kidney/pancreas transplant performed in Auckland in 2007.

Figure 95

Waiting List		
	AUST	NZ **
Number of Patients with Diabetes Type 1 on dialysis (December 2006) *	243	41
Patients < 45 years of age	114	20
Patients < 55 years of age	191	35
Number of patients on the Kidney Transplant Waiting List *	1388	559
Number of patients on the Kidney Pancreas Transplant Waiting List	38	5
Number of patients on the Pancreas only Waiting List	2	0
Number of patients on the Islet Transplant Waiting List	7	0

Reference: \* ANZDATA Registry NOMS (National Organ Matching Service)  
National Pancreas Registry and Dr Kanellis (Pancreas-Victoria)  
\*\* NZ Donor Coordinators

Figure 96

### Outcome of Request for Pancreas Donation 2007



Refer to Appendices for reasons pancreas were not requested, not retrieved and not transplanted

**Figure 97**

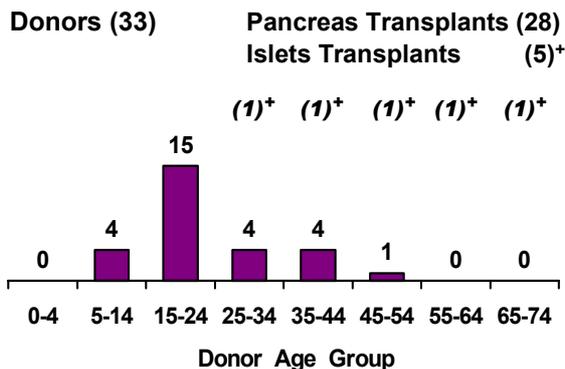
<b>Age of Donors Providing Transplanted Pancreas 2002 - 2007</b>									
		<b>Age Groups</b>							
	<b>Year</b>	<b>00-04</b>	<b>05-14</b>	<b>15-24</b>	<b>25-34</b>	<b>35-44</b>	<b>45-54</b>	<b>55-64</b>	<b>Total</b>
<b>Australia</b>	2002	0	1	14	6	2	2	0	<b>25</b>
	2003	0	0	14	4	7	0	0	<b>25</b>
	2004	0	1	11	6	9	1	0	<b>28</b>
	2005	0	2	11	8	8	4	0	<b>33</b>
	2006	0	1	15	9	8	1	0	<b>34</b>
	2007	0	4	15	4	4	1	0	<b>28</b>
<b>New Zealand</b>	2002	0	0	1	0	0	1	0	<b>2</b>
	2003	0	0	3	2	1	0	0	<b>6</b>
	2004	0	0	1	0	1	0	0	<b>2</b>
	2005	0	0	0	1	1	0	0	<b>2</b>
	2006	0	0	3	2	1	0	0	<b>6</b>
	2007	0	4	15	4	4	1	0	<b>28</b>

**Figure 98**

<b>Age of Donors Providing Transplanted Islets 2002 - 2007</b>										
		<b>Age Groups</b>								
	<b>Year</b>	<b>00-04</b>	<b>05-14</b>	<b>15-24</b>	<b>25-34</b>	<b>35-44</b>	<b>45-54</b>	<b>55-64</b>	<b>65-74</b>	<b>Total</b>
<b>Australia</b>	2002	0	0	0	1	0	0	0	0	<b>1</b>
	2003	0	0	1	0	3	0	2	0	<b>6</b>
	2004	0	0	2	0	1	0	0	0	<b>3</b>
	2005	0	0	0	0	1	0	0	0	<b>1</b>
	2006	0	0	1	1	1	1	2	1	<b>7</b>
	2007	0	0	0	1	1	1	1	1	<b>5</b>

