

CHAPTER 6

HOMOGRAFT - HEART VALVE TRANSPLANTATION

Editor:

Mr Mohamed Ezani Md. Taib

Expert Panel:

Mr Mohamed Ezani Md. Taib (Chairperson)

Dr Abdul Rais Sanusi

Datuk Dr Aizai Azan Abdul Rahim

Dr Ashari Yunus

Dato' Dr David Chew Soon Ping

Table 6.1.1: Stock and Flow, 1996-2009

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New transplant	4	31	22	17	13	20	22	21	9	3	4	5	28	38
Deaths*	1	0	4	3	0	6	4	3	4	2	1	0	3	6
Lost to follow up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alive with functioning graft at 31 st December	3	34	52	66	79	93	111	129	134	135	138	143	168	200

Figure 6.1.1: Stock and Flow, 1996-2009

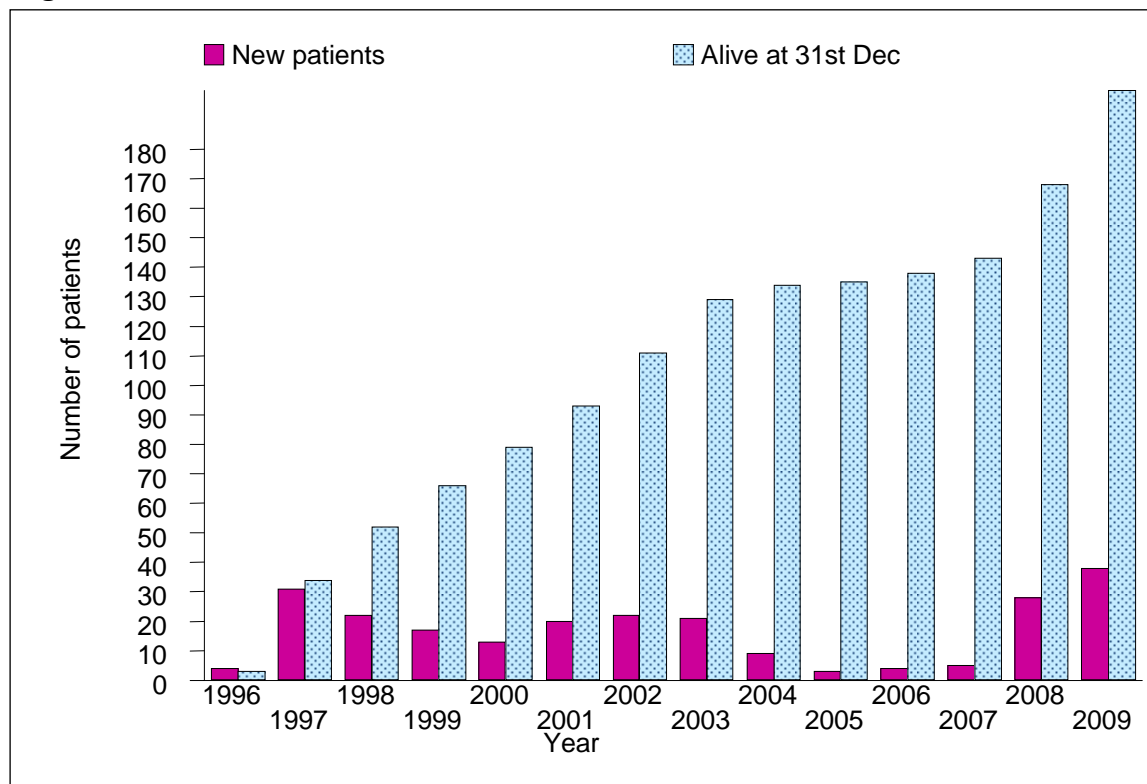


Table 6.2.1: Gender Distribution, 1996-2009

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
Gender	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Male	2	18	9	9	10	6	9	14	3	0	4	2	13	20	119
Female	2	13	13	8	3	14	13	7	6	3	0	3	15	18	118
TOTAL	4	31	22	17	13	20	22	21	9	3	4	5	28	38	237

