

SWISS STATISTICS OF CATHETER ABLATIONS 2013



Stiftung für Herzschrittmacher und Elektrophysiologie
Fondation pour la stimulation cardiaque et électrophysiologie
Fondazione per la stimolazione cardiaca ed elettrofisiologia

Preface

The Swiss statistics of pacemaker, ICD and catheter ablations are presented separately and could be generated automatically for the first time in 2013 from the data collected in CHPACE WEB. The pacemaker and ICD- statistics are published in three national languages. The present statistic on catheter ablation will appear in in English. These statistics were made possible by the Foundation for Cardiac Pacemaker and Electrophysiology (www.pacemaker-stiftung.ch).

CHPACE WEB, the Swiss Registry for pacemakers, ICDs and catheter ablation, not only allows the automatic generation of the annual statistics. CHPACE WEB also serves as an invaluable tool for quality management. All users have the opportunity to compare anonymously their own data with a "Swiss benchmark" and with those of hospitals of similar size.

CHPACE WEB was started in 2008, first in some university and pilot hospitals. The database is continuously accessible and constantly adjusted and updated.

Today, 74 hospitals with 448 users employ CHPACE WEB. By the end of 2013 CHPACE WEB contained 11'393 surgical procedures in pacemaker patients and 2'953 follow-up visits, 4'304 surgical procedures in ICD patients and 1'466 follow-ups as well as 7'837 interventions and 87 follow-ups in ablations patients.

The development and operation of CHPACE WEB is supported by our industry partners. For that we would like to thank the following companies: Bard Medica SA, Biosense Webster Johnson & Johnson AG, Biotronik Schweiz AG, Boston Scientific AG, Medtronic (Schweiz) AG, Sorin Group International SA and St. Jude Medical (Schweiz) AG.

Our thanks also go to all hospitals and users of CHPACE WEB, who transfer their data carefully and completely in the registry. They therefore make an important contribution to this statistic, which is outstanding in the cardiovascular field in Switzerland. We hope you enjoy the reading.

Dr. I. Babotai

Foundation for Cardiac Pacemaker and Electrophysiology

Dr. J. Fuhrer

Working Group Cardiac Pacemaker and Electrophysiology of the SSC

Overview

Ablation centers	22
Included in this statistic	20
Number of interventions	4221
Number of ablations	4612

Omissions

2 centers that did not report data to CHPACE WEB and are therefore not included in the statistics

No.	Center
220	Hôpital de la Tour
278	Clinique de Valère
Total	2

Ablation centers

7 centers with more than 250 interventions

Interventions and Ablations

according to number of interventions

No.	Center	Interventions	thereof aborted	Ablations
250	Klinik Im Park, Zürich	744	4	917
101	Universitätsspital Basel	413	0	436
102	Inselspital Bern	405	2	437
103	Hôpital Cantonal Universitaire de Genève	300	0	338
104	Centre Hospitalier Universitaire Vaudois (CHUV)	288	5	294
105	Universitätsspital Zürich	280	6	301
267	Clinique Cécil	269	1	290
Total	7	2699	18	3013

Ablation Procedures

according to number of interventions

No.	Center	AF	RAFlu	LAFlu	AT	AP	AVNRT	VT	PVC	AVN	AVN(R)	Other
250	Klinik Im Park, Zürich	388	195	16	37	29	181	8	21	1	39	6
101	Universitätsspital Basel	168	106	4	16	29	63	22	6	10	8	4
102	Inselspital Bern	115	143	4	15	31	64	16	18	4	25	4
103	Hôpital Cantonal Universitaire de Genève	102	109	17	18	11	42	7	5	16	9	2
104	Centre Hospitalier Universitaire Vaudois (CHUV)	62	69	16	12	19	53	27	6	1	34	0
105	Universitätsspital Zürich	106	51	1	9	27	92	9	2	3	7	0
267	Clinique Cécil	71	58	9	11	20	50	8	17	6	40	1
Total	7	1012	731	67	118	166	545	97	75	41	162	17

Ablation centers

6 centers with 100 to 250 interventions

Interventions and Ablations

according to number of interventions

No.	Center	Interventions	thereof aborted	Ablations
239	Klinik Beau-Site Bern	232	3	261
236	Stadtspital Triemli, Zürich	204	1	204
246	Hirslandenklinik Aarau	198	2	198
217	Kantonsspital Luzern, Sursee und Wolhusen	175	0	194
214	HerzZentrum & Rhythmologie Hirslanden, Zürich	174	0	194
231	Kantonsspital St. Gallen	163	0	167
Total	6	1146	6	1218

Ablation Procedures

according to number of interventions

No.	Center	AF	RAFlu	LAFlu	AT	AP	AVNRT	VT	PVC	AVN	AVN(R)	Other
239	Klinik Beau-Site Bern	104	73	9	18	12	24	3	8	2	11	0
236	Stadtspital Triemli, Zürich	63	63	5	10	11	45	1	0	4	3	0
246	Hirslandenklinik Aarau	78	34	0	8	13	48	1	3	5	10	0
217	Kantonsspital Luzern, Sursee und Wolhusen	43	61	2	6	20	45	5	4	0	8	0
214	HerzZentrum & Rhythmologie Hirslanden, Zürich	103	29	2	4	10	28	5	3	1	9	0
231	Kantonsspital St. Gallen	35	40	1	8	19	56	1	2	0	5	0
Total	6	426	300	19	54	85	246	16	20	12	46	0

Ablation centers

7 centers with less than 100 interventions

Interventions and Ablations

according to number of interventions

No.	Center	Interventions	thereof aborted	Ablations
216	Cardiocentro Ticino, Lugano	97	0	100
251	Herzzentrum Bodensee, Kreuzlingen	88	1	89
218	Klinik St. Anna, Luzern	47	0	47
106	Universitäts-Kinderkliniken Zürich	38	3	39
228	Hôpital de Sion	31	6	31
233	GZO Spital Wetzikon	26	0	26
268	Clinique des Grangettes	15	0	15
Total	7	342	10	347