**Figure 99**

**Age of Donors Providing Transplanted Pancreas and Islets - Australia 2007**



**Figure 100**

<b>Regional Outcome of Requests for Pancreas 1989 - 2007</b>										
	<b>QLD</b>	<b>NSW</b>	<b>ACT</b>	<b>VIC</b>	<b>TAS</b>	<b>SA</b>	<b>NT</b>	<b>WA</b>	<b>AUST</b>	<b>NZ **</b>
<b>Total Donors</b>	<b>753</b>	<b>1163</b>	<b>87</b>	<b>854</b>	<b>63</b>	<b>495</b>	<b>40</b>	<b>324</b>	<b>3779</b>	<b>555</b>
Requested	634	895	77	527	33	196	15	129	2506	268
Consented	568	848	71	494	30	174	14	105	2305	261
Retrieved	39	270	25	242	16	67	2	68	729	37
Transplanted	29	170	15	97	11	27	0	7	356	28
Pancreas Islets	0	16	1	4	0	2	0	0	23	0

\*\* New Zealand 1993 - 2007

## PANCREAS SPECIAL SECTION

**PAUL ROBERTSON - WESTMEAD HOSPITAL**

**TRACY BRISLANE - DATA MANAGER - WESTMEAD HOSPITAL**

**PROF JEREMY CHAPMAN - RENAL UNIT DIRECTOR - WESTMEAD HOSPITAL**

*For further information, please contact [Paul\\_Robertson@wsahs.nsw.gov.au](mailto:Paul_Robertson@wsahs.nsw.gov.au)*

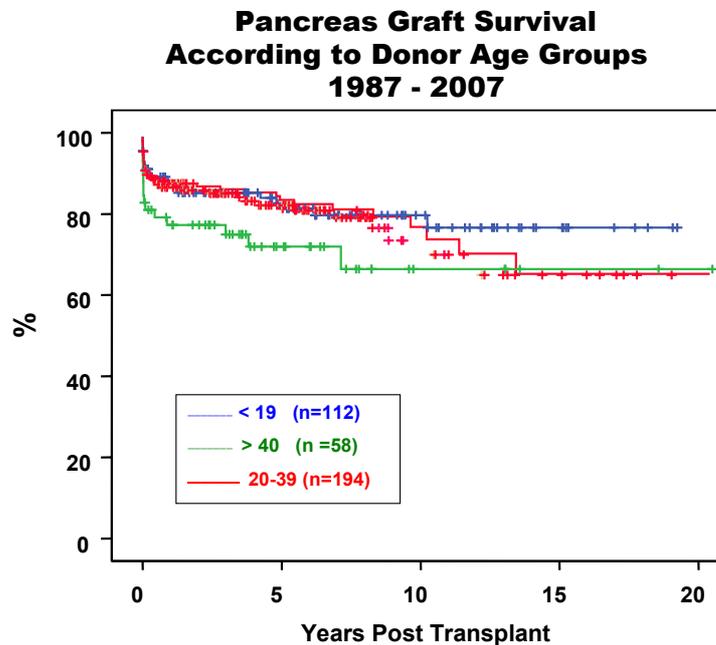
The utilisation of pancreas from deceased donors has evolved from the last pancreas report to the Australia and New Zealand Organ Donation Registry (ANZOD). Since that time there have been further developments in pancreas alone, pancreas after kidney, and islet cell transplantation. In this section we would like to highlight the need for, and use of, potential donors that do not fall within the category as solid organ donors for pancreas.

There are a large number of potential pancreas donors over the age of 45 years that would then be suitable as potential islet donors.

In islet transplantation the suitability criteria include many of the donors excluded from pancreas transplantation.

The issues of donated pancreas for Simultaneous Pancreas Kidney (SPK) transplantation have remained unchanged. There is a favourable outcome when using donors under the age of 40 years. This is further evidenced when comparing donors whose primary cause of death was trauma over that of cerebrovascular disease.

