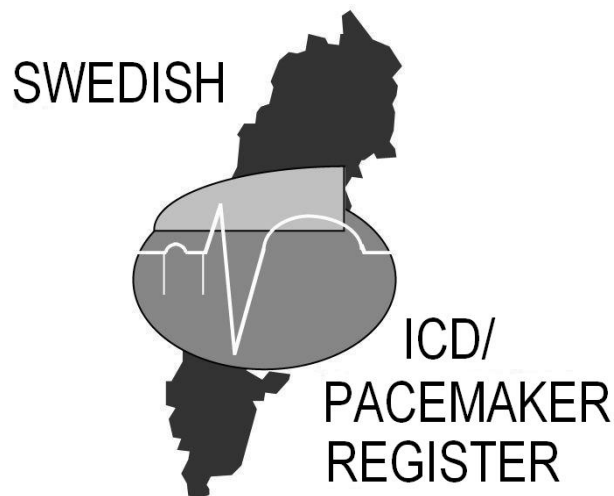


KAROLINSKA HOSPITAL
DEPARTMENT OF CARDIOLOGY
SWEDEN

ANNUAL STATISTICAL REPORT 2006

SWEDISH PACEMAKER REGISTER



STATISTICAL REPORT SWEDISH PACEMAKER REGISTRY 2006

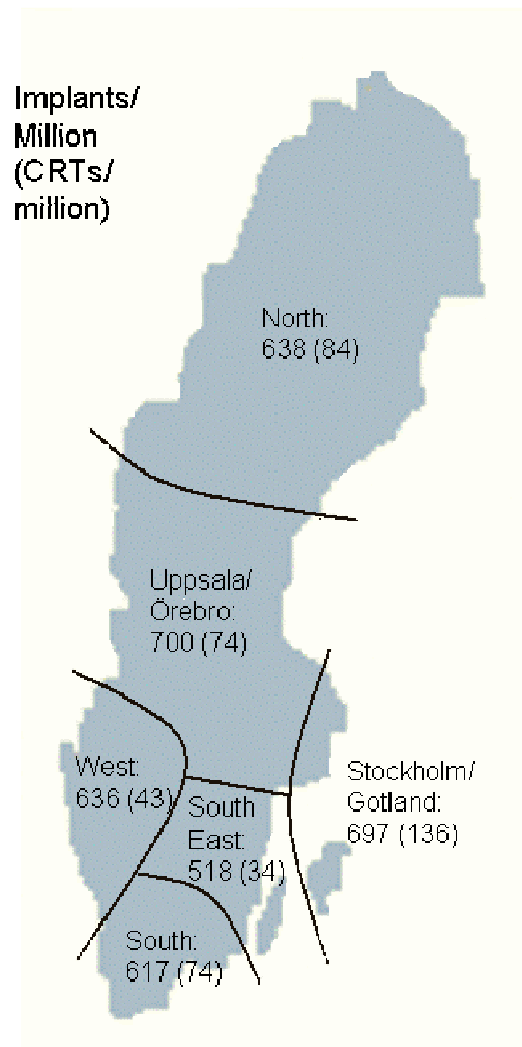
PACEMAKER IMPLANTING HOSPITALS / REGION 2006

Region	Hospital	No of first implants
Stockholm/Gotland	Danderyds sjukhus	370
	Karolinska Universitetssjukhuset Huddinge	214
	Karolinska Universitetssjukhuset Solna	279
	St Görans sjukhus	197
	Södersjukhuset	299
	Visby lasarett	19
Western Sweden	Alingsås lasarett	1
	Borås lasarett	166
	Kungälv's sjukhus	103
	Kärnsjukhuset Skövde	195
	NÄL	61
	Sahlgrenska sjukhuset	375
	Uddevalla sjukhus	98
	Varbergs sjukhus	85
	Östra sjukhuset	10
Northern Sweden	Kalix sjukhus	17
	Skellefteå sjukhus	34
	Sollefteå sjukhus	28
	Sunderby sjukhus	118
	Sundsvalls sjukhus	69
	Universitetssjukhuset Umeå	191
	Örnsköldsviks sjukhus	37
	Östersunds sjukhus	72
Southern Sweden	Blekinge sjukhuset	169
	Centralsjukhuset Växjö	66
	Länssjukhuset Halmstad	64
	UMAS	149
	Universitetssjukhuset Lund	564
Uppsala/Örebro	Arvika sjukhus	63
	Bollnäs sjukhus	79
	Centrallasarettet Västerås	125
	Centralsjukhuset Karlstad	107
	Falu lasarett	187
	Hudiksvalls sjukhus	66
	Länssjukhuset Gävle	146
	Mälarsjukhuset	115
	Universitetssjukhuset Örebro	201
	Uppsala Akademiska sjukhuset	265
South-East Sweden	Länssjukhuset Kalmar	44
	Länssjukhuset Ryhov	172
	Oskarshamns sjukhus	10
	Universitetssjukhuset Linköping	181
	Vrinnevisjukhuset	75
	Västerviks sjukhus	28

ANNUAL IMPLANTATION RATE

NUMBER OF IMPLANTS LISTED PER REGION

Region	Population	No of first implants	No /million	% CRT	Active patients
Stockholm/Gotland	1 975 401	1 377	697	10.0	8 796
Western Sweden	1 704 661	1 085	636	4.0	7 864
Northern Sweden	880 465	562	638	15.1	4 048
Southern Sweden	1 638 053	1 011	617	7.3	7 417
Uppsala/Örebro	1 931 396	1 353	700	5.5	8 727
Southeast Sweden	983 281	510	518	6.7	4 042
Total	9 113 257	5 898	647	7.6	40 894

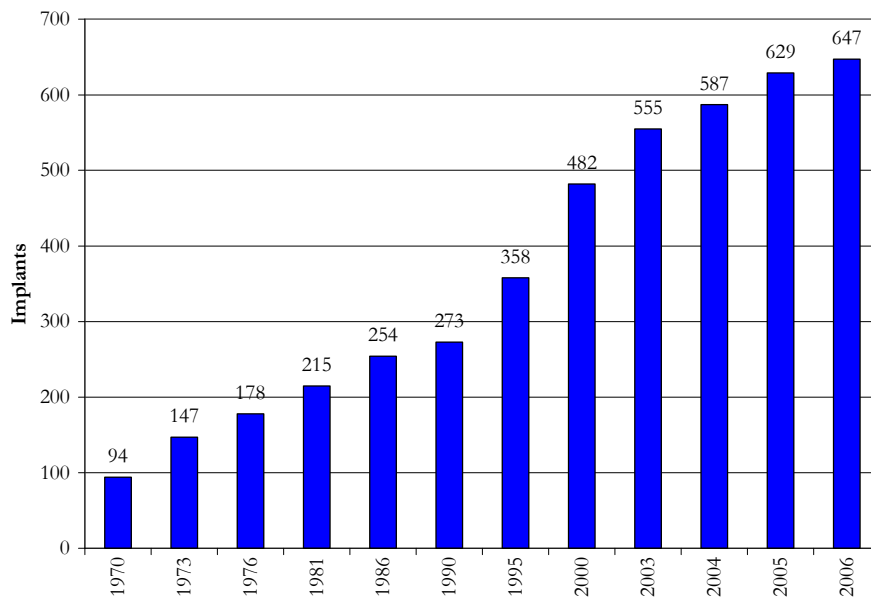
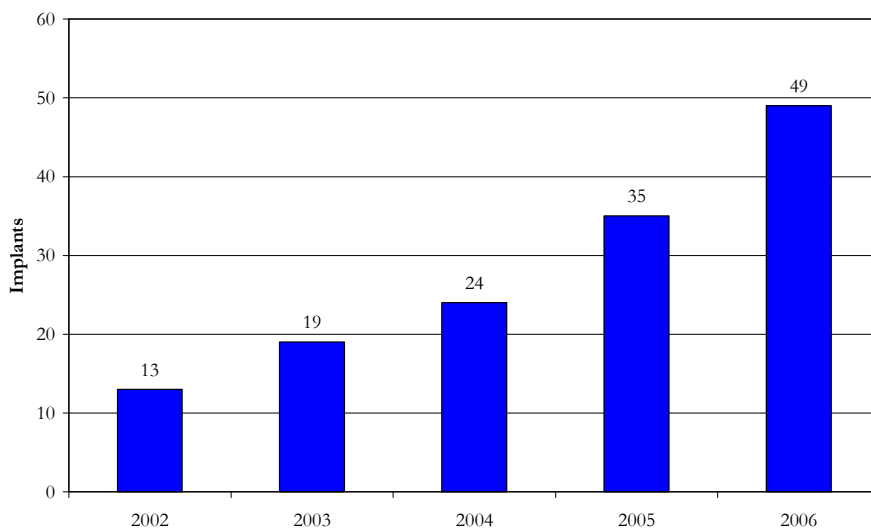


ANNUAL IMPLANTATION RATE

NUMBER OF IMPLANTS PERFORMED PER COUNTY

County	Population	No of first implants	No/million	%CRT
Stockholm	1 918 104	1359	708	10,4
Uppsala	319 925	265	828	19,6
Södermanland	263 099	115	437	0
Östergötland	417 966	256	612	12,9
Jönköping	331 539	172	518	0
Kronoberg	179 635	66	367	0
Kalmar	233 776	82	350	1,2
Gotland	57 297	19	331	0
Blekinge	151 436	169	1115	5,9
Skåne	1 184 500	713	601	9
Halland	288 859	149	515	2,7
Västra Götaland	1 538 284	1009	655	3,9
Värmland	273 489	170	621	0
Örebro	275 030	201	730	10,9
Västmanland	248 489	125	503	0
Dalarna	275 711	187	678	0
Gävleborg	275 653	291	1055	0
Västernorrland	243 978	134	549	11,2
Jämtland	127 020	72	566	0
Västerbotten	257 581	225	873	31,1
Norrbottn	251 886	135	535	0

ANNUAL IMPLANTATION RATE

NUMBER OF IMPLANTS / MILLION INHABITANTS 1970-2006**NUMBER OF CRT IMPLANTS / MILLION INHABITANTS 1970-2006**

DISTRIBUTION OF MANUFACTURERS

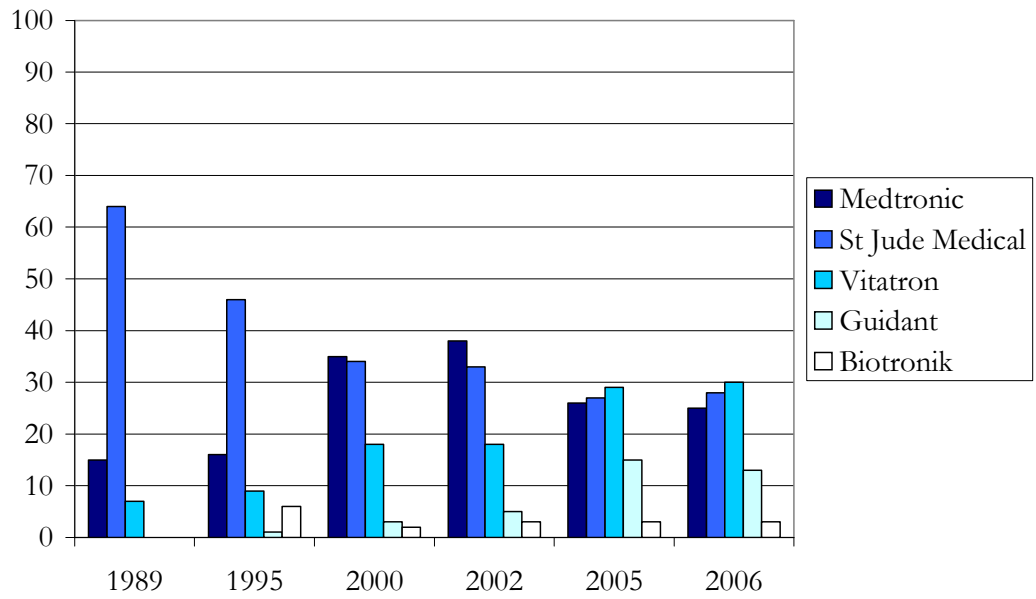
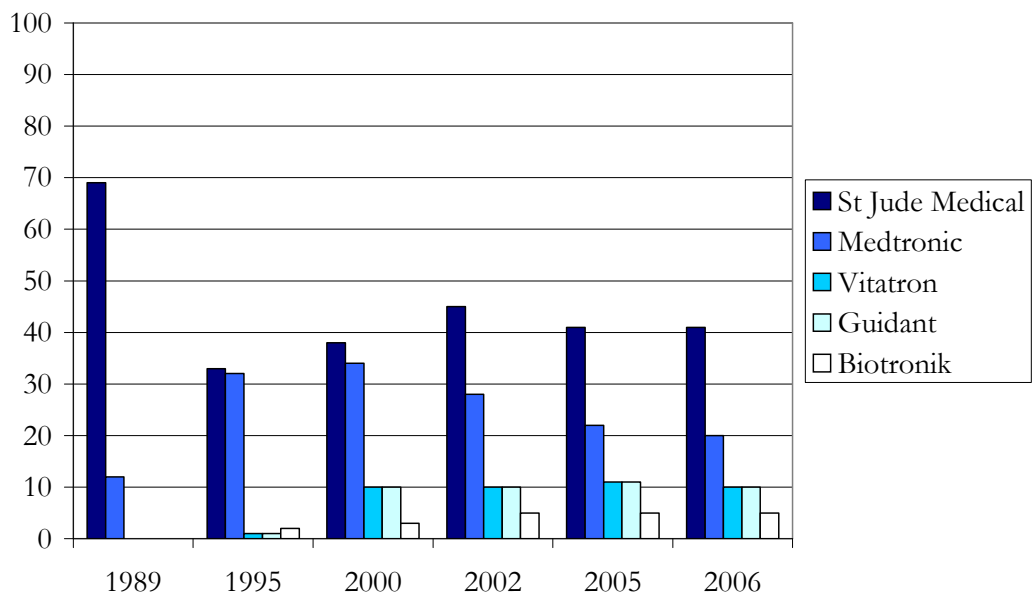
PACEMAKERS (% OF TOTAL)