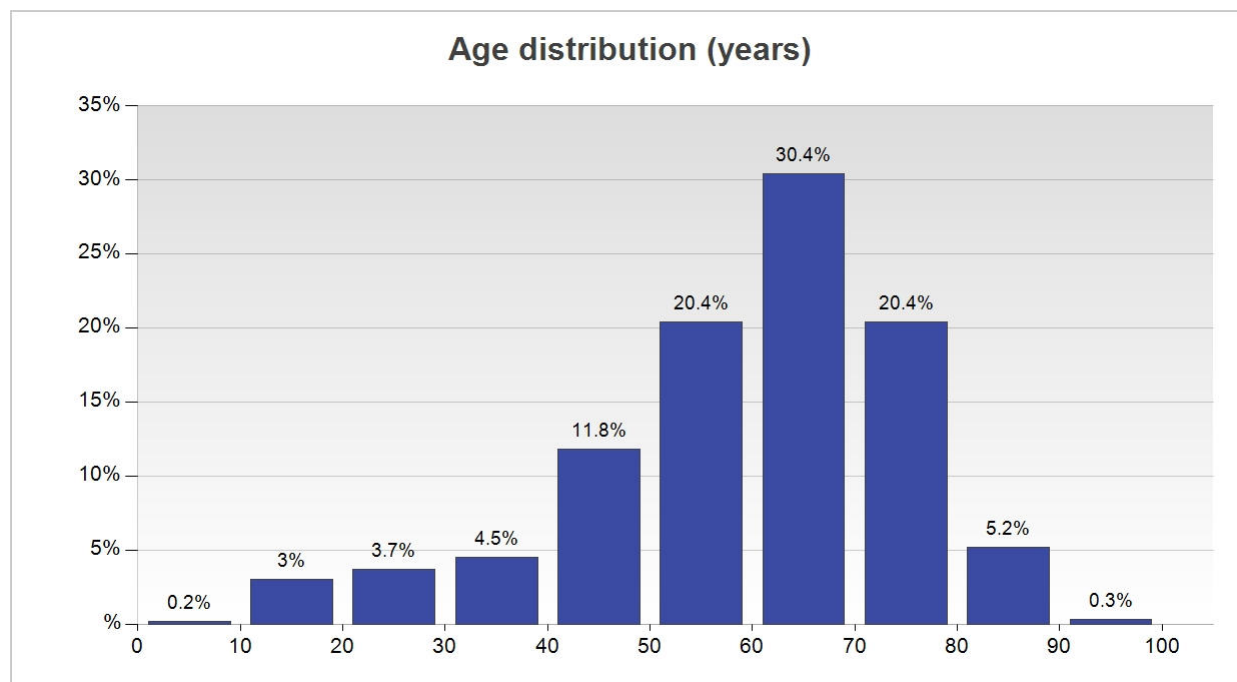
Ablation procedures

according to number of interventions

No.	Center	AF	RAFlu	LAFlu	AT	AP	AVNRT	VT	PVC	AVN	AVN(R)	Other
216	Cardiocentro Ticino, Lugano	19	18	0	6	4	20	9	3	2	17	2
251	Herzzentrum Bodensee, Kreuzlingen	44	10	1	3	4	14	6	5	0	3	0
218	Klinik St. Anna, Luzern	5	9	0	5	3	20	0	0	0	5	0
106	Universitäts-Kinderkliniken Zürich	0	0	0	3	25	11	1	0	0	0	2
228	Hôpital de Sion	0	9	0	3	1	13	1	0	7	1	2
233	GZO Spital Wetzikon	0	8	0	2	1	11	0	0	0	4	0
268	Clinique des Grangettes	0	3	0	0	1	9	0	0	2	0	0
Total	7	68	57	1	22	39	98	17	8	11	30	6

All ablation types

Number of ablations: 4612



Age (years)	min.	Ø	max.
Female	10	60	95
Male	0	60	94
All	0	60	95

Number of patients	n	%
Females	1523	36.37
Males	2664	63.63
Total	4187	

Anesthesia	n	%
Local	3462	82.68
General	725	17.32
Total	4187	

Combinations of ablations performed during one intervention

Number of interventions	4157
AF	1165
AVNRT	831
RAFlu	765
AP	270
AF RAFlu	262
AVN(R)	230
AT	153
VT	123
PVC	98
AVN	59
LAFIu	48
AF LAFIu	18
RAFlu AVNRT	17
Other	15
AF AT	14
AF LAFIu RAFlu	11
AF AVNRT	10
AP AVNRT	10
LAFIu RAFlu	8
AT AVNRT	7
RAFlu AT	7
AF RAFlu AT	5
RAFlu AP	3
AVN AVN(R)	3
LAFIu AT	2
AF Other	2
AVNRT AVN	2
AF RAFlu AVNRT	2
RAFlu AVN(R)	2
AF AP	2
AF AVN(R)	1
AVNRT PVC	1
RAFlu AT PVC	1
VT AVN(R)	1
AF RAFlu AP	1
RAFlu VT	1
PVC Other	1
AF RAFlu Other	1
AT Other	1
AVNRT VT	1
VT PVC	1
AT AP	1
AT VT	1

Only completely documented and non-aborted interventions are counted.

Ablation procedures

Atrial Fibrillation	1494
Paroxysmal	1051
Persistent	409
Long-standing Persistent	34

Left Atrial Flutter	87
Roof-dependent	19
Perimitral	28
Peri-Incisional	7
Peri Ostial Pulm. Vein	15
Other	30

Accessory Pathway	287
Concealed	88
WPW	171
Asymptomatic Preexcitation	29
Atrio-Fascicular	1
PJRT	3
Mahaim	4
Other	5

AVN (to Resync.)	64
-------------------------	-----------

AVN (Rate Control)	237
Paroxysmal	79
Persistent	78
Long-standing Persistent	80

Other Arrhythmia	20
PAC	2
JET	2
SNT	2
Other	15

Right Atrial Flutter	1086
Cavotricuspid	1062
Scar Related	19
Other	16

Atrial Tachycardia	192
---------------------------	------------

AVNRT	881
Slow-Fast	841
Fast-Slow	25
Slow-Slow	25

VT	128
Monomorphic	81
Polymorphic	13
Ischemic	17
RVOT	27
LVOT / Aortic Cusp	9
Left Fascicular VT	9
BB Reentry	3
Epicardial	6
Other	9