**Figure 101**



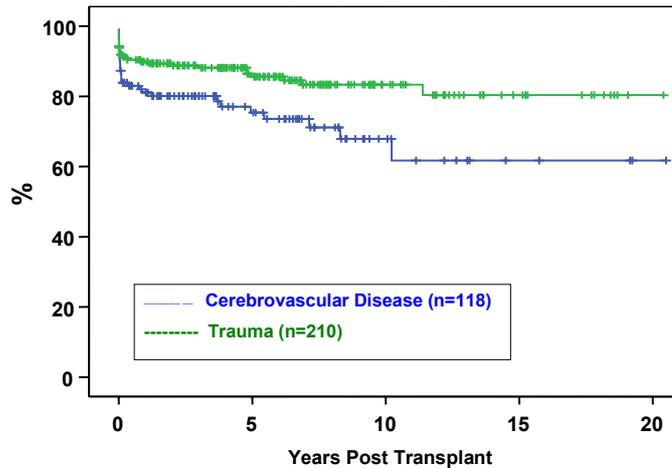
There is no difference in graft survival between the donors aged below 39 years but there is a difference in the over 40 year olds.

First year graft survival is 87% for both <19 and 20-39 years of age and 77% for over 40 years.

Third year graft survival is 85% for all under 39 years of age and 72% for over 40 years and the fifth year survival is 84% for both <19 and 20-39 years and 65% for over 40 years of age.

**Figure 102**

**Pancreas Graft Survival  
According to Cause of Donor Death  
1987 - 2007**



The pancreas graft survival was higher from donors who died from trauma compared to donors that died from cerebrovascular disease (CVD).

Those from trauma had an 88% survival rate at one year and those from CVD had 80%. At three years, trauma donors had an 88% survival rate, while CVD donors had 78%. At five years, trauma donors had an 87% survival rate and CVD donors 75%.

As seen above the donor characteristics, such as > 40 years of age and cerebrovascular disease as a cause of death, have an adverse outcome for pancreas transplantation. These two variables however do not have any impact on the suitability or the yield for islet cell transplantation.

The current allocation process favours the use of a donated pancreas for whole organ transplantation followed by further offers for islet isolation. The donor for islet transplantation extend the current utilisation by taking in an extended criteria as shown below.

Whole organ criteria

- Age <45 years
- Usually transplanted with a kidney
- Not obese

Islet donor criteria

- Preferable age <65 years
- Overweight donor may be preferable
- Pancreas only required

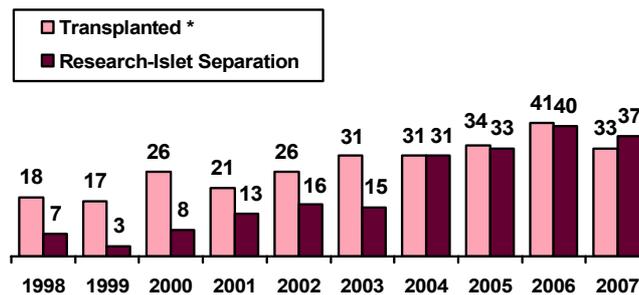
In both groups high inotrope use is an issue to be considered. It is clearly important for the vascularised graft but may be less of an issue for islet isolation. Ischaemia time is an issue for both groups. This seems particularly important for the islet group as a further process of isolation impacts on islet survival. Insulin use is a consideration for both groups.

In short the way forward for an increased use of donated pancreas is in the area of islet isolation. As shown below the number of pancreata utilised over the past ten years continues to increase with a stable number being transplanted as a whole organ graft (mostly in conjunction with a kidney - SPK).

As yet the number of patients transplanted with pancreatic islets is small, but with current research and established units across the country, the expectation is that this area will progress rapidly over the coming years.