	1989	1995	2000	2002	2005	2006
	n=2833	n=4075	n=5555	n=6182	n=7555	n=8152
Medtronic	15	16	35	38	26	25
St Jude Medical	64	46	34	33	27	28
Vitatron	7	9	18	18	29	30
Guidant	-	1	3	5	15	13
Biotronik	-	6	2	3	3	3
ELA	-	2	8	3	<1	<1
Intermedics	3	6	<1	-	-	-
Telectronics	11	14	-	-	-	-

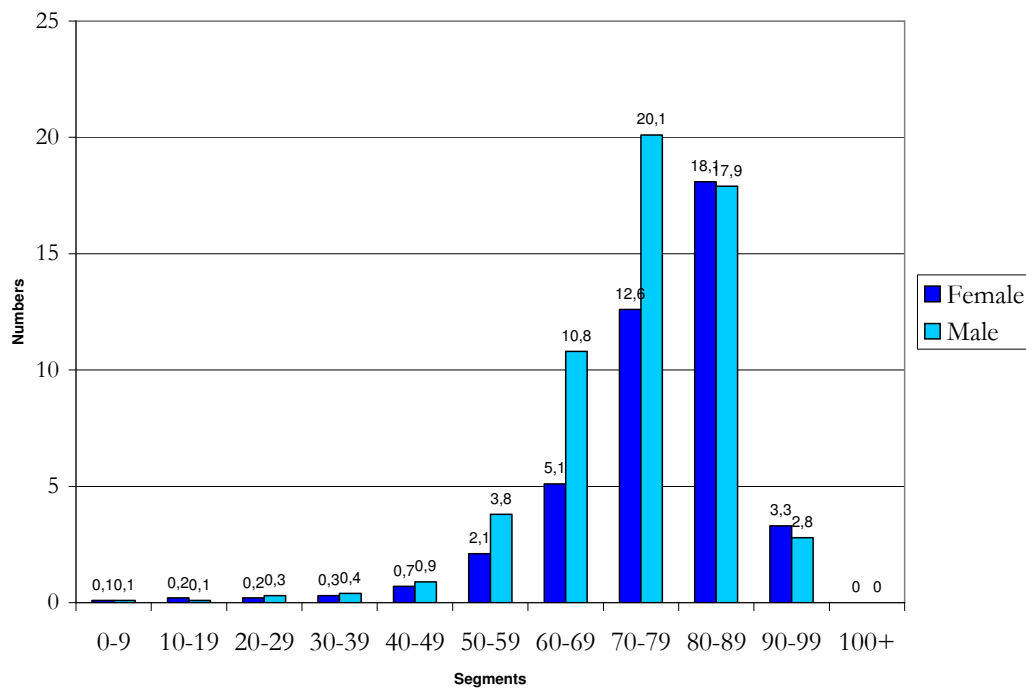
LEADS (% OF TOTAL)

	1989	1995	2000	2002	2005	2006
	n=2718	n=5155	n=7482	n=8301	n=10317	n=10983
Medtronic	12	32	34	28	22	20
St Jude Medical	69	33	38	45	41	41
Vitatron	1	2	10	12	21	24
Guidant	-	1	10	10	11	10
Biotronik	-	2	3	5	5	5
ELA	-	-	1	-	-	-
Intermedics	4	4	3	-	-	-
Telectronics	7	15	-	-	-	-
Osypka	-	4	1	-	-	<1
Stöckert	1	4	-	-	-	-
Sorin	<1	<1	-	-	-	-
Uns	5	3	<1	-	-	-

DISTRIBUTION OF MANUFACTURERS

Pacemaker Market Share Development 1989-2005

Lead Market Share Development 1989-2005


AGE DISTRIBUTION - FIRST IMPLANT

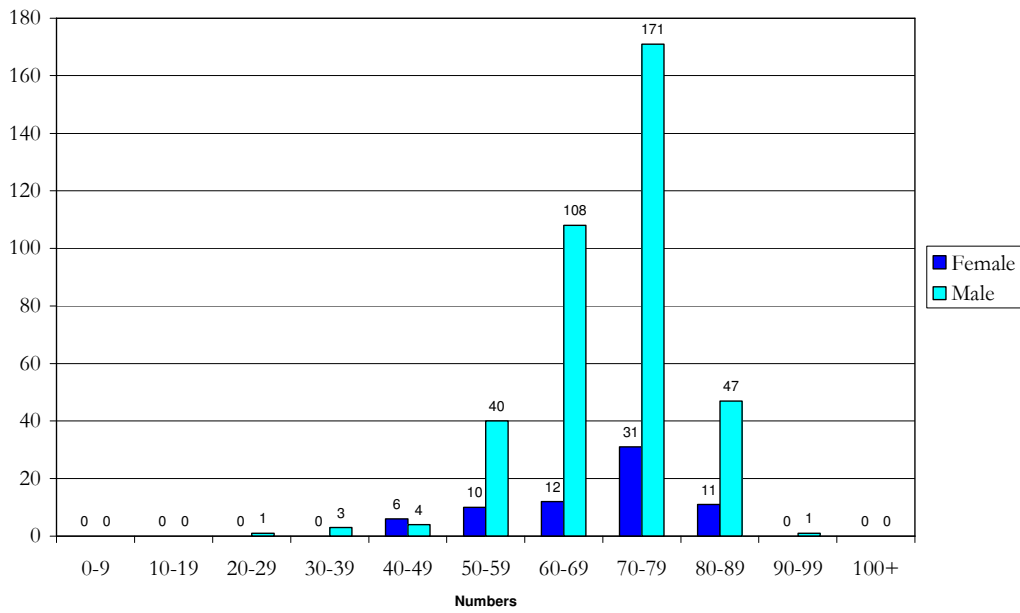
AGE DISTRIBUTION FOR MALES, FEMALES 2006


Total number of implants 5898

Age (Years)	Total no	%	Female	Male
0-9	8	0,1	0,1	0,1
10-19	14	0,2	0,2	0,1
20-29	29	0,5	0,2	0,3
30-39	43	0,7	0,3	0,4
40-49	97	1,6	0,7	0,9
50-59	346	5,9	2,1	3,8
60-69	941	15,9	5,1	10,8
70-79	1930	32,7	12,6	20,1
80-89	2126	36,0	18,1	17,9
90-99	362	6,1	3,3	2,8
100+	2	0,0	0	0
average	75,8		77,2	74,7

AGE DISTRIBUTION - FIRST IMPLANT

AGE DISTRIBUTION CRT 2006

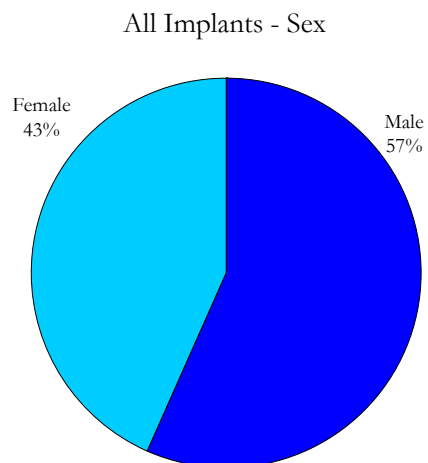
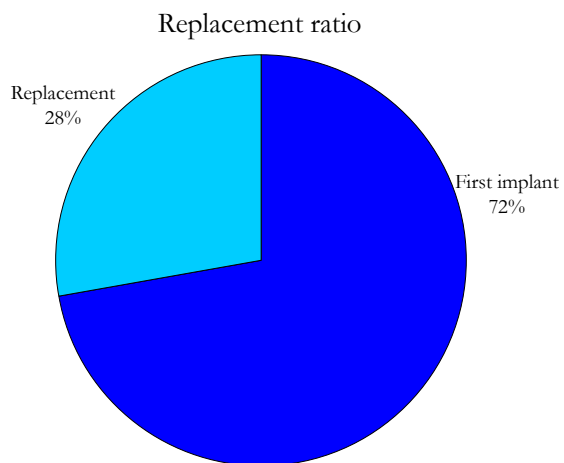
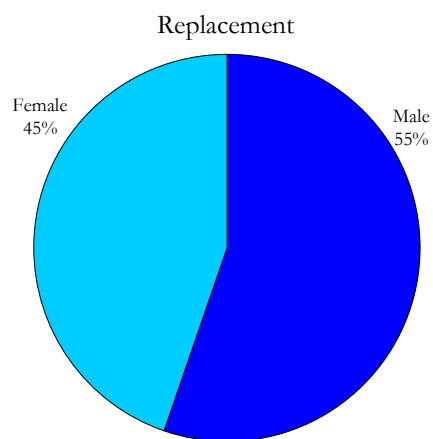
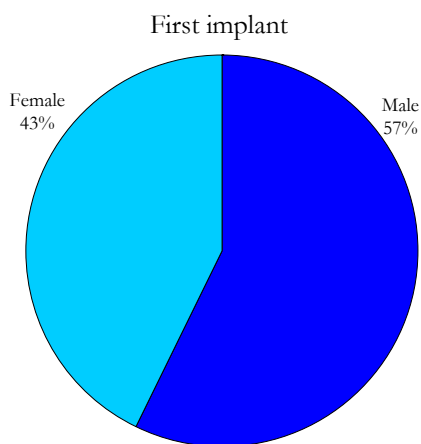


Total no of implants 445 CRT

Age (Years)	Total no	%	Female	Male
0-9	0	0,0	0	0
10-19	0	0,0	0	0
20-29	1	0,2	0	1
30-39	3	0,7	0	3
40-49	10	2,3	6	4
50-59	50	11,2	10	40
60-69	120	27,0	12	108
70-79	202	45,4	31	171
80-89	58	13,0	11	47
90-99	1	0,2	0	1
100+	0	0,0	0	0
average	70,3		69,4	70,3