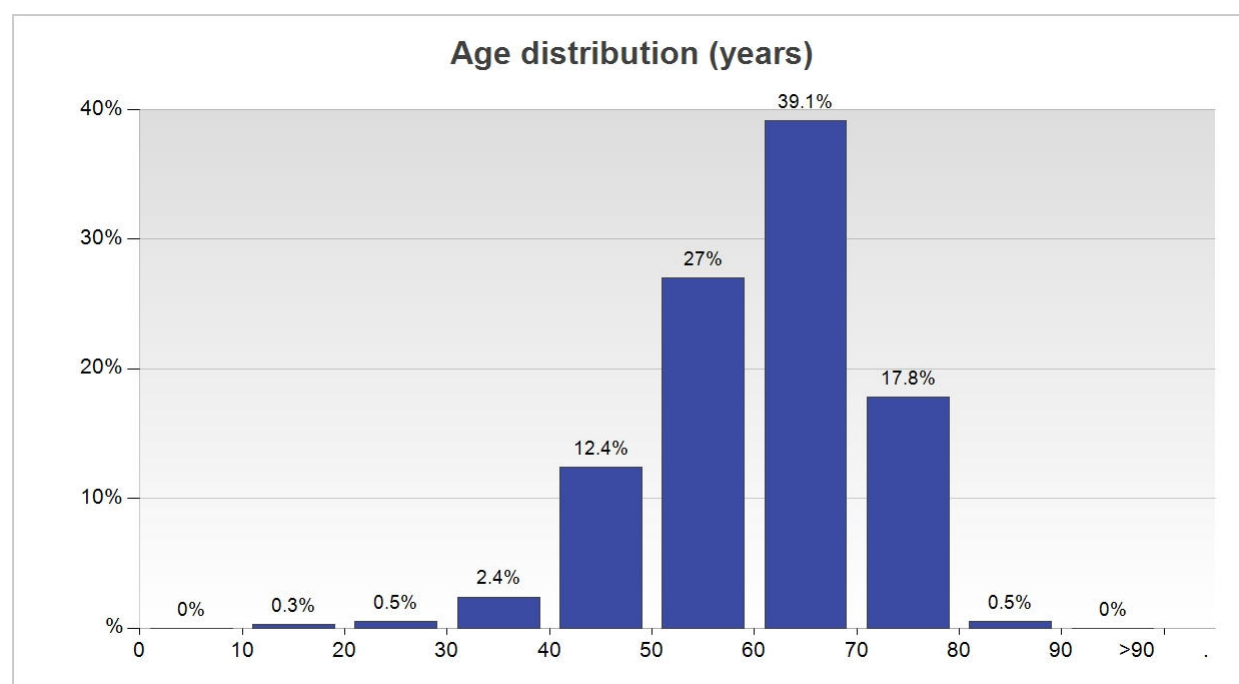
PVC	102
Monomorphic	70
Polymorphic	6
Ischemic	2
RVOT	48
LVOT / Aortic Cusp	25
Left Fascicular VT	2
HP System	3
Other	5

Atrial Fibrillation

Ablation of Atrial Fibrillation (AF)

	n
All interventions	1494
AF combined with others	329
AF combined with RAFLa	262
AF only	1165

The following statistics include AF only procedures



Age (years)	min.	Ø	max.
Female	30	65	82
Male	18	60	88
All	18	61	88

Number of patients	n	%
Females	332	28.5
Males	833	71.5
Total	1165	

Atrial Fibrillation

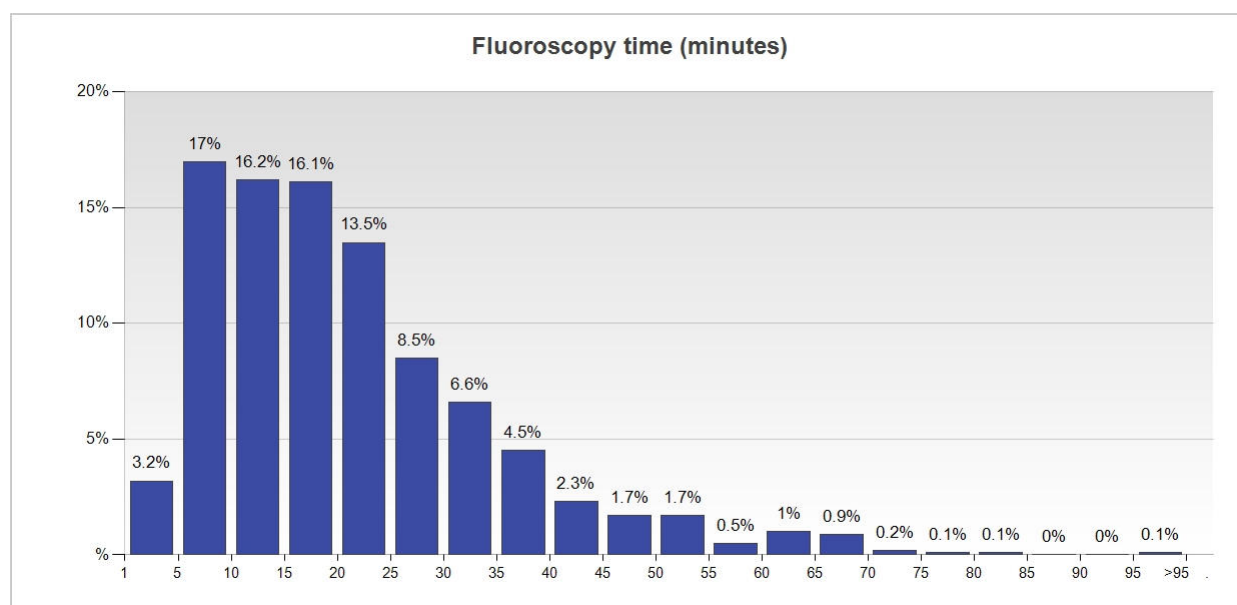
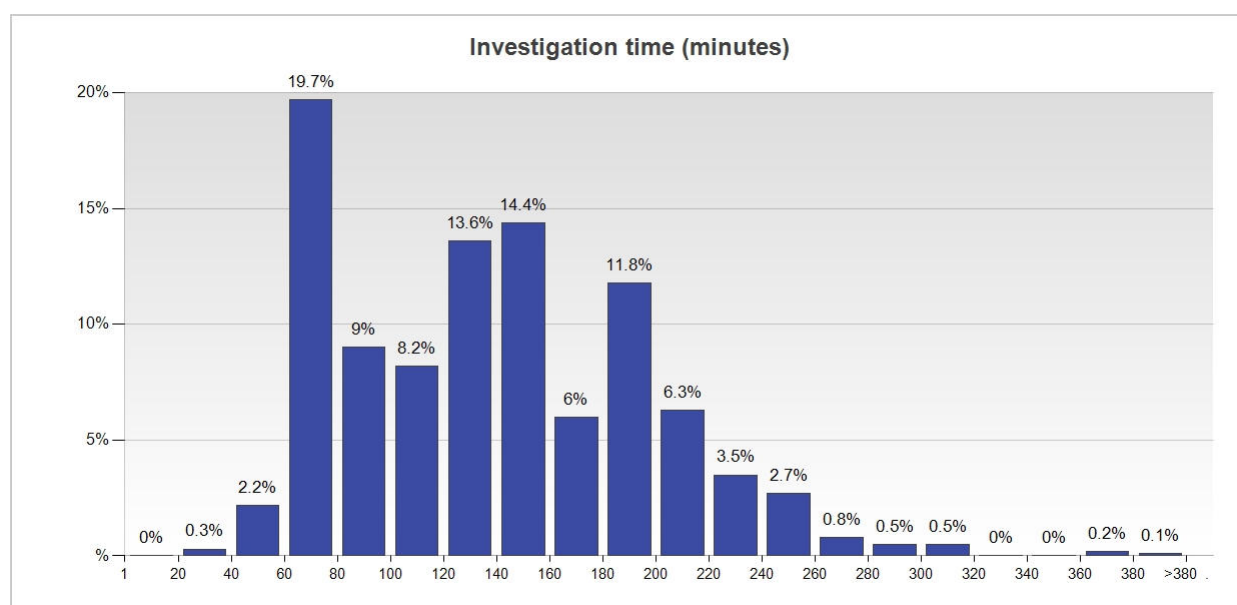
Cardiopathy (Underlying heart disease)	n	%
None	818	70.21
Hypertensive Cardiomyopathy	117	10.04
Ischemic	73	6.27
Tachycardiomyopathy	50	4.29
Valvular	25	2.15
Dilated	23	1.97
Other	23	1.97
H(O)CM	19	1.63
Congenital	7	0.6
Angioplasty	5	0.43
Post Valvular Surgery	3	0.26
RV Cardiomyopathy	1	0.09
CABG	1	0.09
Infiltrative	0	0
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
Post Congenital Surgery	0	0
Total	1165	