**Figure 103**

**Acceptance of Pancreas for Transplantation and Research Australia 1998 - 2007**



\* Includes 23 Pancreas Islets transplanted from 2002-2007



## BONE DONATION

Figure 107

### Outcome of Request for Bone Donation 2007

Australia	New Zealand
<b>Total Donors 198</b>	<b>Total Donors 38</b>
↓ No request for bone donation 105	↓ No request for bone donation 21
<b>Request for donation 93</b>	<b>Request for donation 17</b>
↓ No consent given 48	↓ No consent given 1
<b>Consent given 45 Donors</b>	<b>Consent given 16 Donors</b>
↓ Bone not retrieved 34	↓ Bone not retrieved 16
<b>Bone retrieved 11</b>	<b>Bone retrieved 0</b>
↓ Bone not transplanted 0	↓ Bone not transplanted 0
<b>Bone Stored 11</b>	<b>Bone Stored 0</b>

Refer to Appendices for reasons bones were not requested, not retrieved and not transplanted

Figure 108

Age of Bone Donors 2002 - 2007											
		Age Groups									
	Year	00-04	05-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	Total
<b>Australia</b>	2002	0	0	2	1	3	1	0	0	0	<b>7</b>
	2003	0	0	4	4	1	3	1	0	0	<b>13</b>
	2004	0	0	6	1	1	6	2	0	0	<b>16</b>
	2005	0	0	1	0	1	6	2	0	0	<b>10</b>
	2006	0	0	6	2	3	3	3	0	0	<b>17</b>
	2007	0	0	0	1	1	4	5	0	0	<b>11</b>
<b>New Zealand</b>	2002	0	2	0	0	2	0	0	0	0	<b>2</b>
	2003	0	0	1	0	1	0	0	0	0	<b>2</b>
	2004	0	0	0	0	0	0	0	0	0	<b>0</b>
	2005	0	0	1	0	0	0	0	0	0	<b>1</b>
	2006	0	0	0	0	0	0	0	0	0	<b>0</b>
	2007	0	0	0	0	0	0	0	0	0	<b>0</b>

Figure 109

Regional Outcome of Bone Donation 1989 - 2007										
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ **
<b>Total Donors</b>	<b>753</b>	<b>1163</b>	<b>87</b>	<b>854</b>	<b>63</b>	<b>495</b>	<b>40</b>	<b>324</b>	<b>3779</b>	<b>555</b>
Requested	594	81	4	120	5	197	3	148	<b>1152</b>	<b>192</b>
Consented	397	60	4	64	3	79	3	86	<b>696</b>	<b>154</b>
Retrieved	156	8	0	22	2	49	0	48	<b>285</b>	<b>37</b>
Transplanted/Stored	152	8	0	15	2	49	0	47	<b>273</b>	<b>37</b>
** New Zealand 1993 - 2007										

## TERMINAL MANAGEMENT

### TIME FROM ADMISSION TO BRAIN DEATH

#### AUSTRALIA

In 2007, 30% of Australian donors were declared brain dead within 23 hours of hospital admission.

The median time from admission to brain death was 36.0 hours.

Thirteen percent of donors were in hospital for more than five days.

#### NEW ZEALAND

In 2007, 47% of New Zealand donors were declared brain dead within 23 hours of hospital admission.

Time of admission to hospital was unknown in 10% of donors. The median time from admission to brain death was 22.6 hours.

Six percent of donors were in hospital for more than five days.

Figure 110

Time from Admission to Brain Death 2002 - 2007												
	Year	Hours								Not Known	Median (hours)	No. of Donors
		0-23	24-47	48-71	72-95	96-119	120-143	144-167	>=168			
Australia	2002	39%	28%	16%	4%	4%	2%	1%	6%	0%	30.3	206
	2003	37%	32%	10%	7%	3%	2%	1%	8%	0%	28.6	179
	2004	36%	30%	11%	8%	5%	3%	1%	6%	0%	33.3	218
	2005	30%	32%	16%	3.5%	5%	1.5%	1%	10%	1%	36.7	204
	2006	37%	27%	8%	10%	3%	4%	4%	6%	<1%	33.0	202
	2007	30%	30%	15%	7%	3%	5%	2%	6%	2%	36.9	198
New Zealand	2002	44%	33%	3%	6%	3%	0%	3%	8%	6%	25.6	38
	2003	35%	20%	5%	5%	8%	0%	0%	0%	27%	24.0	40
	2004	33%	25%	10%	0%	2%	2%	2%	8%	18%	26.3	40
	2005	38%	14%	10%	7%	3.5%	0%	0%	10.5%	17%	31.2	29
	2006	12%	32%	12%	20%	4%	4%	0%	0%	16%	43.5	25
	2007	47%	18%	8%	8%	3%	3%	0%	3%	10%	22.6	38