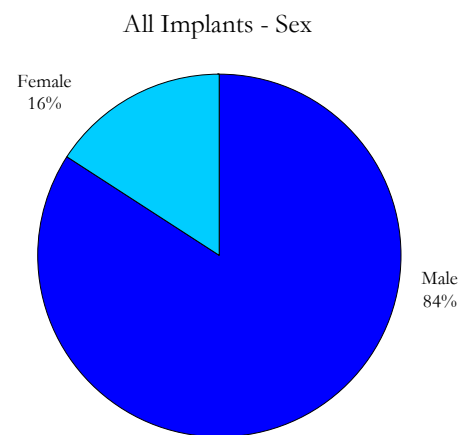
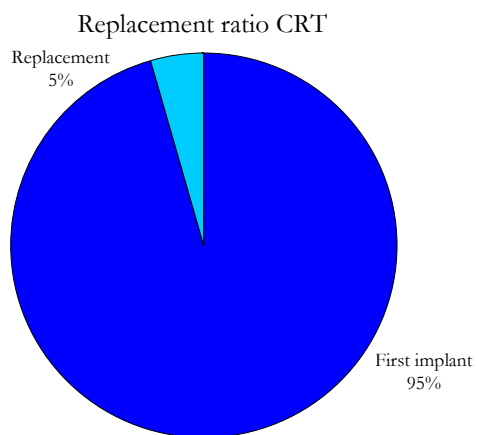
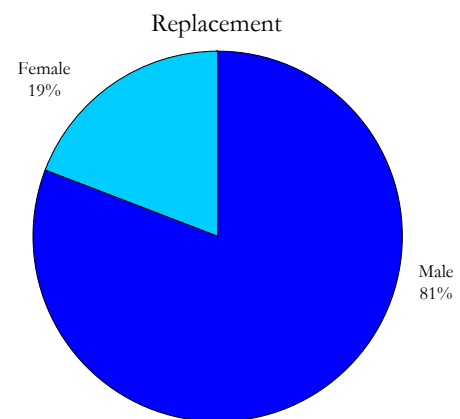
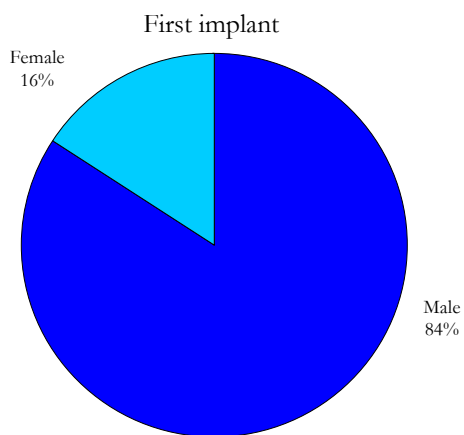
NUMBER OF IMPLANTS

	Total no	Male	Female
First implant	5898	3379	2519
	72.4%	57.3%	42.7%
Replacement	2254	1244	1010
	27.6%	55.2%	44.8%



NUMBER OF IMPLANTS CRT

	Total no	Male	Female
First implant	445	375	70
		84,3%	15,7%
Replacement	21	17	4
		81,0%	19,0%

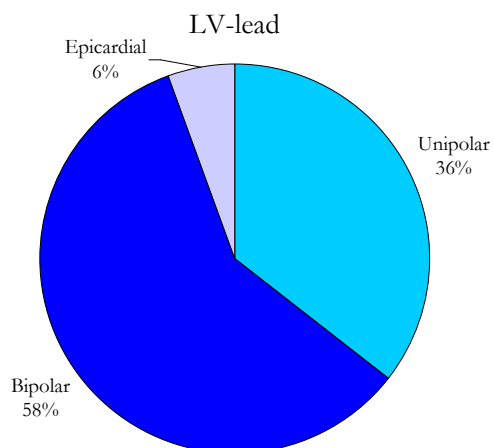
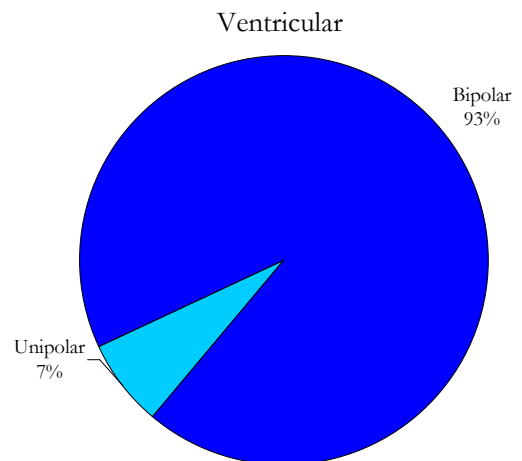
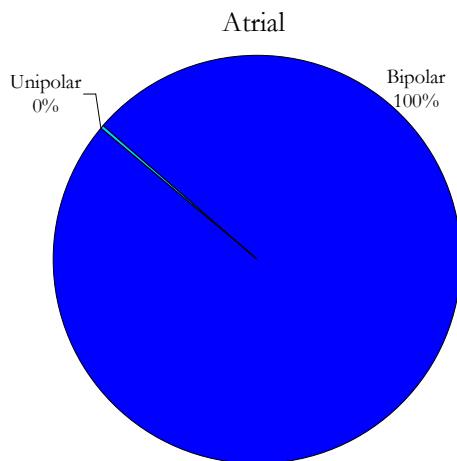


LEADS

LEAD TYPES 2006

Total no of leads 10981

Type	Atrial		Ventricular		LV-lead	
	no 4477	%	no 6028	%	no 476	%
Unipolar	10	0.2	421	7.0	169	35.5
Bipolar	4467	99.8	5607	93.0	280	58.8
Epicardial					27	5.7
Passive fixation	207	4.6	3468	57.5		
Active fixation	4270	95.4	2560	42.5		

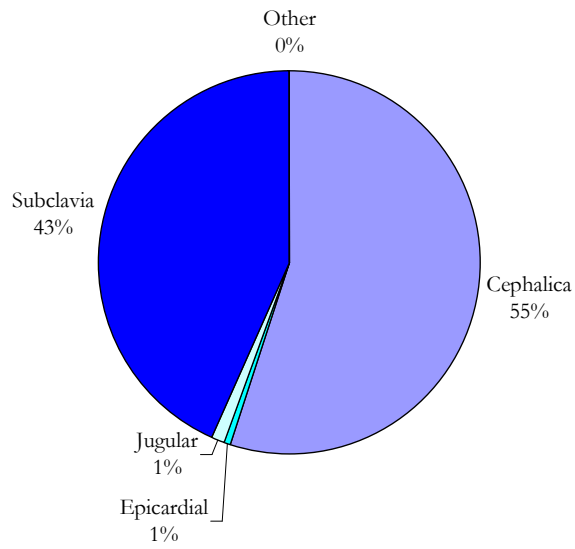


LEADS

LEAD ACCESS 2006

Total no of leads 11004

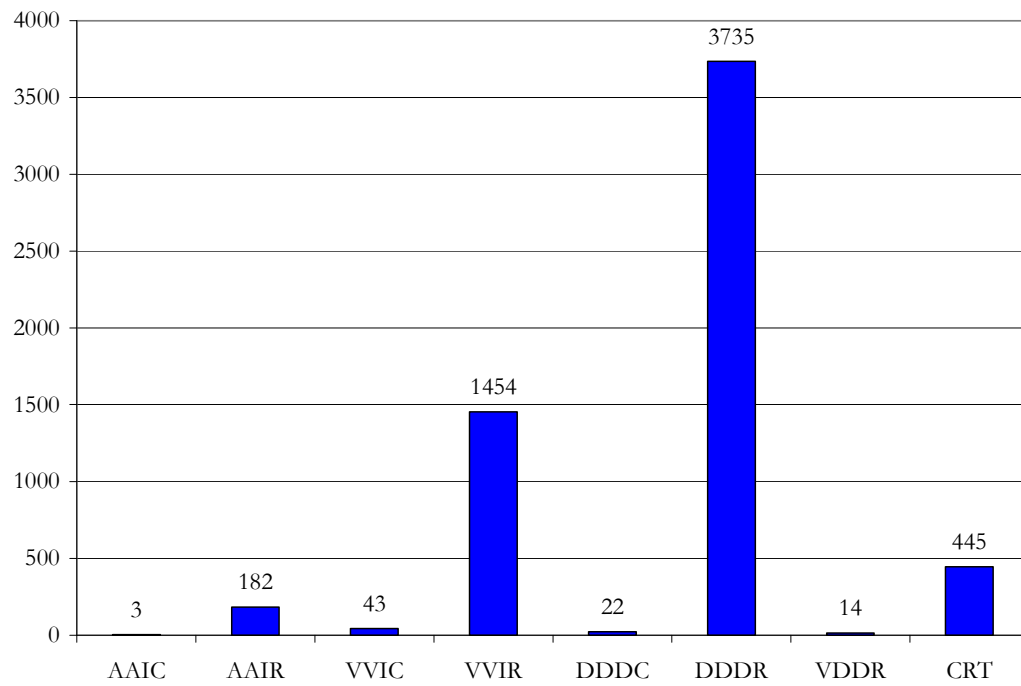
Lead access	No	%
Cephalica	6048	55.0
Epicardial	76	0.7
Jugular	114	1.0
Subclavia	4757	43.2
Other	9	0.1



PACING MODE FIRST IMPLANT

Total number of implants 5898

Mode	%	No
AAIC	<0.1	3
AAIR	3.1	182
VVIC	0.7	43
VVIR	24.7	1454
DDDC	0.4	22
DDDR	63.3	3735
VDDR	0.2	14
CRT	7.6	445



SYSTEM UPGRADE

VVI TO VVIR

	2002	2003	2004	2005	2006
VVI to VVIR	38	77	64	50	50
(Elective/ERI)	15	25	19	7	10
(Hemodynamic)	3	1	2	0	0

AAI/AAIR TO DDD/DDDR

	2002	2003	2004	2005	2006
AAI/AAIR to DDD/DDDR	19	40	45	44	39
(Elective/ERI)	2	8	11	11	7
(Hemodynamic)	11	23	22	11	10

VVI/VVIR TO DDD/DDDR

	2002	2003	2004	2005	2006
VVI/VVIR to DDD/DDDR	39	57	59	75	91
(Elective/ERI)	14	15	19	14	14
(Hemodynamic)	18	27	30	27	38

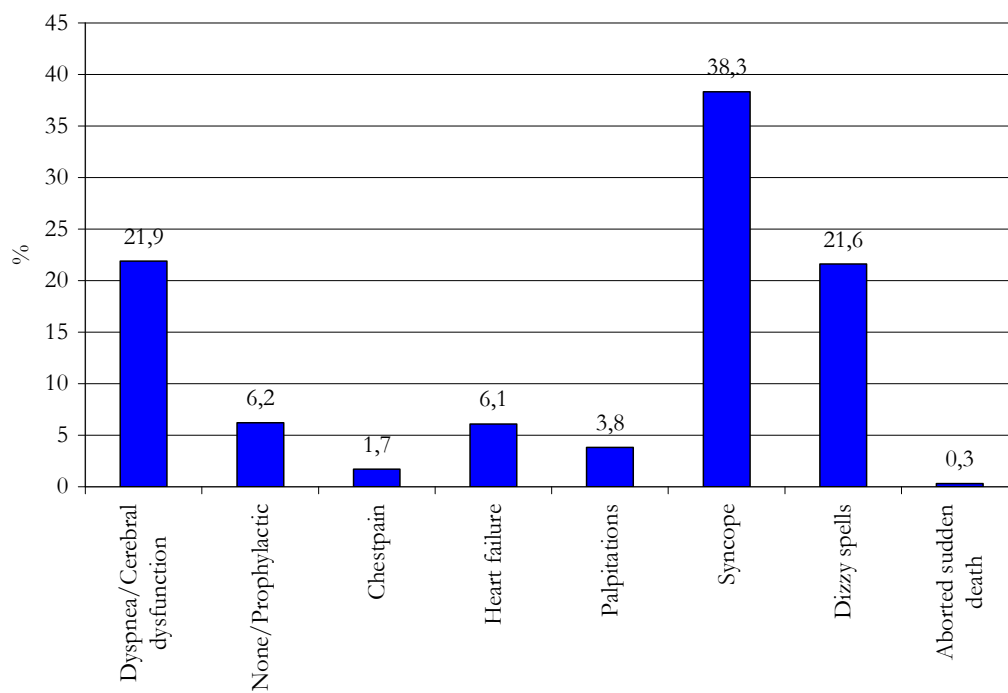
VVI/VVIR/DDD/DDDR TO CRT

	2002	2003	2004	2005	2006
VVI/VVIR/DDD/DDDR to CRT	26	25	45	63	93
(Elective/ERI)	4	3	12	10	14
(Hemodynamic)	20	19	29	47	61