Symptoms	n
Palpitations	1015
Dyspnea	301
Fatigue	244
Dizziness	152
Other	48
None	35
Syncope	22
Angina Pectoris	21
SCD	0

Atrial Fibrillation

Anesthesia	n	%
Local	763	65.49
General	402	34.51
Total	1165	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	30	134.7	383	1164	1
Fluoroscopy time	2	20.7	155	1097	68



Atrial Fibrillation

Type of AF	n	%
Paroxysmal	828	71.07
Persistent	305	26.18
Long-standing Persistent (>1 Year)	32	2.75

EHRA-Score	n	%
Score I	112	9.61
Score II	683	58.63
Score III	350	30.04
Score IV	20	1.72

Type of Intervention	n	%
Percutaneous	1165	100
Hybrid (Epicardial + Endovascular)	0	0
Surgical Ablation	0	0

Intervention	n	%
Primary Intervention	910	78.11
Redo	255	21.89

Antiarrhythmic Drugs

	n
Beta Blocker	655
Amiodarone	385
Flecainide	163
None	147
Sotalol	80
Dronedarone	73
Calcium Antagonist	37
Digitalis	14
Propafenone	11
Other	9

Thromboembolic Risk Factors

	n
Hypertension	463
Diabetes	67
Congestive Heart Failure, LV dysfunction	49
Stroke, TIA, Other Embolic Event	48
Prior MI, Per. Artery Disease, Aortic Plaque	44

Atrial Fibrillation

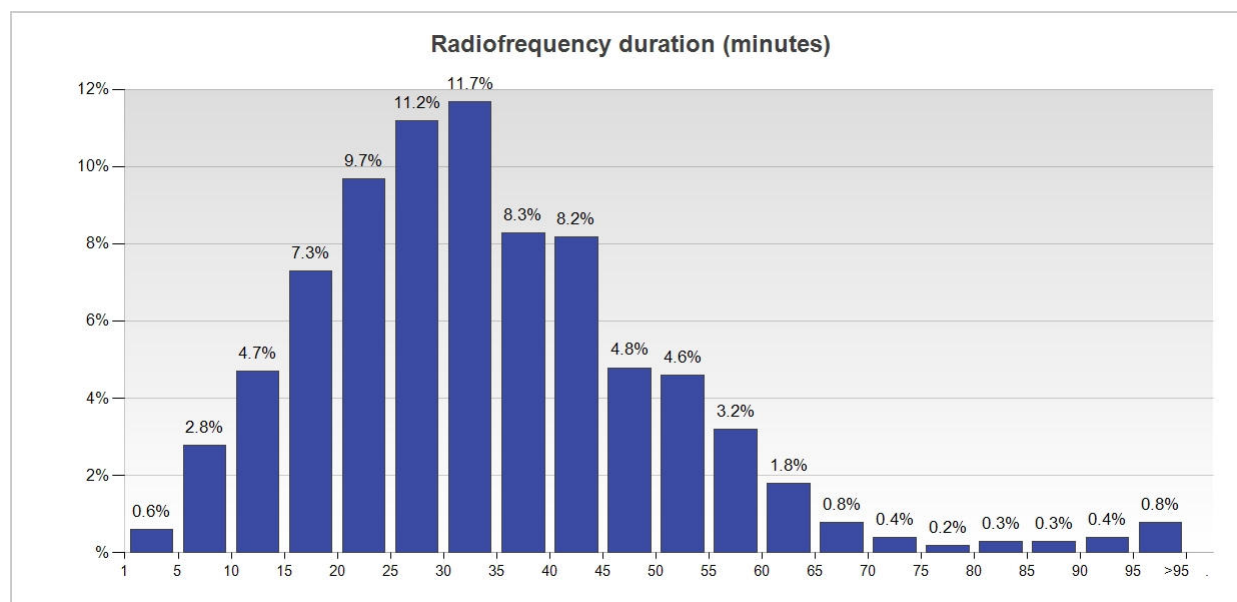
Anticoagulation, Antiaggregation	n
Vitamin K-Antagonist	501
Factor Xa-Antagonist	408
None	100
Direct Thrombin Inhibitor	89
Aspirin	49
Other	27
Clopidogrel	11
Prasugrel	4
Ticagrelor	0