Figure 6.2.1: Gender Distribution, 1996-2009

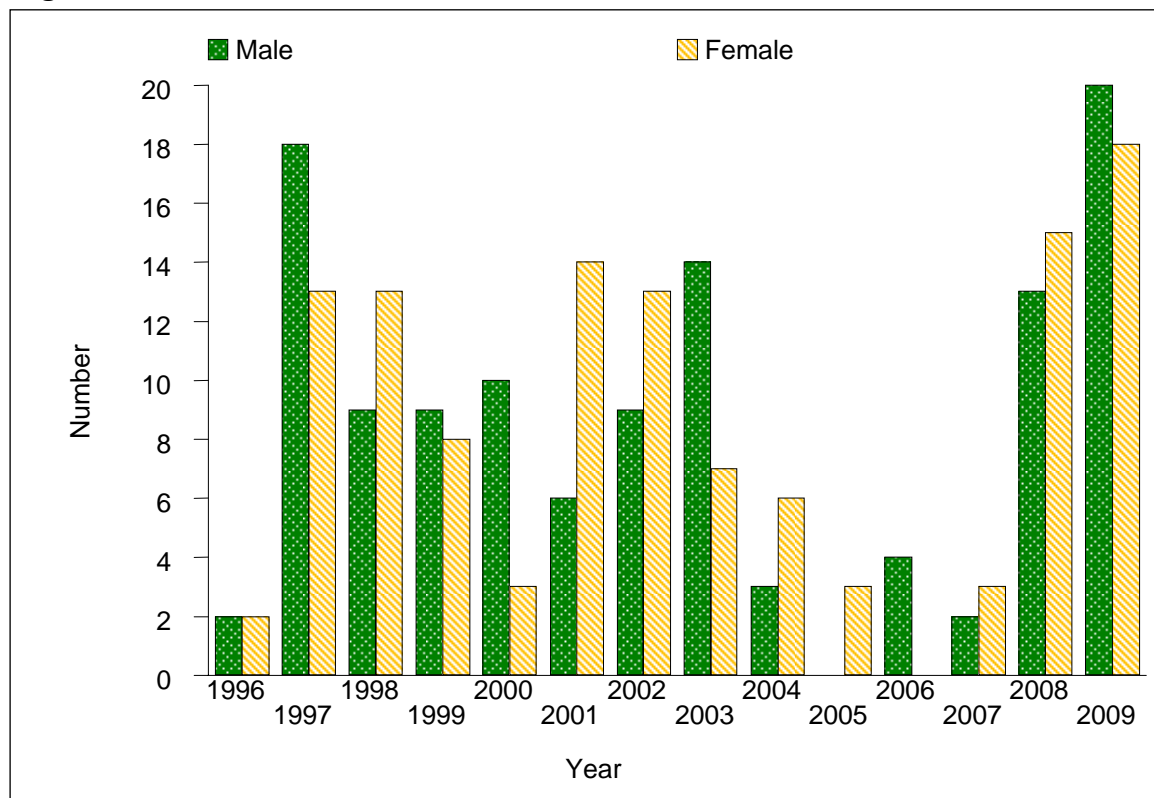


Table 6.2.2: Ethnic Group Distribution, 1996-2009

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
Ethnic group	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Malay	1	18	15	9	9	10	16	12	6	3	2	3	18	29	151
Chinese	3	11	4	3	2	9	4	6	1	0	1	0	7	6	57
Indian	0	2	2	2	0	1	2	2	1	0	1	0	1	3	17
Others	0	0	1	3	2	0	0	1	1	0	0	2	2	0	12
TOTAL	4	31	22	17	13	20	22	21	9	3	4	5	28	38	237