CLINICAL INDICATIONS – FIRST IMPLANT

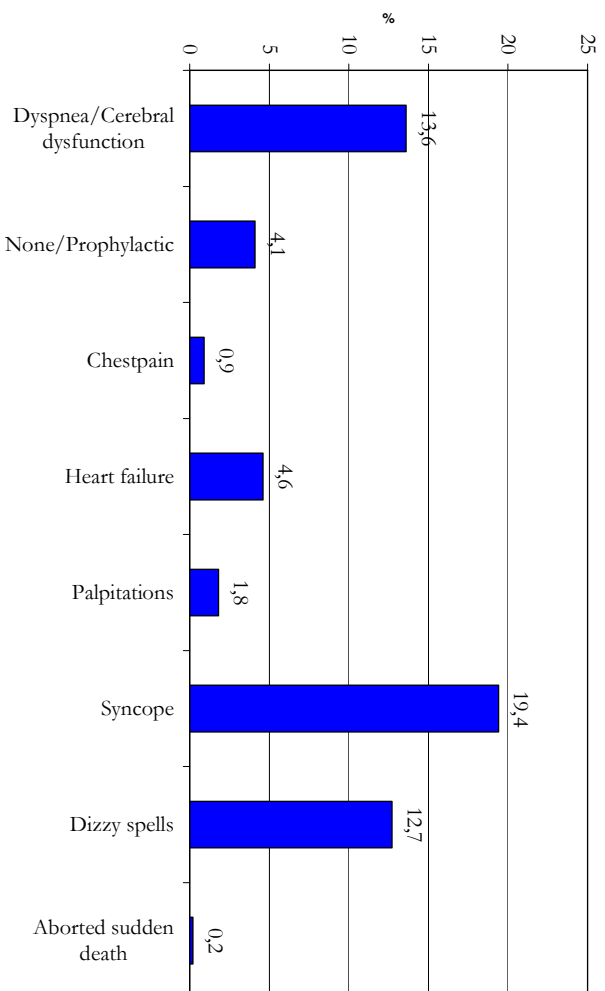
Total no of implants 5898

Indication	Total %	Male %	Female%
Dyspnea/Cerebral dysfunction	21,9	13,6	8,3
None/Prophylactic	6,2	4,1	2,1
Chestpain	1,7	0,9	0,8
Heart failure	6,1	4,6	1,5
Palpitations	3,8	1,8	2
Syncope	38,3	19,4	18,9
Dizzy spells	21,6	12,7	8,9
Aborted sudden death	0,3	0,2	0,1

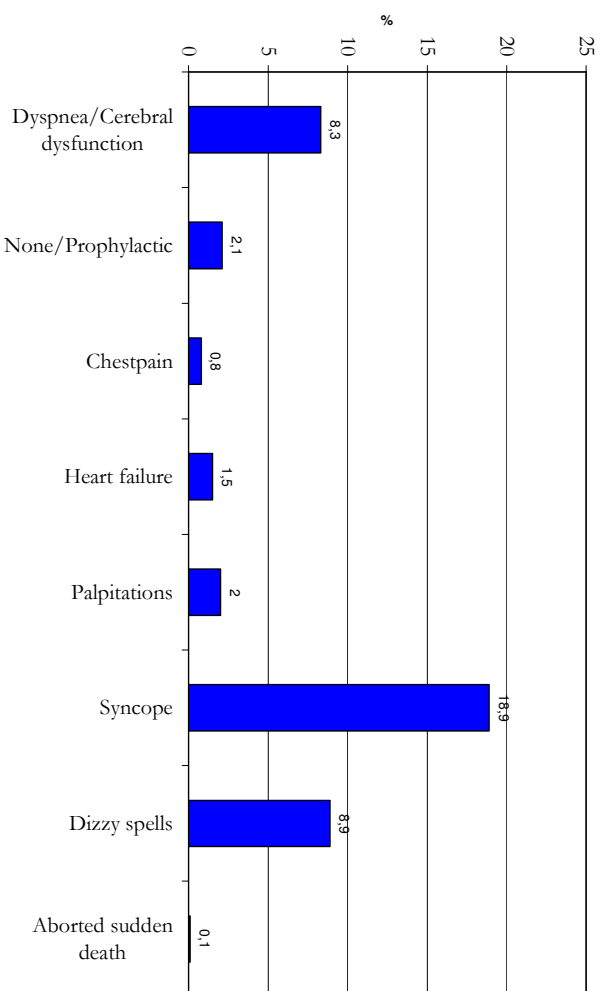
CLINICAL INDICATIONS 2006


CLINICAL INDICATIONS – FIRST IMPLANT

CLINICAL INDICATIONS, MALE 2006



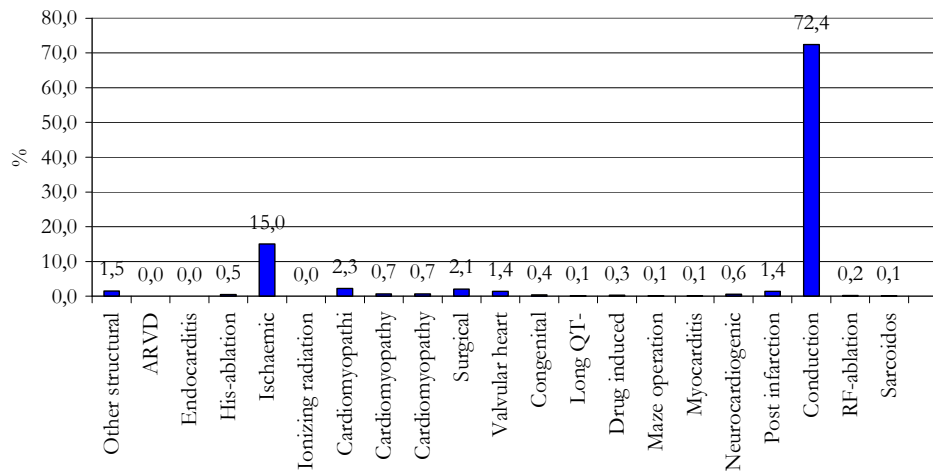
CLINICAL INDICATIONS, FEMALE 2006



AETIOLOGY - FIRST IMPLANT

Total no of implants 5898

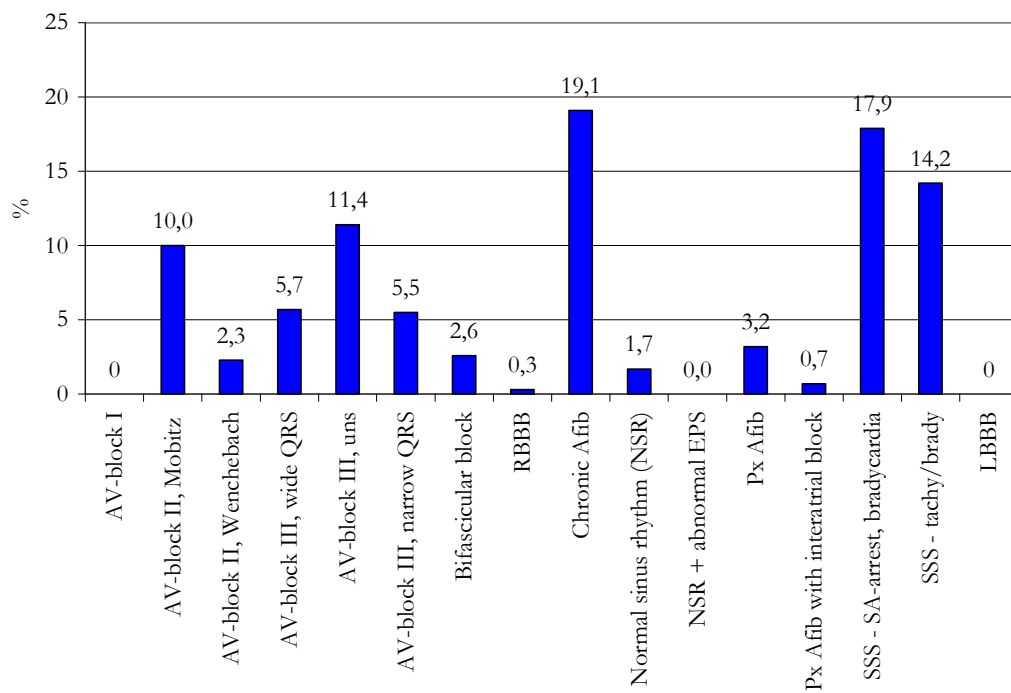
Aetiologi	Total %	Male %	Female%
Other structural heart disease	1,5	0,9	0,6
ARVD	0,0	0	0
Endocarditis	0,0	0	0
His-ablation	0,5	0,2	0,3
Ischaemic	15,0	10,4	4,6
Ionizing radiation	0,0	0	0
Cardiomyopathi dilated	2,3	1,8	0,6
Cardiomyopathy hypertrophic	0,7	0,2	0,5
Cardiomyopathy ischaemic	0,7	0,5	0,1
Surgical complication	2,1	1,4	0,7
Valvular heart disease	1,4	0,7	0,7
Congenital	0,4	0,2	0,2
Long QT-syndrome	0,1	0	0,1
Drug induced	0,3	0,1	0,2
Maze operation	0,1	0,1	0
Myocarditis	0,1	0,1	0
Neurocardiogenic syncope	0,6	0,3	0,3
Post infarction	1,4	0,8	0,6
Conduction tissue fibrosis	72,4	39,3	33,1
RF-ablation	0,2	0,1	0,1
Sarcoidos	0,1	0,1	0



ECG INDICATIONS - FIRST IMPLANT

Total number of implants 5898

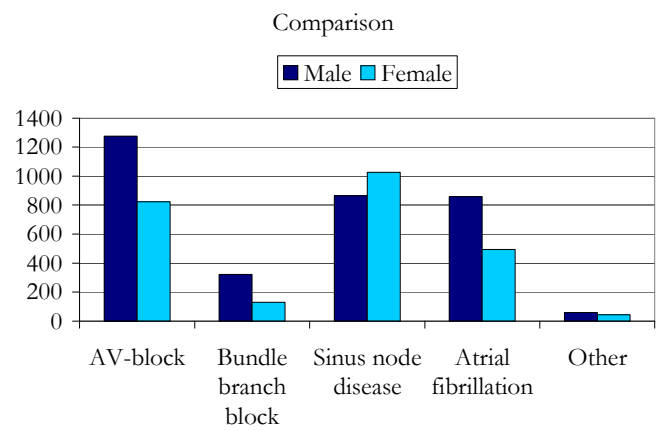
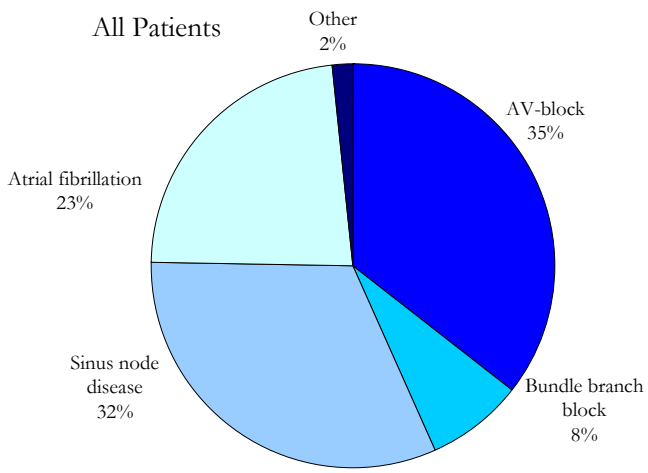
Indication	%
AV-block I	0,6
AV-block II, Mobitz	10,0
AV-block II, Wenchebach	2,3
AV-block III, wide QRS	5,7
AV-block III, uns	11,4
AV-block III, narrow QRS	5,5
Bifascicular block	2,6
RBBB	0,3
Chronic Afib	19,1
Normal sinus rhythm (NSR)	1,7
NSR + abnormal EPS	0,0
Px Afib	3,2
Px Afib with interatrial block	0,7
SSS - SA-arrest, bradycardia	17,9
SSS - tachy/brady	14,2
LBBB	4,8