CHA₂DS₂-VASc Score	n
Score = 0	316
Score = 1	396
Score = 2	261
Score = 3	134
Score = 4	40
Score = 5	12
Score = 6	3
Score = 7	3

Site of Ablation	n
LSPV	1092
RSPV	1090
RIPV	1090
LIPV	1087
CFAE	107
Roof Line	106
Mitral Isthmus Line	37
Other Lines	27
RMPV	21
Non-PV Focus	16
SVC	10
Septal Line	8
Vein of Marshall	6
Other Veins	4

Atrial Fibrillation

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	33.4	192	933	206
Irrigated Technology				841	
RF Duty Cycled				7	



Atrial Fibrillation

Cryoablation	min.	Ø	max.	n	n₀*
Total Duration (minutes)	16	50.4	180	20	0

	n
Additional RF or Cryo Cath Needed	0

	n
Laser Balloon	3

Access	n	%
Trans-septal, Puncture	974	83.61
Venous	96	8.24
Trans-septal, PFO	94	8.07
Arterial	1	0.09
Epicardial, Coronary Sinus	0	0
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Other	0	0
Total	1165	

Mapping	n	%
3D Mapping	736	63.18
Conventional	207	17.77
Lasso	171	14.68
Other	47	4.03
Basket	3	0.26
Non Contact	1	0.09
HD Mesh	0	0
Total	1165	

Atrial Fibrillation

Catheter Steering

	n	%
Conventional	1148	98.54
Other	9	0.77
Stereotaxis	7	0.6
Hansen	1	0.09
Total	1165	

Results

	n
All Veins Isolated	1151
Roof Line Block Confirmed	75
Mitral Isthmus Line Block Confirmed	25
Roof Line Block Not Confirmed	15
Mitral Isthmus Line Block Not Confirmed	9
Not All Veins Isolated	8

Sinus Rhythm

	n
Spontaneous	570
By Ablation	318
With Electrical Cardioversion / Stimulation	250
Not Achieved	34
AAD	5

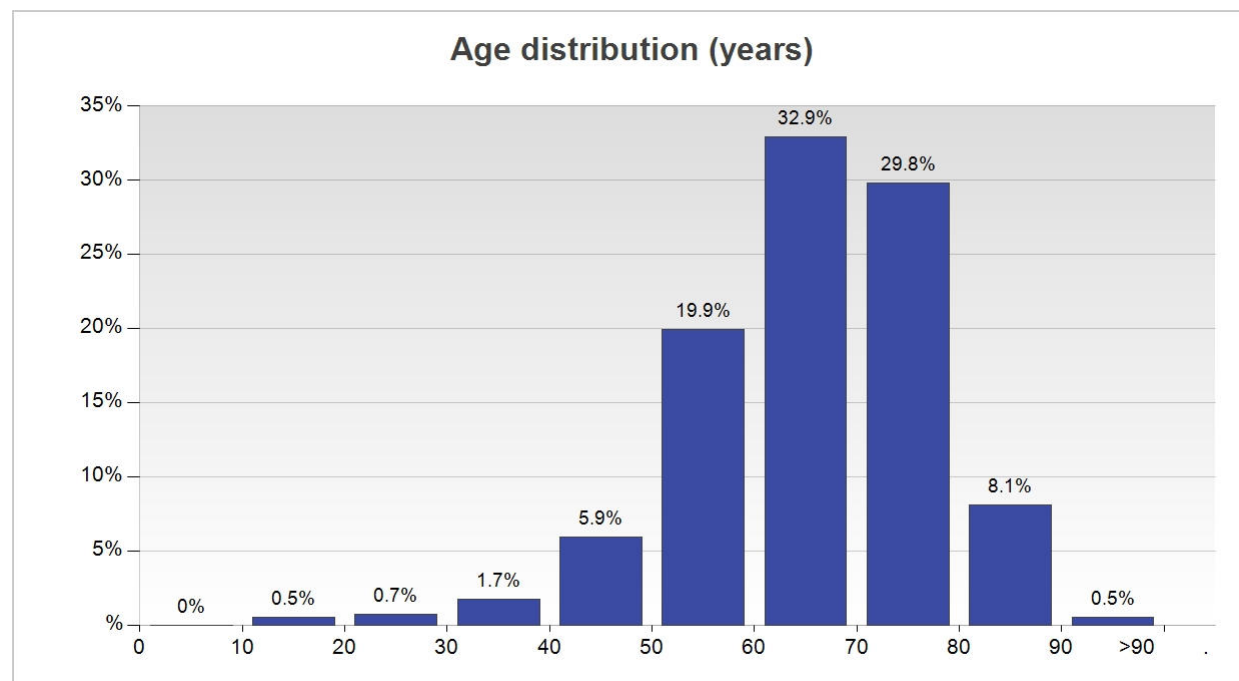
Atrial Fibrillation

Periprocedural Complications	n
No complications	1147
Other	6
Inguinal Hematoma	4
Tamponade	3
Pericardial Effusion	2
AV Fistula	1
Infection	1
Pseudoaneurysm	1
Pulmonary Oedema	1
Pulmonary Embolism	0
Pneumothorax	0
TIA	0
PV Stenosis	0
Hemothorax	0
Stroke	0
Aortic Dissection	0
Valvular Lesion	0
Transient AV Block	0
Myocardial Infarction	0
Arterial Thrombosis	0
High Degree or Complete AV Block	0
Arterial Occlusion	0
Death	0
Phrenic Nerve Paralysis	0

Right Atrial Flutter

Ablation of Right Atrial Flutter (RAFlu)	n
All interventions	1086
RAFlu combined with others	321
RAFlu only	765