Figure 111

Australian States Time from Admission to Brain Death 2007											
States	Hours								Not Known	Median (hours)	No. of Donors
	0-23	24-47	48-71	72-95	96-119	120-143	144-167	>=168			
Queensland	20%	38%	15%	8%	3%	8%	3%	5%	0%	44.2	39
New South Wales	36%	23%	11%	9%	6%	4%	1%	6%	4%	32.2	53
ACT	100%	0%	0%	0%	0%	0%	0%	0%	0%	22.5	1
Victoria	35%	26%	16%	5%	2%	2%	5%	7%	2%	32.9	55
Tasmania	100%	0%	0%	0%	0%	0%	0%	0%	0%	11.9	1
South Australia	19%	33%	26%	4%	0%	11%	0%	7%	0%	46.2	27
Northern Territory	67%	33%	0%	0%	0%	0%	0%	0%	0%	19.4	3
Western Australia	26%	42%	5%	5%	11%	5%	0%	5%	0%	41.0	19

**Figure 112**

<b>Time from Ventilation to Brain Death 2002 - 2007</b>												
	Year	Hours								Not Known	Median (hours)	No. of Donors
		0-23	24-47	48-71	72-95	96-119	120-143	144-167	>=168			
<b>Australia</b>	2002	38%	31%	16%	4%	3%	1%	1%	5%	<1%	29.3	<b>206</b>
	2003	39%	35%	7%	6%	4%	2%	<1%	12%	0%	27.0	<b>179</b>
	2004	39%	33%	12%	7%	4%	1%	1%	3%	0%	29.7	<b>218</b>
	2005	32%	37%	16%	4%	2%	1%	0%	7%	<1%	31.4	<b>204</b>
	2006	40%	28%	12%	8%	2.5%	2.5%	2.5%	3.5%	1%	28.8	<b>202</b>
	2007	31%	32%	16%	5%	4%	4%	2%	4%	2%	32.9	<b>198</b>
<b>New Zealand</b>	2002	42%	32%	5%	5%	2.5%	2.5%	0%	0%	11%	24.8	<b>38</b>
	2003	43%	18%	2%	5%	5%	2%	0%	0%	25%	21.1	<b>40</b>
	2004	40%	22.5%	7.5%	2.5%	5%	0%	2.5%	5%	15%	25.3	<b>40</b>
	2005	34.5%	17%	14%	0%	0%	0%	0%	10.5%	24%	27.7	<b>29</b>
	2006	36%	28%	16%	0%	4%	0%	0%	0%	16%	28.4	<b>25</b>
	2007	47%	26%	5%	11%	0%	0%	0%	0%	11%	21.9	<b>38</b>

## TIME FROM BRAIN DEATH TO AORTIC CROSS CLAMP

### AUSTRALIA

Thirty percent of donors had undergone aortic cross clamp within twelve hours of the certification of brain death in 2007.

The median time was 15.2 hours.

### NEW ZEALAND

In 2007, 60% of donors had undergone aortic cross clamp within twelve hours of certification of brain death.