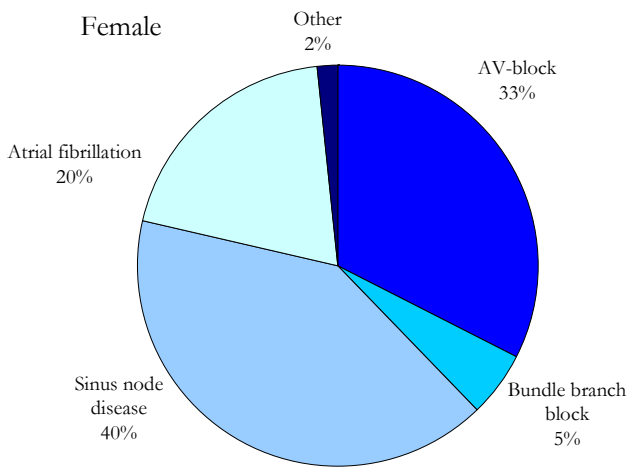
PREPACING ECG – FIRST IMPLANT – SEX

Total number of implants 5898

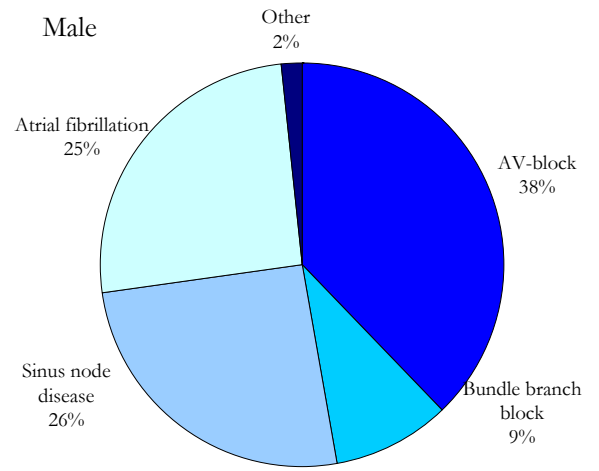
Prepacing ECG	No	%	Male	Female	<18 years
AV-block	2097	35.6	1275	822	16
Bundle branch block	452	7.7	321	131	
Sinus node disease	1892	32.1	865	1027	6
Atrial fibrillation	1353	22.9	858	495	
Other	104	1.7	60	44	2



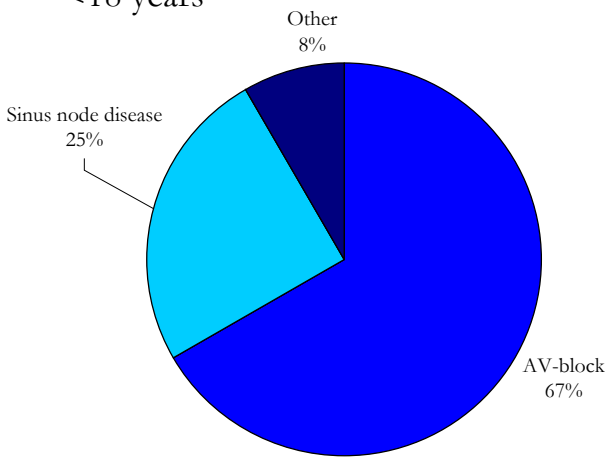
Female



Male



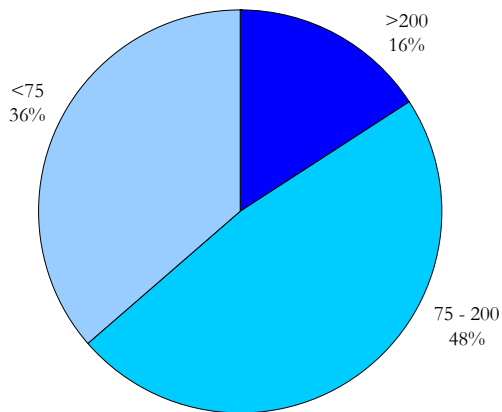
<18 years



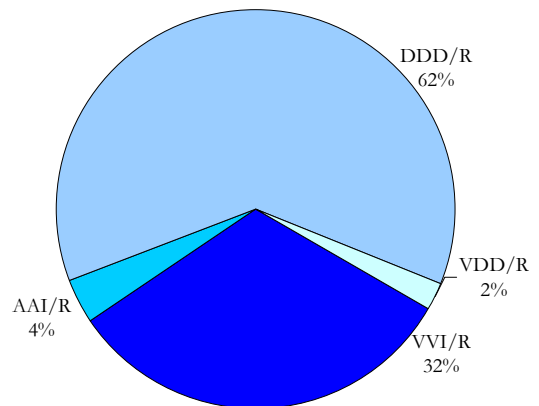
USE OF PACING MODES FOR FIRST IMPLANT

Implants / year	Hospitals	VVI/R	AAI/R	DDD/R	VDD/R
>200	7	22,6	3,4	74,0	-
75 - 200	21	26,2	2,8	71,0	-
<75	16	32,1	3,6	62,2	2,1
Total	44				

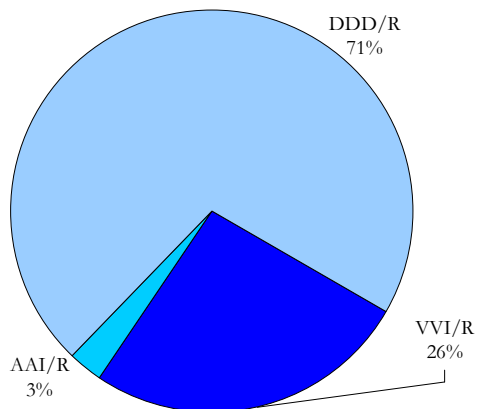
Hospitals and number of implants per year



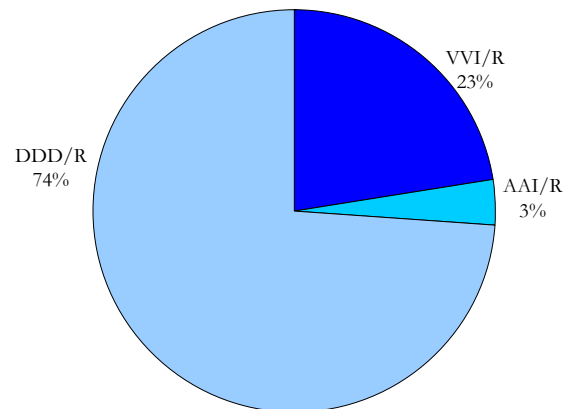
Hospitals with less than 75 implants per year



Hospitals with 75-200 implants per year



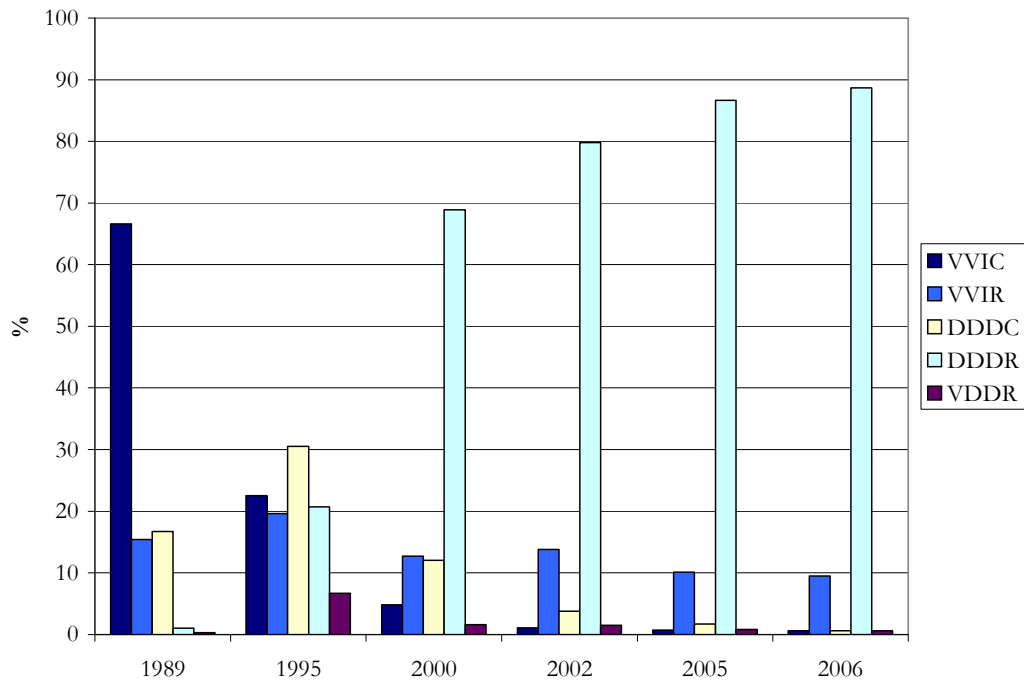
Hospitals with more than 200 implants per year



HIGH DEGREE AV-BLOCK FIRST IMPLANT

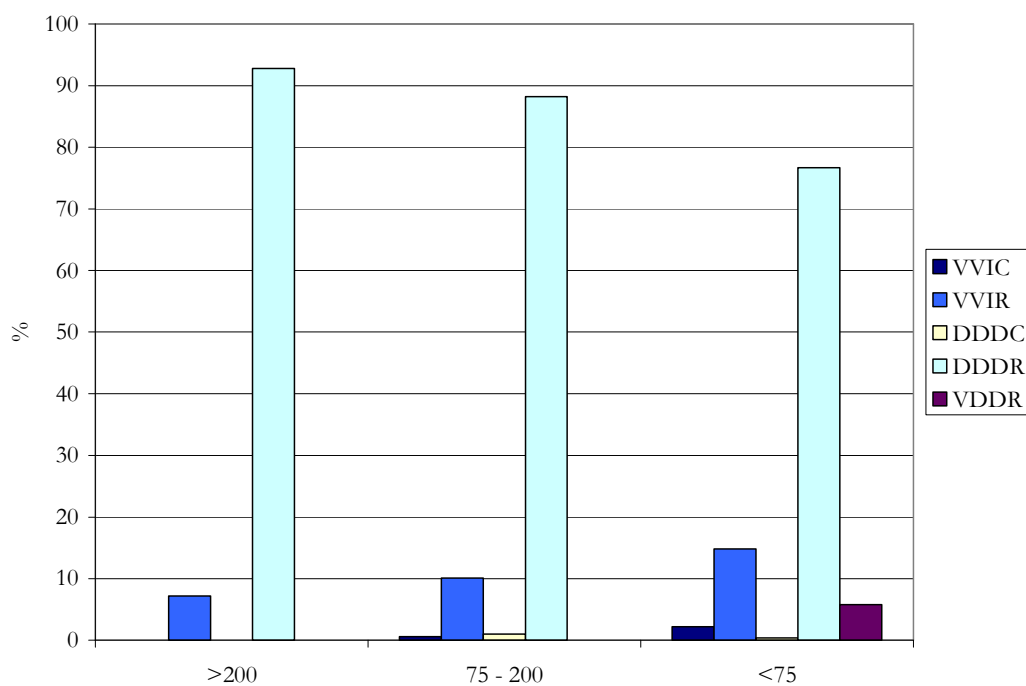
MODES USED, HISTORICAL DATA

Mode	1989	1995	2000	2002	2005	2006
VVIC	66,6	22,5	4,8	1,1	0,7	0,6
VVIR	15,4	19,6	12,7	13,8	10,1	9,5
DDDC	16,7	30,5	12,0	3,8	1,7	0,6
DDDR	1,0	20,7	68,9	79,8	86,7	88,7
VDDR	0,3	6,7	1,6	1,5	0,8	0,6