The following statistics include RAFlu only procedures



Age (years)	min.	Ø	max.
Female	18	67	90
Male	15	66	94
All	15	66	94

Number of patients	n	%
Females	157	20.52
Males	608	79.48
Total	765	

Right Atrial Flutter

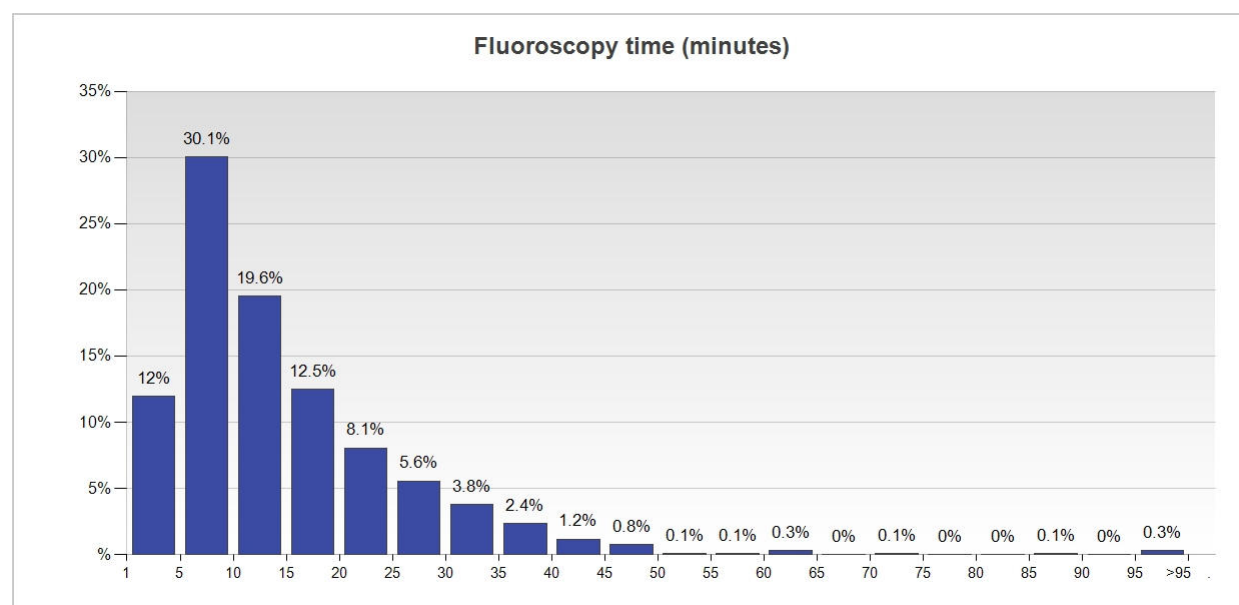
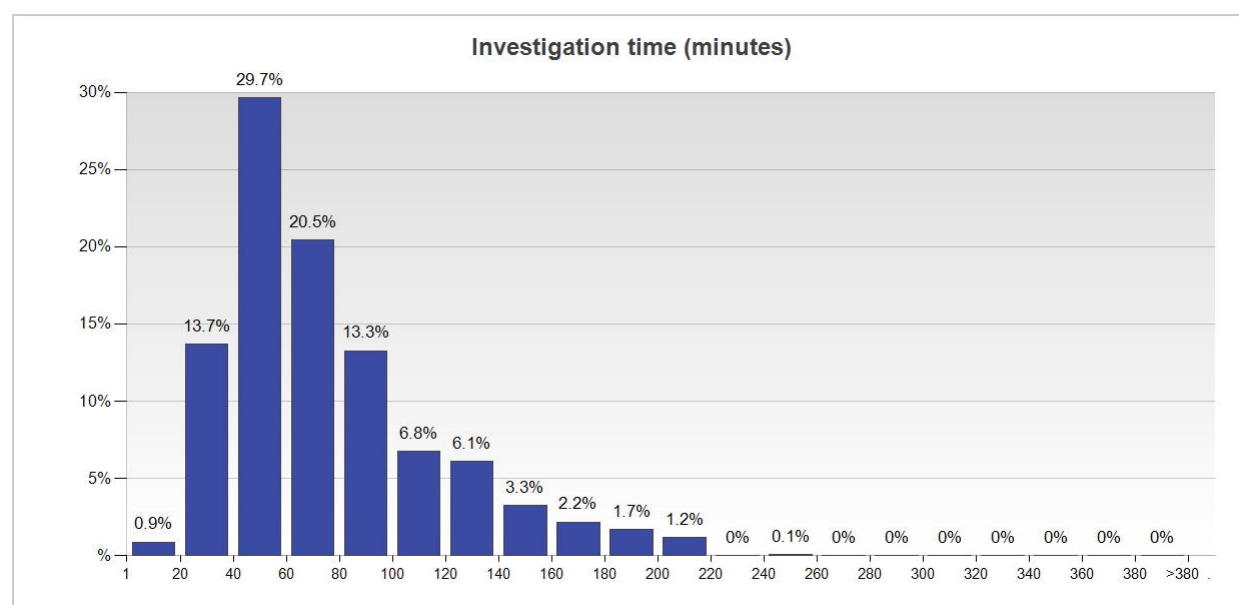
Cardiopathy (Underlying heart disease)	n	%
None	362	47.32
Ischemic	106	13.86
Hypertensive Cardiomyopathy	98	12.81
Valvular	61	7.97
Other	41	5.36
Dilated	25	3.27
Tachycardiomyopathy	25	3.27
Congenital	20	2.61
Post Valvular Surgery	8	1.05
Post Congenital Surgery	6	0.78
H(O)CM	5	0.65
CABG	5	0.65
Infiltrative	2	0.26
Angioplasty	1	0.13
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
RV Cardiomyopathy	0	0
Total	765	

Symptoms	n
Palpitations	537
Dyspnea	267
Fatigue	195
Dizziness	59
None	58
Other	25
Angina Pectoris	18
Syncope	17
SCD	1

Right Atrial Flutter

Anesthesia	n	%
Local	743	97.12
General	22	2.88
Total	765	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	4	72.6	243	762	3
Fluoroscopy time	1	14.9	340	743	22