Figure 6.2.2: Ethnic Group Distribution, 1996-2009

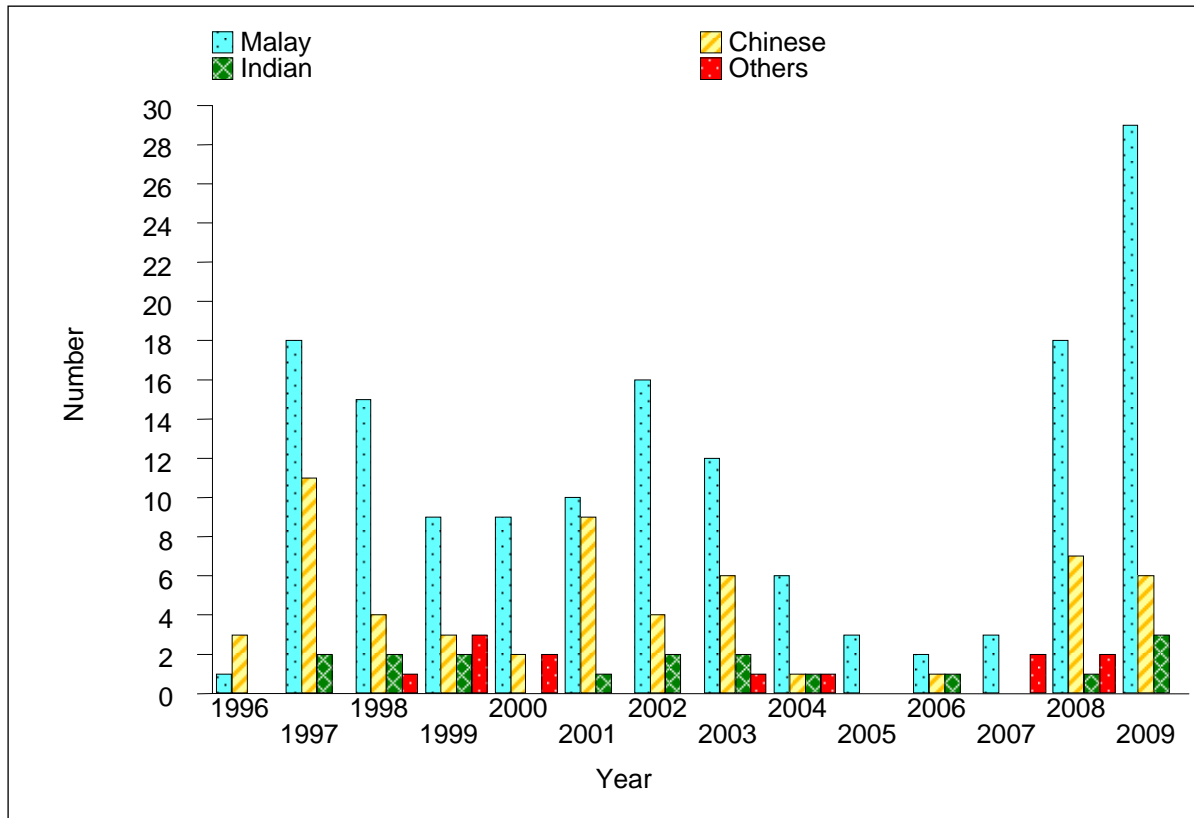


Table 6.2.3: Age Distribution in Years, 1996-2009

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
Age group	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
0-9	2	16	15	13	10	14	10	11	3	1	3	2	19	31	150
10-19	1	11	5	4	2	2	11	8	4	2	1	2	7	5	65
20-39	1	4	1	0	0	3	1	1	1	0	0	0	2	2	16
40-59	0	0	0	0	0	1	0	1	1	0	0	1	0	0	4
≥60	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
TOTAL	4	31	22	17	13	20	22	21	9	3	4	5	28	38	237
Mean	11.9	11.5	11	6.9	12.3	10.9	10.2	12.3	15.2	15	5.7	15.8	6.8	8.4	10.2
SD	6.6	6.7	14.5	4.1	17	14.2	6.1	11	11.4	7.8	4.6	18.4	6.2	6.9	10
Median	11.2	9.9	7.8	7	8.3	4.8	10.4	9	10.3	19.5	4.9	10.5	6.3	7.1	8
Min		2.4	2.4	7.2		4.8						2.4	1.2	2.4	1.2
	4.9	months	months	months	1.6	months	2.6	1.8	4.9	6	1	months	months	months	months
Max	20.5	29.6	69.7	17.1	66.8	52.8	27.5	53.4	42	19.5	11.8	47.4	21.5	36	69.7