AV-BLOCK, MODES USED PER HOSPITAL, ORDERED BY SIZE

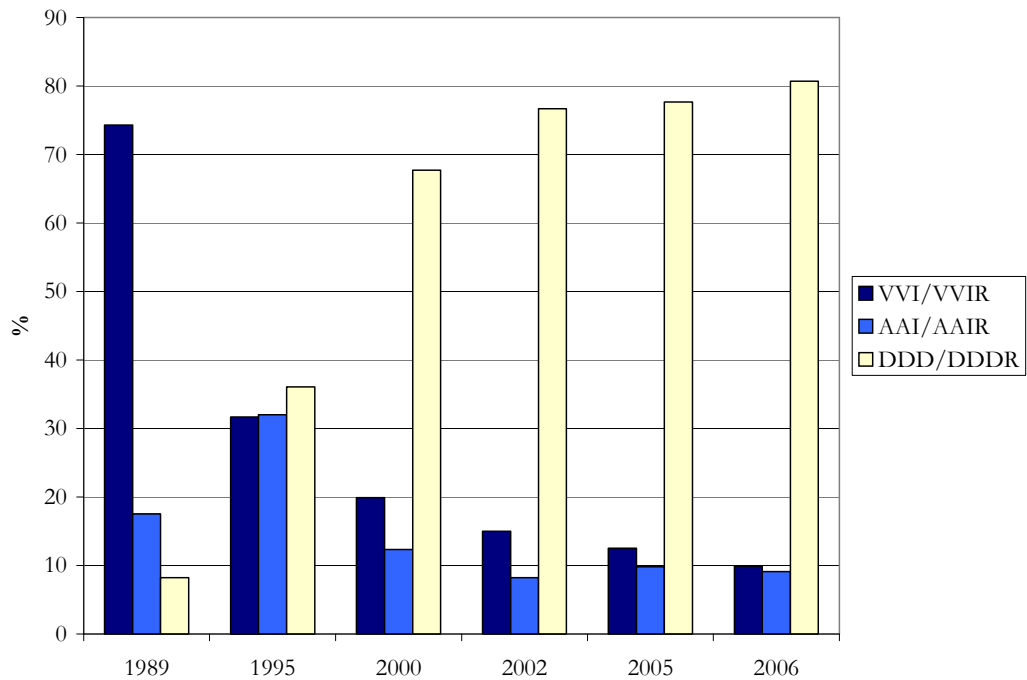
Mode	All hospitals	>200	75 - 200	<75
VVIC	0,6	-	0,6	2,2
VVIR	9,5	7,2	10,1	14,8
DDDC	0,6	-	1,0	0,4
DDDR	88,7	92,8	88,2	76,7
VDDR	0,6	-	-	5,8



SINUS NODE DYSFUNCTION FIRST IMPLANT

MODES USED, HISTORICAL DATA, %

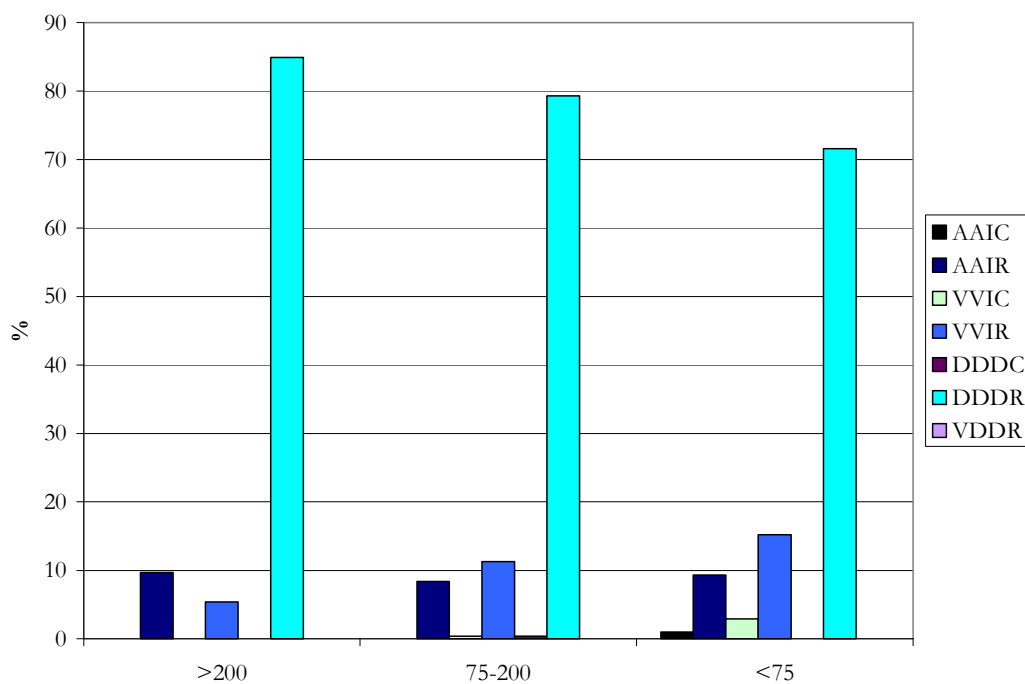
Mode	1989	1995	2000	2002	2005	2006
VVI/VVIR	74,3	31,7	19,9	15	12,5	9,9
AAI/AAIR	17,5	32	12,3	8,2	9,8	9,1
DDD/DDDR	8,2	36,1	67,7	76,7	77,7	80,7
VDD/VDDR	-	0,2	<0,1	0,1	-	-



SINUS NODE DYSFUNCTION FIRST IMPLANT

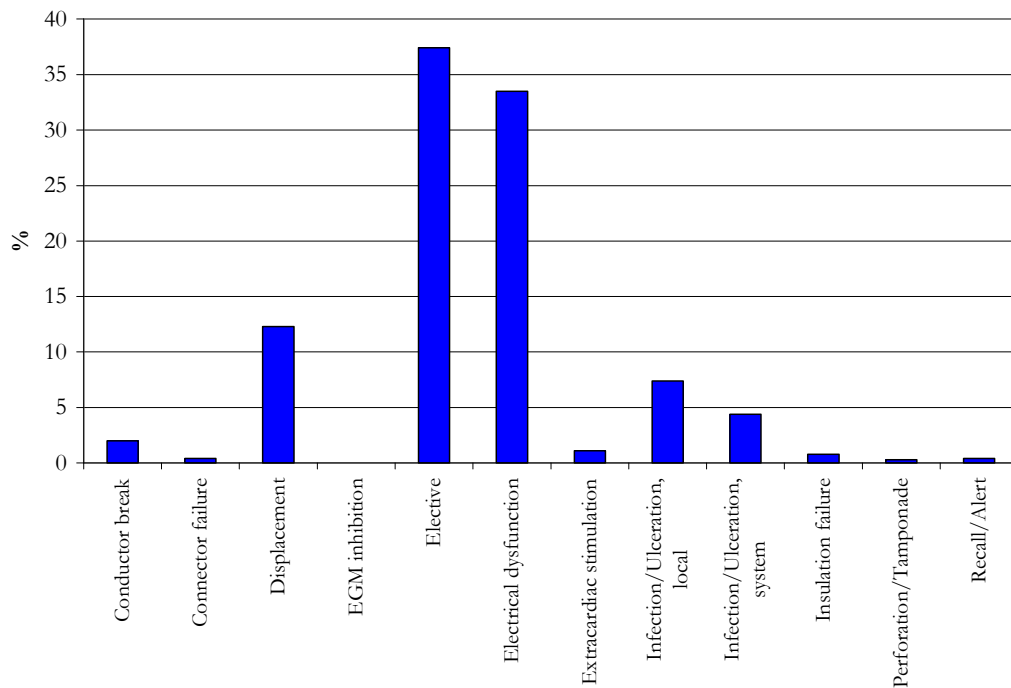
SND MODES USED PER HOSPITAL ORDERED BY SIZE, %

Mode	All hospitals	>200	75-200	<75
AAIC	0,2	-	0,1	1
AAIR	9	9,7	8,4	9,3
VVIC	0,5	-	0,4	2,9
VVIR	9,4	5,4	11,3	15,2
DDDC	0,2	-	0,4	-
DDDR	80,7	84,9	79,3	71,6
VDDR	-	-	-	-



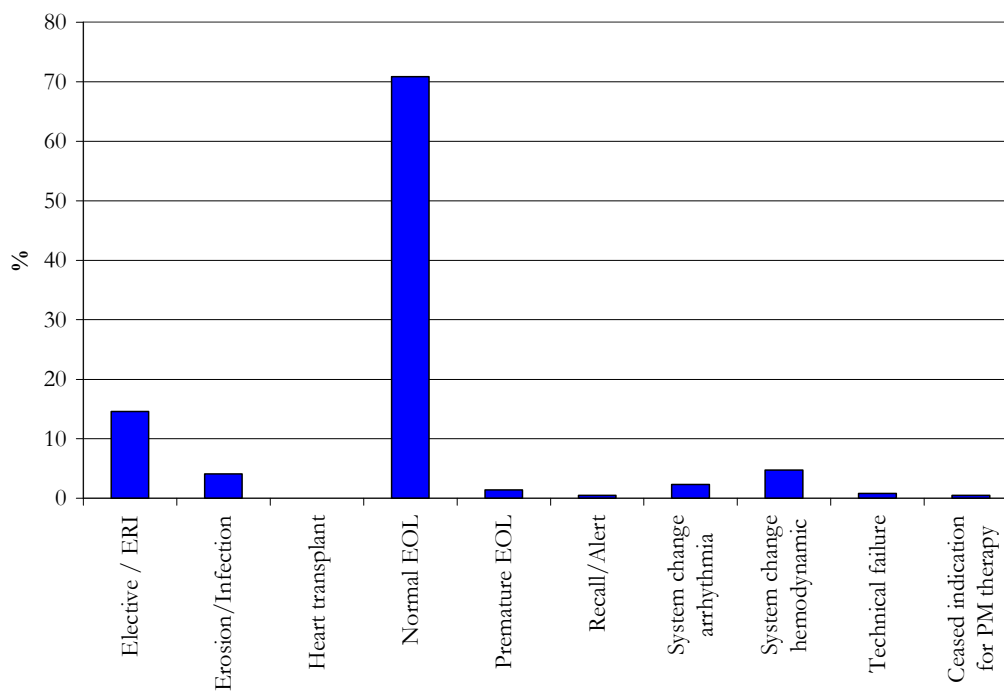
REASON FOR LEAD REPLACEMENT %

Reason	All hospitals	>200	75 - 200	<75
Conductor break	2	1,3	2,6	2,6
Connector failure	0,4	0,6	0	1,3
Displacement	12,3	9,4	14,1	15,8
EGM inhibition	0	0	0	0
Elective	37,4	40,1	36,3	31,6
Electrical dysfunction	33,5	22,7	42,7	35,5
Extracardiac stimulation	1,1	1,9	0,6	0
Infection/Ulceration, local	7,4	12,6	2,6	7,9
Infection/Ulceration, system	4,4	8,7	0,6	3,9
Insulation failure	0,8	1,9	0	0
Perforation/Tamponade	0,3	0,6	0	0
Recall/Alert	0,4	0	0,6	1,3

REASONS FOR LEAD REPLACEMENT - ALL HOSPITALS


REASON FOR GENERATOR REPLACEMENT %

Reason	All hospitals %	>200	75 - 200	<75
Elective / ERI	14,6	8,7	20,4	11,7
Erosion/Infection	4,1	5,8	2,4	5,4
Heart transplant	0	0,1	0	0
Normal EOL	70,9	75	66,6	74,4
Premature EOL	1,4	1,1	1,7	1,8
Recall/Alert	0,5	0,1	1	0
System change arrhythmia	2,3	2,5	2,1	2,2
System change hemodynamic	4,7	5,6	4,1	4
Technical failure	0,8	0,7	1,1	0
Ceased indication for PM therapy	0,5	0,5	0,6	0,4