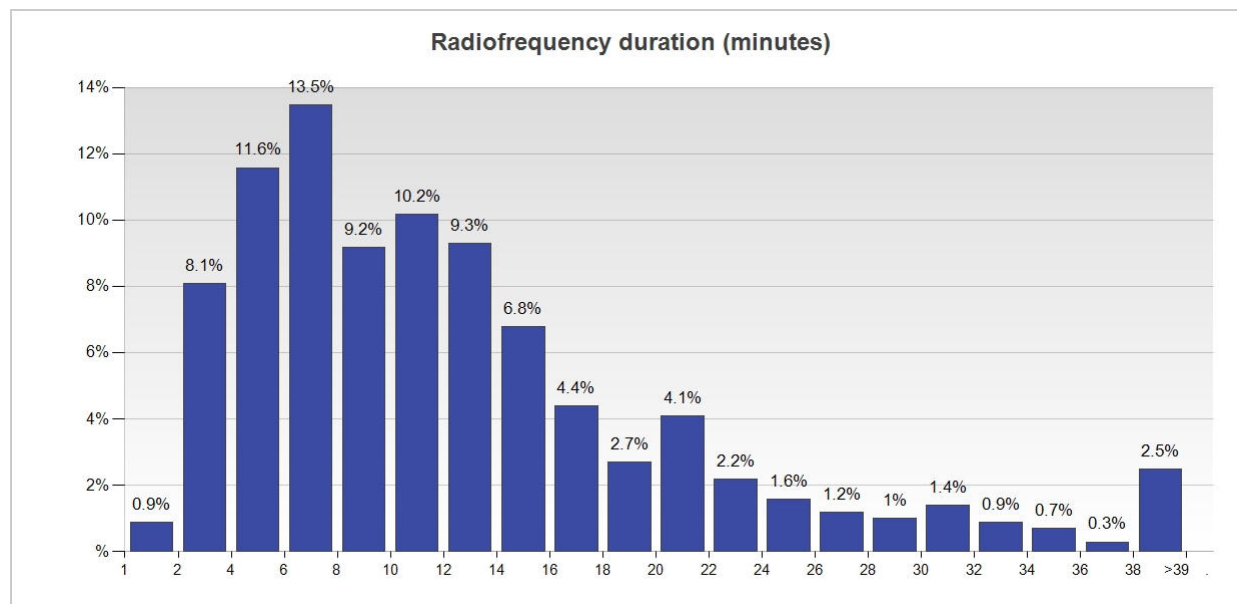
Right Atrial Flutter

Type of Flutter	n
Cavotricuspid	743
Scar related	18
Other	15

Intervention	n	%
Primary Intervention	697	91.11
Redo	68	8.89

Right Atrial Flutter

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	12.3	59	710	55
Irrigated Technology				411	



Right Atrial Flutter

Cryoablation	min.	Ø	max.	n	n₀*
Total Duration (minutes)	0	0	0	0	0

	n
Additional RF or Cryo Cath Needed	1

Access	n	%
Venous	758	99.08
Trans-septal, Puncture	5	0.65
Other	2	0.26
Arterial	0	0
Trans-septal, PFO	0	0
Epicardial, Coronary Sinus	0	0
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Total	765	

Mapping	n	%
Conventional	684	89.41
3D Mapping	62	8.1
Other	11	1.44
Lasso	5	0.65
Basket	1	0.13
Non Contact	1	0.13
HD Mesh	1	0.13
Total	765	

Catheter Steering	n	%
Conventional	760	99.35
Other	5	0.65
Stereotaxis	0	0
Hansen	0	0
Total	765	

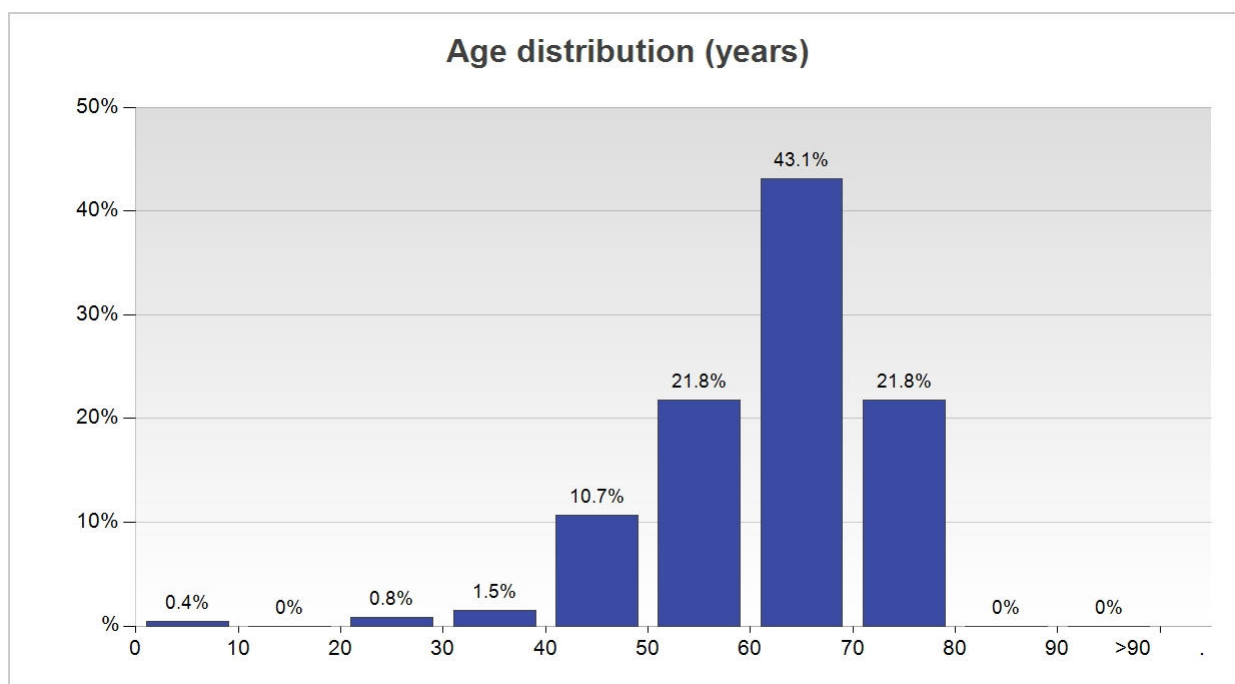
Results	n	%
Block confirmed	728	95.16
Block not confirmed	37	4.84

Right Atrial Flutter

Periprocedural Complications	n
No complications	756
Other	5
AV Fistula	2
Stroke	1
High Degree or Complete AV Block	1
Inguinal Hematoma	1
Pulmonary Embolism	0
Infection	0
Pneumothorax	0
TIA	0
Pseudoaneurysm	0
PV Stenosis	0
Hemothorax	0
Aortic Dissection	0
Valvular Lesions	0
Transient AV Block	0
Myocardial Infarction	0
Arterial Thrombosis	0
Pulmonary Oedema	0
Pericardial Effusion	0
Arterial Occlusion	0
Death	0
Phrenic Nerve Paralysis	0
Tamponade	0