Figure 6.2.3: Age Distribution in Years, 1996-2009

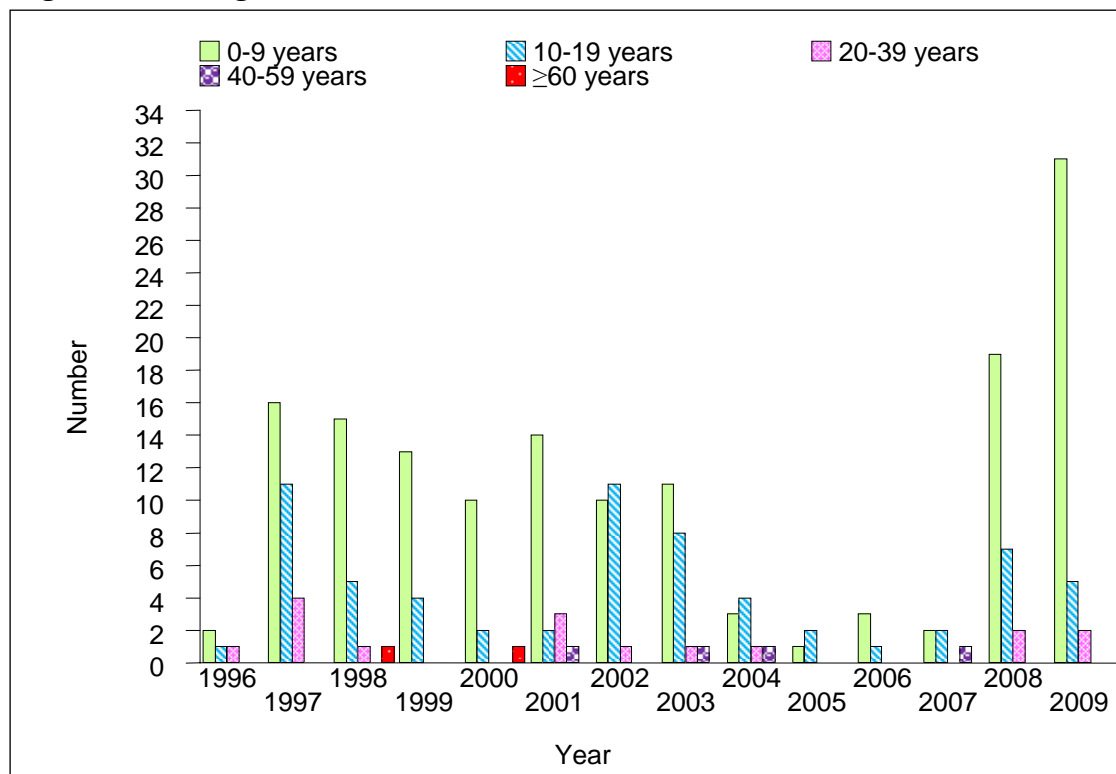


Table 6.3.1: Number of Valves Harvested by Type of Homograft, 1996-2009

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
Type of Homograft	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Aortic	8	17	10	8	11	14	10	8	7	5	14	9	15	17	153
Pulmonary	1	14	11	10	12	12	14	9	8	5	15	8	13	19	151
TOTAL	9	31	21	18	23	26	24	17	15	10	29	17	28	36	304

Table 6.3.2: Type of Transplant, 1996-2009

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
Type of transplant	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Aortic	4	18	11	7	7	9	10	10	4	1	1	2	8	24	116
Pulmonary	0	13	11	10	6	11	12	11	5	2	3	3	20	14	121
TOTAL	4	31	22	17	13	20	22	21	9	3	4	5	28	38	237