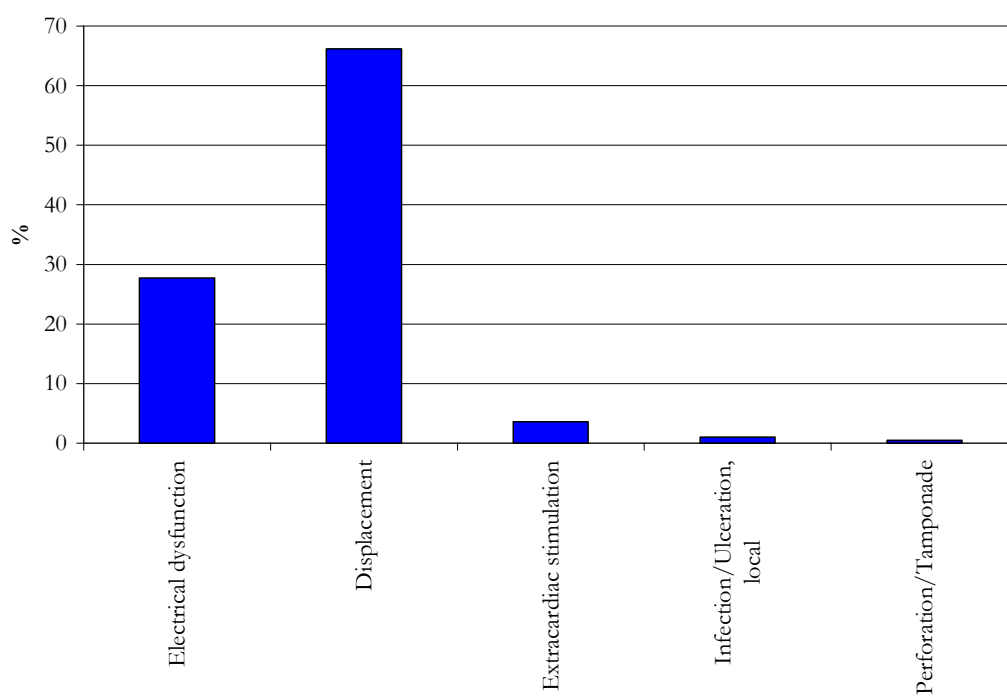
REASON FOR GENERATOR REPLACEMENT- ALL HOSPITALS


REASON FOR GENERATOR REPLACEMENT HISTORICAL DATA%

Reason %	2002	2003	2004	2005	2006
Elective/ERI	45,6	38,4	36,8	30,1	14,6
Erosion/Infection	3,7	5	4,1	3,6	4,1
Heart transplant	0	0	0	0,3	0
Normal EOL	37,5	47	49,7	55,8	70,9
Premature EOL	1,9	2	1,5	0,6	1,4
Recall/Alert	1	0,3	0,4	1,8	0,5
System change arrhythmia	0,3	-	0,1	2,7	2,3
System change hemodynamic	9,9	7,4	6,9	4	4,7
Technical failure	0,2	-	-	0,6	0,8
Ceased indication for PM therapy	0	0	0,6	0,6	0,5

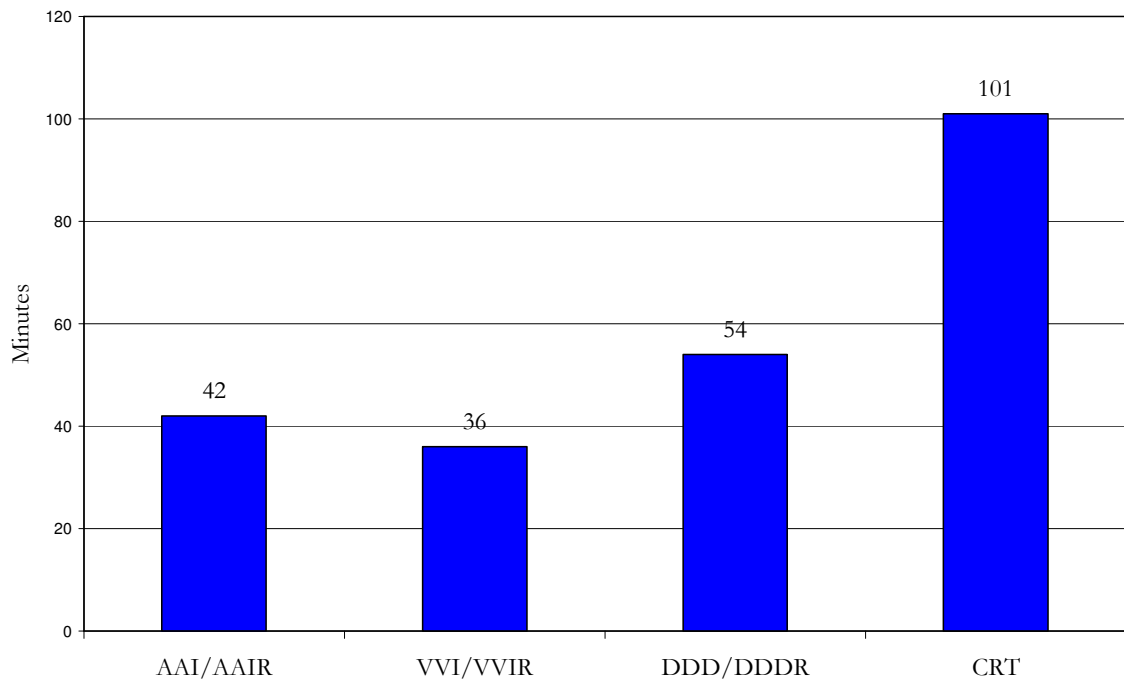
REASON FOR LEAD CORRECTION %

Reason	All hospital	>200	75 - 200	<75
Electrical dysfunction	27,7	30,1	27,4	11,1
Displacement	66,2	61,6	67,3	88,9
Extracardiac stimulation	3,6	2,7	4,4	-
Infection/Ulceration, local	1	4,1	0,9	-
Perforation/Tamponade	0,5	1,4	-	-

REASON FOR LEAD CORRECTION - ALL HOSPITALS


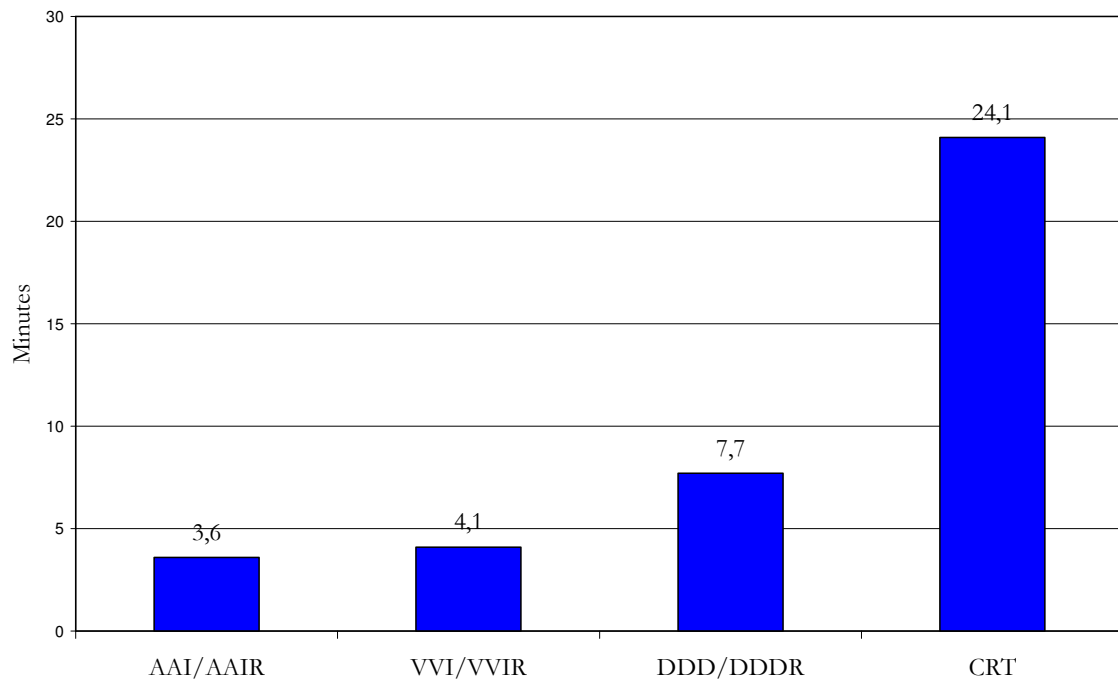
KNIFE TIME

Knife time	Average	Standard deviation
AAI/AAIR	42	28
VVI/VVIR	36	21
DDD/DDDR	54	32
CRT	101	56



FLUOROSCOPY

Fluoro time	Average	Standard deviation
AAI/AAIR	3,6	7,7
VVI/VVIR	4,1	7,6
DDD/DDDR	7,7	19,7
CRT	24,1	22,8



LEAD DISLOCATIONS

Type	Left ventricle	Right ventricle	Left atrium	Right atrium	Total
Fixed	0,0%	0,0%	0,0%	1,1%	1,1%
Active	0,0%	1,3%	0,0%	1,8%	1,6%
Passive	3,5%	1,6%	0,0%	2,7%	1,9%
Total	3,3%	1,5%	0,0%	1,7%	1,7%

COMPLICATIONS TOTAL

Based on 8667 (all implants) alternatively 6413
(first implants + lead replacement) validated events

COMPLICATION	%
Electrical dysfunction	1.6
Local bleeding	0.5
Perforation/Tamponade	0.2
Pneumothorax	0.7
Infection / Perforation	1.2
Electrode displacement	3.5
Other	1.6
Death	0.0
Total (642)	7.4

COMPLICATIONS TO INTERVENTIONS PER HOSPITAL

Hospital	Other	Local bleeding	Electrical dysfunction	Electrode displacement
Akademiska sjukhuset	9,8	-	1,2	3,6
Alingsås lasarett	-	-	-	-
Arvika sjukhus	-	-	-	-
Blekingesjukhuset	1,2	-	2,4	1,6
Bollnäs sjukhus	2,1	2,1	-	4,1
Borås lasarett	-	-	1,7	3
Centralsjukhuset Karlstad	-	0,8	-	-
Centralsjukhuset Västerås	0,4	-	-	1,2
Centralsjukhuset Växjö	-	0,4	1,3	0,9
Danderyds sjukhus	0,4	0,4	0,6	2,4
Falu lasarett	1,5	1,5	0,8	4,9
Hudiksvalls sjukhus	-	1,1	2,3	9,2
Kalix sjukhus	-	-	-	-
KS Huddinge	-	0,3	1,2	2,7
KS Solna	0,4	-	0,4	1,5
Kungälv sjukhus	4,2	0,7	-	7,7
Kärnsjukhuset Skövde	1,2	0,9	0,3	1
Linköpings Universitetssjukhus	1	1	0,6	0,6
Länssjukhuset Gävle	5,2	0,9	5,2	-
Länssjukhuset Halmstad	0,8	0,4	-	-
Länssjukhuset Kalmar	0,6	1,3	1,9	3,8
Länssjukhuset Ryhov	0,6	-	-	4,1
Mälarsjukhuset	1,6	-	1,6	3,1
NÄL	-	3,6	1,8	3,6
Oskarshamns sjukhus	-	-	7,1	7,1
Sahlgrenska sjukhuset	0,6	-	0,5	0,2
Skellefteå sjukhus	1,7	-	1,7	6,8
Sollefteå sjukhus	2,9	-	1	1,9
St Görans sjukhus	0,5	-	0,7	-
Sunderby sjukhus	-	-	-	-
Sundsvalls sjukhus	-	-	-	1,3
Södersjukhuset	2,1	0,7	2,9	3,6
Uddevalla sjukhus	1,1	0,8	1,9	0,8
UMAS	-	-	0,4	-
Universitetssjukhuset Örebro	0,5	-	0,5	1,4
Universitetssjukhuset Lund	1,0	-	0,4	0,4
Universitetssjukhuset Umeå	0,3	0,3	0,6	3
Varbergs sjukhus	0,8	-	-	4,5
Visby lasarett	9,1	-	-	3
Vrinnevisjukhuset	-	-	-	-
Västerviks sjukhus	-	-	-	-
Örnsköldsviks sjukhus	1,7	-	-	5,1
Östersunds sjukhus	0,5	-	-	1,1
Östra sjukhuset	-	-	-	-

COMPLICATIONS TO INTERVENTIONS PER HOSPITAL

Hospital	Infection/ Perforation	Perforation/Tamp onade	Pneumothorax	Death
Akademiska sjukhuset	0,5	0,7	-	-
Alingsås lasarett	-	-	-	-
Arvika sjukhus	-	-	-	-
Blekingesjukhuset	1,2	-	-	-
Bollnäs sjukhus	-	-	-	-
Borås lasarett	0,7	-	0,3	-
Centralsjukhuset Karlstad	-	-	-	-
Centralsjukhuset Västerås	-	-	1,5	-
Centralsjukhuset Växjö	0,4	-	-	-
Danderyds sjukhus	0,4	-	-	-
Falu lasarett	-	-	0,8	-
Hudiksvalls sjukhus	2,3	-	-	-
Kalix sjukhus	-	-	-	-
KS Huddinge	0,6	0,3	1,2	-
KS Solna	0,9	-	-	-
Kungälv sjukhus	0,7	-	1,4	-
Kärnsjukhuset Skövde	0,4	-	0,3	-
Linköpings Universitetssjukhus	-	0,2	0,8	-
Länssjukhuset Gävle	1,4	0,5	-	-
Länssjukhuset Halmstad	0,4	-	0,8	-
Länssjukhuset Kalmar	0,6	-	-	-
Länssjukhuset Ryhov	2,7	-	1,4	-
Mälarsjukhuset	-	-	0,5	-
NÄL	1,8	-	-	-
Oskarshamns sjukhus	-	-	-	-
Sahlgrenska Universitetssjukhuset	0,2	-	-	-
Skellefteå sjukhus	-	-	6,8	-
Sollefteå sjukhus	1	-	1	-
St Görans sjukhus	-	-	-	-
Sunderby sjukhus	0,6	-	-	-
Sundsvalls sjukhus	1,8	-	-	-
Södersjukhuset	0,2	-	-	-
Uddevalla sjukhus	0,8	0,3	1,1	-
UMAS	0,4	-	-	-
Universitetssjukhuset Örebro	0,8	0,5	0,5	-
Universitetssjukhuset Lund	3,2	0,2	-	-
Universitetssjukhuset Umeå	-	-	0,3	-
Varbergs sjukhus	-	-	1,5	-
Visby lasarett	-	-	3	-
Vrinnevisjukhuset	-	0,8	-	-
Västerviks sjukhus	-	-	-	-
Örnköldsviks sjukhus	-	-	1,7	-
Östersunds sjukhus	-	-	-	-
Östra sjukhuset	-	-	-	-