The median time was 11.8 hours

**Figure 113**

<b>Time from Brain Death to Aortic Cross Clamp 2002 - 2007</b>												
Hours	Australia						New Zealand					
	2002	2003	2004	2005	2006	2007	2002	2003	2004	2005	2006	2007
<=6	4%	3%	5%	5%	4%	2%	18%	12.5%	12.5%	3%	8%	5%
7 - 12	48%	42%	40%	30%	27%	28%	61%	67.5%	70%	80%	68%	55%
13 - 18	39%	41%	44%	48%	48%	49%	13%	17.5%	17.5%	17%	16%	37%
19 - 24	6%	7%	6%	13%	13%	15%	3%	0%	0%	0%	8%	3%
> 24	3%	7%	5%	4%	8%	6%	5%	2.5%	0%	0%	0%	0%
<b>Median Hours</b>	<b>12.8</b>	<b>13.4</b>	<b>13.5</b>	<b>14.5</b>	<b>14.7</b>	<b>15.2</b>	<b>9.5</b>	<b>9.9</b>	<b>9.6</b>	<b>10.3</b>	<b>9.8</b>	<b>11.8</b>
Number of Donors	204	178	215	195	194	179	38	40	40	29	25	38
DCD Donors *	2	1	3	9	8	19	0	0	0	0	0	0

**Figure 114**

<b>Australian States Time from Brain Death to Aortic Cross Clamp 2007</b>								
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA
<= 6 hours	0%	0%	0%	0%	0%	12%	0%	0%
7 - 12 hours	44%	36%	100%	15%	0%	28%	0%	10%
13 - 18 hours	44%	53%	0%	55%	0%	52%	0%	42%
19 - 24 hours	10%	4%	0%	28%	0%	8%	33%	32%
> 24 hours	2%	7%	0%	2%	100%	0%	67%	16%
<b>Median Hours</b>	<b>14.1</b>	<b>14.5</b>	<b>9.7</b>	<b>17.4</b>	<b>26.3</b>	<b>13.7</b>	<b>29.7</b>	<b>18.9</b>
Number of Donors	39	45	1	46	1	25	3	19
DCD Donors *	0	8	0	9	0	2	0	0

\* DCD = Donation after Cardiac Death Donors

## DONOR MAINTENANCE

### DRUGS FOR MAINTENANCE OF THE DONOR (GIVEN IN THE INTENSIVE CARE/CRITICAL CARE UNIT)

#### AUSTRALIA

There were 9% (18) of donors who did not require inotropic support in 2007. Twelve of those were DCD donors.

Antidiuretic agents (desmopressin/vasopressin) were prescribed to 58% (115) of all donors.

#### MAP <50 mm Hg

Mean arterial blood pressure (MAP) <50 mm Hg was recorded in 4% (8) of donors in Australia in 2007. Five donors had a duration of less than one hour and three donors had one hour or longer.

Range was fifteen minutes to two hours.

#### NEW ZEALAND

In 2007 there were two donors (5%) who did not require inotropic support.

Antidiuretic agents (desmopressin/vasopressin) were prescribed to 53% (20) of all donors.

#### MAP <50 mm Hg

Six donors were reported with a mean arterial blood pressure (MAP) <50 mm Hg. Three donors had a duration of less than one hour and three donors, a duration of one hour.

Range was fifteen minutes to one hour.

**Figure 115**

Donor Maintenance 2002 - 2007												
Drugs	Australia						New Zealand					
	2002	2003	2004	2005	2006	2007	2002	2003	2004	2005	2006	2007
<b>Number of Donors</b>	<b>(206)</b>	<b>(179)</b>	<b>(218)</b>	<b>(204)</b>	<b>(202)</b>	<b>(198)</b>	<b>(38)</b>	<b>(40)</b>	<b>(40)</b>	<b>(29)</b>	<b>(25)</b>	<b>(38)</b>
Dopamine	18	12	22	15	15	10	10	9	6	1	2	5
Adrenaline	42	34	28	26	21	17	2	0	4	0	1	0
Noradrenaline	151	138	174	165	156	160	31	28	44	26	20	31
Aramine	7	12	4	4	11	4	0	2	0	0	0	0
Dobutamine	5	3	3	8	5	11	0	0	0	1	0	1
Desmopressin / DDAVP	134	122	133	127	121	115	14	20	16	20	13	20