Figure 6.3.2: Type of Transplant, 1996-2009

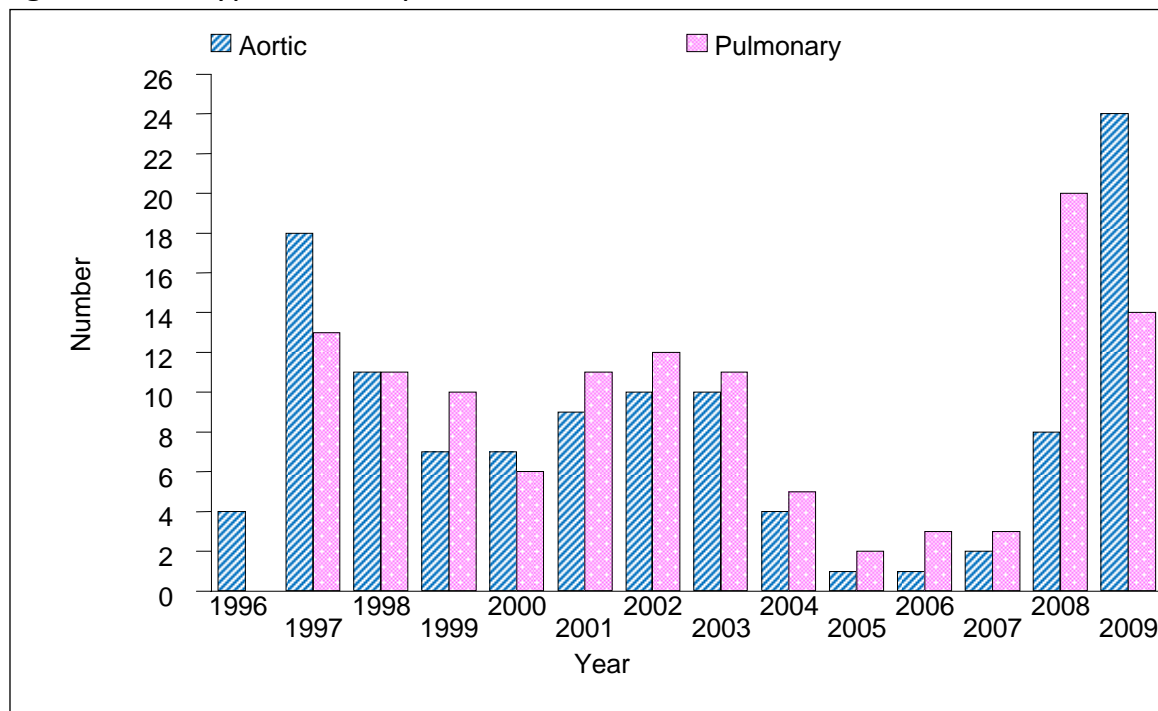


Table 6.4.1: Patient Survival by Gender, 1996-2009

Gender	Male		Female	
	% Survival	SE	% Survival	SE
Interval (years)				
1	90	3	90	3
3	88	3	86	3
5	86	4	86	3
7	86	4	86	3
9	86	4	83	4
11	86	4	83	4
13	86	4	83	4