COMPLICATIONS TO INTERVENTIONS PER HOSPITAL

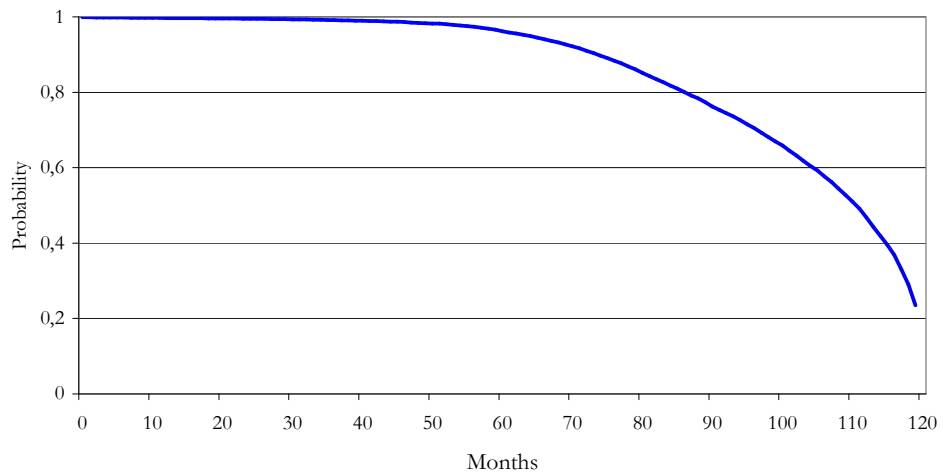
*

The following hospitals have 0 registered complications or incomplete registration (<2%).

Arvika sjukhus
Centralsjukhuset Karlstad
Kalix sjukhus
Sahlgrenska sjukhuset
St Görans sjukhus
Sunderby sjukhus
UMAS
Vrinnevisjukhuset
Västerviks sjukhus
Östersunds sjukhus

SURVIVAL

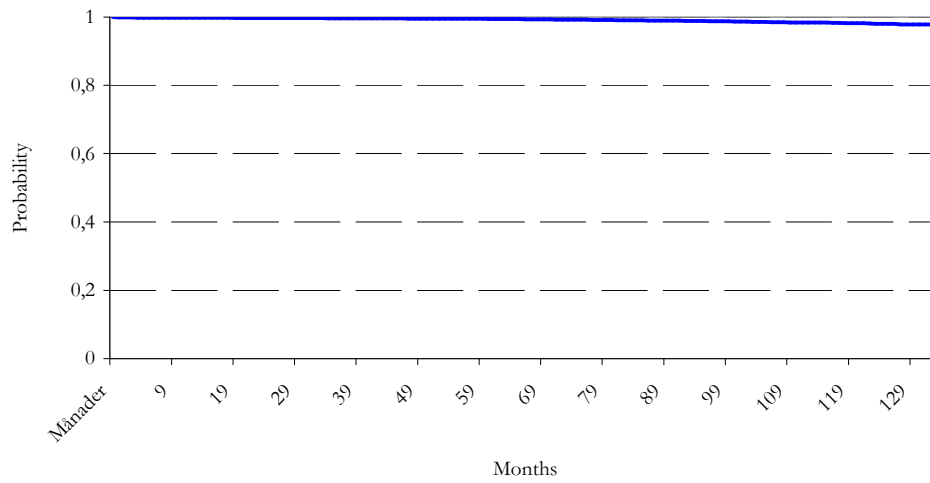
Pacemaker survival



Years	Survival probability
1	0,997262213
2	0,995218352
3	0,991600729
4	0,98464121
5	0,96258707
6	0,910654168
7	0,818074608
8	0,715180604
9	0,544784568
10	0,234541247

Tillverkare	Modell	2år	4år	6år	8år	10år
St Jude Medical	2037	99,5%	99,4%	99,0%	97,2%	95,0%
Medtronic	KDR701	99,7%	97,4%	89,5%	34,8%	34,8%
St Jude Medical	2033	99,7%	99,2%	98,3%	94,7%	82,0%
St Jude Medical	2045	99,6%	99,3%	96,6%	87,4%	50,0%
Telectronis	158	99,7%	99,4%	99,4%	98,6%	97,9%
St Jude Medical	2040	99,5%	99,5%	99,4%	98,2%	89,7%
St Jude Medical	2404	99,7%	99,5%	94,8%	84,6%	73,2%
St Jude Medical	5386	99,8%	98,6%	98,6%	-	-
St Jude Medical	688	99,9%	99,7%	99,7%	99,4%	97,0%
St Jude Medical	2400	99,6%	99,5%	97,3%	96,1%	94,7%
St Jude Medical	5142	99,8%	99,5%	96,5%	96,5%	-
Medtronic	E2DR01	99,8%	99,8%	99,8%	-	-
St Jude Medical	2016	99,5%	98,8%	96,9%	93,6%	76,7%
St Jude Medical	748	100,0%	99,5%	96,2%	96,2%	94,7%
Medtronic	7960	99,6%	99,2%	96,0%	74,9%	37,0%
St Jude Medical	2034	99,5%	99,5%	99,3%	98,1%	80,1%
Vitatron	C60DR	99,4%	99,3%	99,3%	-	-
Guidant	1298	99,0%	97,1%	97,1%	-	-
St Jude Medical	5346	99,7%	98,8%	94,0%	-	-
Medtronic	KDR901	99,8%	99,6%	99,6%	-	-
Medtronic	SS303	99,8%	97,2%	95,4%	88,0%	-
Telectronis	8218	99,7%	99,7%	99,4%	92,8%	57,0%
Vitatron	C20SR	-	-	-	-	-
St Jude Medical	2364L	98,2%	96,0%	78,8%	39,2%	9,2%
Medtronic	KSR701	99,7%	97,4%	85,3%	40,3%	-
Telectronis	1254	99,8%	98,6%	90,6%	68,0%	60,8%
Vitatron	860	99,5%	97,3%	90,1%	56,8%	-
St Jude Medical	5156	99,9%	99,7%	-	-	-
Telectronis	8224	99,7%	99,2%	91,4%	79,1%	53,4%
Intermedics	294-03	97,7%	97,5%	94,0%	86,5%	78,8%
Vitatron	820	100,0%	98,5%	83,4%	38,2%	17,3%
St Jude Medical	2010	99,8%	99,0%	97,7%	95,9%	91,2%
Intermedics	292-03	98,7%	98,4%	95,3%	87,6%	81,6%
Guidant	284-05	98,6%	98,0%	93,7%	85,3%	68,4%
Medtronic	7860i	99,6%	99,0%	95,7%	79,9%	36,5%
St Jude Medical	2402	99,8%	98,4%	98,4%	97,1%	95,1%
Guidant	1190	99,1%	98,5%	-	-	-
St Jude Medical	2049	100,0%	99,6%	99,6%	95,3%	76,3%

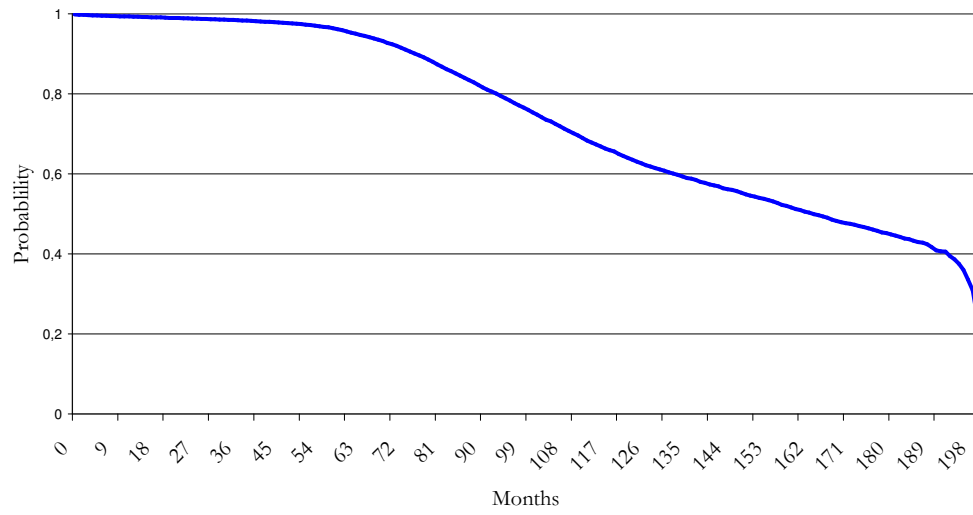
Lead survival



Years	Survival probability
1	99,8%
2	99,7%
3	99,6%
4	99,5%
5	99,4%
6	99,2%
7	99,0%
8	98,8%
9	98,4%
10	98,1%

Tillverkare	Modell	2år	4år	6år	8år	10år
Biotronik	PX60-UP	99,5%	99,5%	99,5%		
Biotronik	Y60-BP	99,8%	99,7%	99,4%	98,6%	
Guidant	4470	99,5%	98,6%	98,6%		
Guidant	4474	99,3%	98,8%	98,6%	98,3%	
Intermedics	435-07	99,9%	99,8%	99,6%	98,8%	98,8%
Intermedics	438-10	99,8%	99,8%	99,5%	98,6%	
Medtronic	4023	99,8%	99,4%	99,3%	98,9%	97,5%
Medtronic	4074	99,1%	98,7%			
Medtronic	4076	99,7%	99,7%			
Medtronic	5024M	100,0%	100,0%	100,0%	99,7%	98,7%
Medtronic	5032M	100,0%	99,8%	99,4%	98,7%	
Medtronic	5033	100,0%	99,6%	98,6%	97,4%	
Medtronic	5034	100,0%	100,0%	99,9%	99,7%	99,0%
Medtronic	5054	99,6%	99,5%	99,5%		
Medtronic	5076	99,6%	99,4%	98,5%		
Medtronic	5092	99,3%	98,7%	95,7%	95,7%	
St Jude Medical	1388T	100,0%	99,7%	99,1%	98,5%	97,5%
St Jude Medical	1403K	99,9%	99,7%	99,7%	99,0%	98,2%
St Jude Medical	1446T	99,2%	99,2%	99,2%		
St Jude Medical	1450K	99,1%	98,6%	97,9%	95,1%	95,1%
St Jude Medical	1450T	99,7%	99,5%	99,3%	97,9%	93,8%
St Jude Medical	1452K	99,9%	99,6%	98,6%	97,6%	
St Jude Medical	1452T	99,6%	99,1%	99,0%	97,7%	97,7%
St Jude Medical	1480T	98,9%	98,7%	98,7%		
St Jude Medical	1488T	99,3%	98,7%	98,2%		
St Jude Medical	1636T	99,3%	99,1%			
St Jude Medical	1688T	98,9%	98,7%			
Vitatron	ICF09	99,3%	99,2%	99,2%		
Vitatron	ICM09B	99,1%				
Vitatron	ICQ09B	99,6%				
Vitatron	IMG49	99,4%	98,7%	97,5%	94,4%	

Patient survival



Years	Survival probability
1	99,3%
2	98,9%
3	98,4%
4	97,6%
5	95,6%
6	91,5%
7	85,1%
8	78,9%
9	71,3%
10	65,6%