NB: Donors may be given more than one drug

**Figure 116**

Australian States Donor Maintenance 2007 (2006)								
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA
<b>Number of Donors</b>	<b>39 (36)</b>	<b>53 (50)</b>	<b>1 (4)</b>	<b>52 (45)</b>	<b>1 (8)</b>	<b>27 (36)</b>	<b>3 (2)</b>	<b>19 (21)</b>
Dopamine	6 (7)	1 (6)	0 (0)	1 (2)	1 (0)	0 (0)	0 (0)	1 (0)
Adrenaline	5 (1)	2 (6)	0 (0)	5 (2)	0 (1)	3 (10)	1 (0)	1 (1)
Noradrenaline	25 (22)	49 (39)	1 (4)	42 (38)	1 (8)	22 (22)	2 (2)	18 (21)
Aramine	0 (0)	2 (6)	0 (2)	0 (2)	0 (0)	1 (0)	1 (0)	0 (1)
Dobutamine	2 (0)	2 (1)	0 (1)	1 (1)	0 (0)	2 (2)	1 (0)	3 (0)
Desmopressin / DDAVP	26 (25)	37 (31)	0 (3)	22 (21)	1 (4)	12 (19)	3 (2)	14 (16)

NB: Donors may be given more than one drug

## TERMINAL TREATMENT

### TERMINAL TREATMENT (PROVIDED IN THE OPERATING THEATRES)

#### AUSTRALIA

Eleven donors did not receive any heparin as part of their terminal treatment in 2007. Three of these were DCD (donation after cardiac death) donors.

Five donors did not receive any terminal treatment at all. Two were beating heart donors.

#### NEW ZEALAND

All donors received heparin as part of their terminal treatment.

All were beating heart donors in 2007.

**Figure 117**

Terminal Treatment 2002 - 2007												
Drugs	Australia						New Zealand					
	2002	2003	2004	2005	2006	2007	2002	2003	2004	2005	2006	2007
<b>Number of Donors</b>	<b>(206)</b>	<b>(179)</b>	<b>(218)</b>	<b>(204)</b>	<b>(202)</b>	<b>(198)</b>	<b>(38)</b>	<b>(40)</b>	<b>(40)</b>	<b>(29)</b>	<b>(25)</b>	<b>(38)</b>
Heparin	203	177	211	193	196	187	37	40	37	27	25	38
Methyl Prednisolone	186	157	182	145	162	145	2	4	5	2	4	3
Chlorpromazine	49	37	35	30	38	30	2	0	1	0	0	0
Mannitol	8	12	4	6	11	17	0	0	0	0	0	0
Prostacyclin	89	76	93	59	58	46	12	21	11	10	13	12

NB: Donors may be given more than one drug

**Figure 118**

Australian States Terminal Treatment 2007 (2006)								
	QLD	NSW	ACT	VIC	TAS	SA	NT	WA
<b>Number of Donors</b>	<b>39 (36)</b>	<b>53 (50)</b>	<b>1 (4)</b>	<b>52 (45)</b>	<b>1 (8)</b>	<b>27 (36)</b>	<b>3 (2)</b>	<b>19 (21)</b>
Heparin	37 (36)	52 (47)	1 (4)	51 (45)	1 (8)	25 (34)	3 (2)	17 (20)
Methyl Prednisolone	17 (13)	45 (44)	0 (4)	37 (38)	1 (7)	27 (36)	2 (2)	16 (18)
Chlorpromazine	26 (29)	0 (0)	0 (0)	3 (7)	0 (1)	0 (1)	0 (0)	1 (0)
Mannitol	2 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	1 (0)	14 (1)
Prostacyclin	11 (12)	20 (22)	0 (2)	0 (2)	0 (1)	5 (8)	1 (0)	9 (11)

NB: Donors may be given more than one drug