Figure 6.4.1: Patient Survival by Gender, 1996-2009

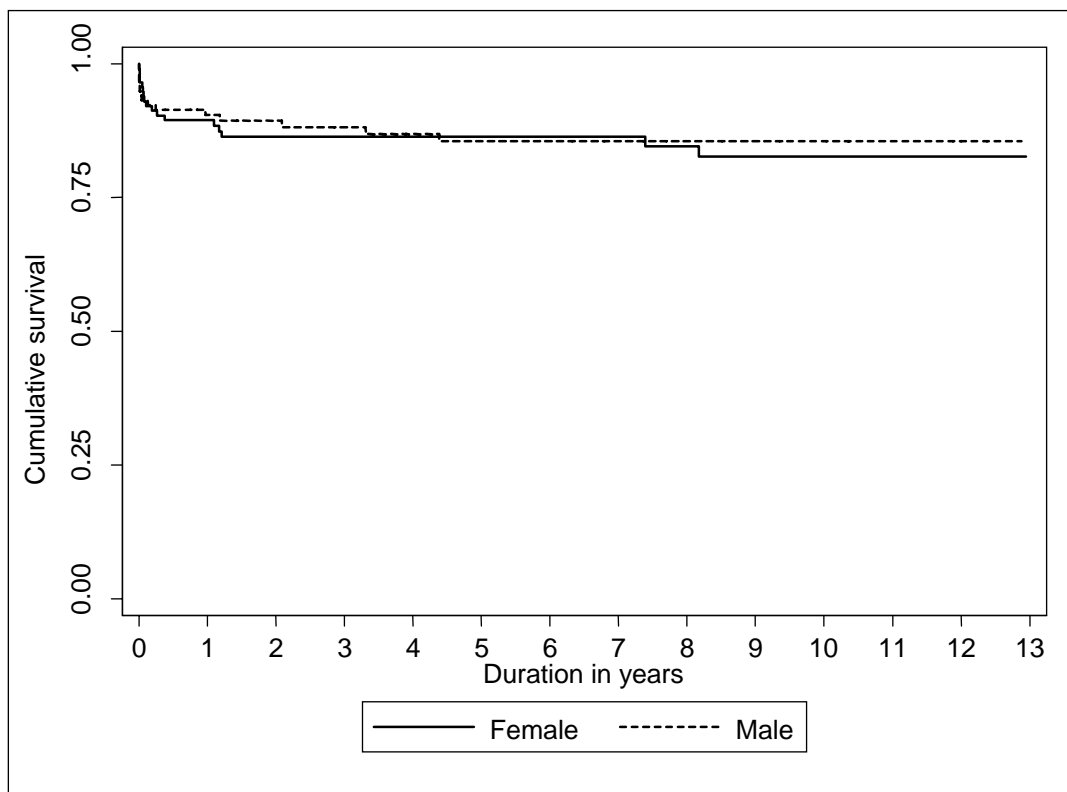


Table 6.4.2: Patient Survival by Age Group, 1996-2009

Age group Interval (months)	0-9 years		10-19 years		≥20 years	
	% Survival	SE	% Survival	SE	% Survival	SE
1	88	3	94	3	90	6
3	87	3	88	4	85	8
5	87	3	86	5	79	9
7	87	3	86	5	79	9
9	86	3	83	5	79	9
11	86	3	83	5	79	9
13	86	3	83	5	79	9

Figure 6.4.2: Patient Survival by Age Group, 1996-2009

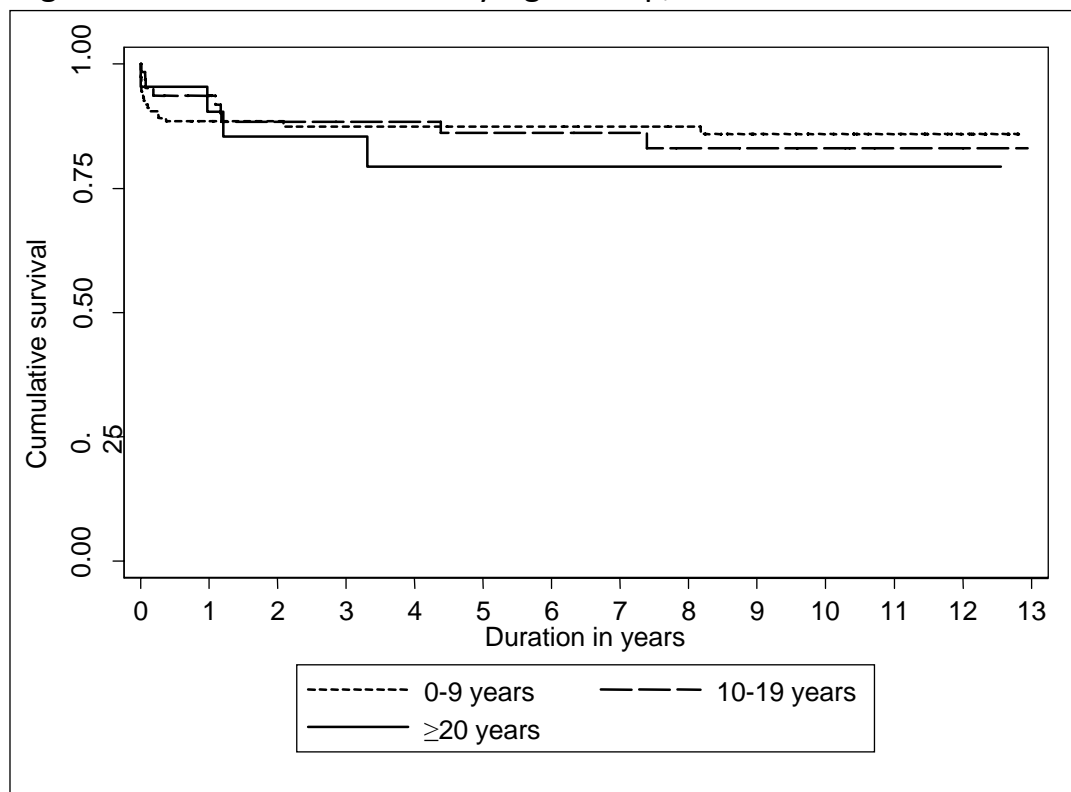


Table 6.4.3: Patient Survival by Type of Homograft, 1996-2009

Type of homograft Interval (years)	Aortic		Pulmonary	
	% Survival	SE	% Survival	SE
1	90	3	90	3
3	85	4	89	3
5	84	4	88	3
7	84	4	88	3
9	81	4	88	3
11	81	4	88	3
13	81	4	88	3

Figure 6.4.3: Patient Survival by Type of Homograft, 1996-2009