Atrial Fibrillation combined with Right Atrial Flutter

Number of interventions (AF with RAFlu): 262



Age (years)	min.	Ø	max.
Female	39	66	80
Male	0	61	79
All	0	62	80

Number of patients	n	%
Females	73	27.86
Males	189	72.14
Total	262	

Atrial Fibrillation combined with Right Atrial Flutter

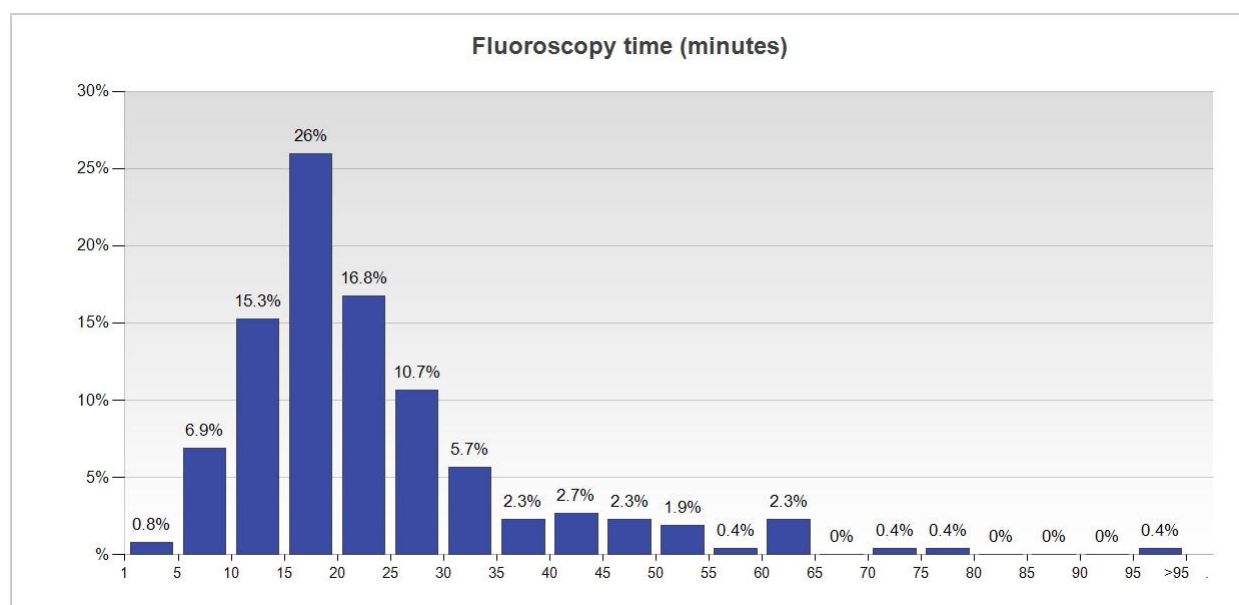
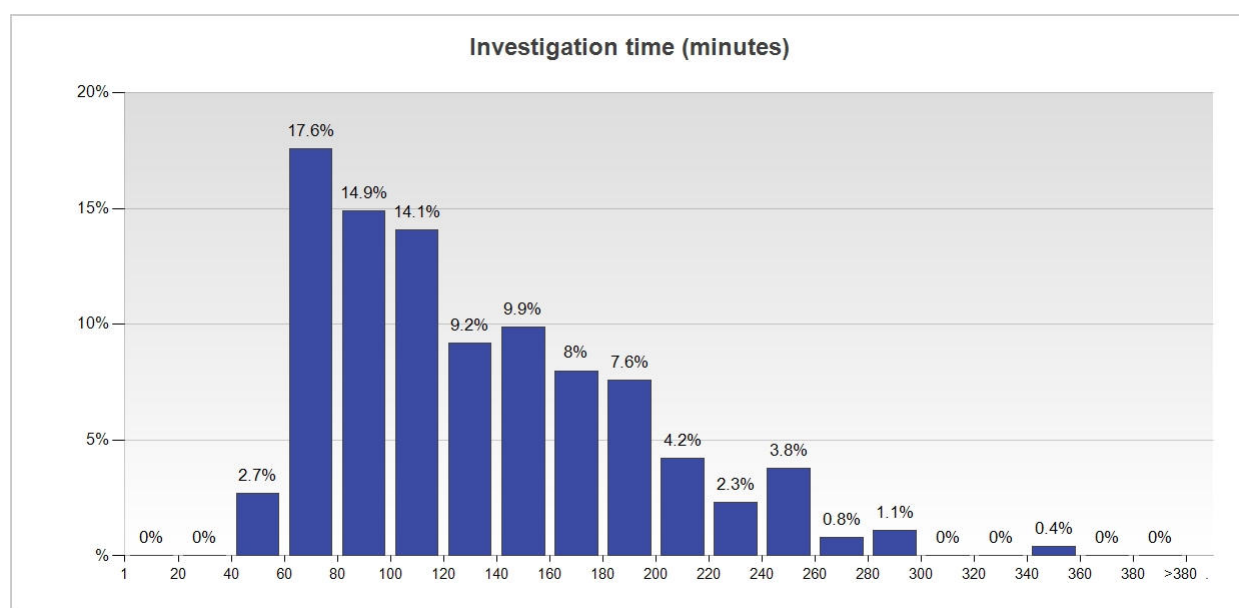
Cardiopathy (Underlying heart disease)	n	%
None	170	64.89
Hypertensive Cardiomyopathy	24	9.16
Ischemic	20	7.63
Tachycardiomyopathy	18	6.87
Other	9	3.44
Valvular	6	2.29
Dilated	5	1.91
Congenital	3	1.15
Angioplasty	3	1.15
CABG	2	0.76
H(O)CM	1	0.38
Post Valvular Surgery	1	0.38
Infiltrative	0	0
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
RV Cardiomyopathy	0	0
Post Congenital Surgery	0	0
Total	262	

Symptoms	n
Palpitations	219
Dyspnea	45
Fatigue	40
Dizziness	18
Other	18
None	13
Syncope	2
Angina Pectoris	0
SCD	0

Atrial Fibrillation combined with Right Atrial Flutter

Anesthesia	n	%
Local	117	44.66
General	145	55.34
Total	262	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	40	129.1	350	253	9
Fluoroscopy time	4	23	101	249	13



Atrial Fibrillation combined with Right Atrial Flutter

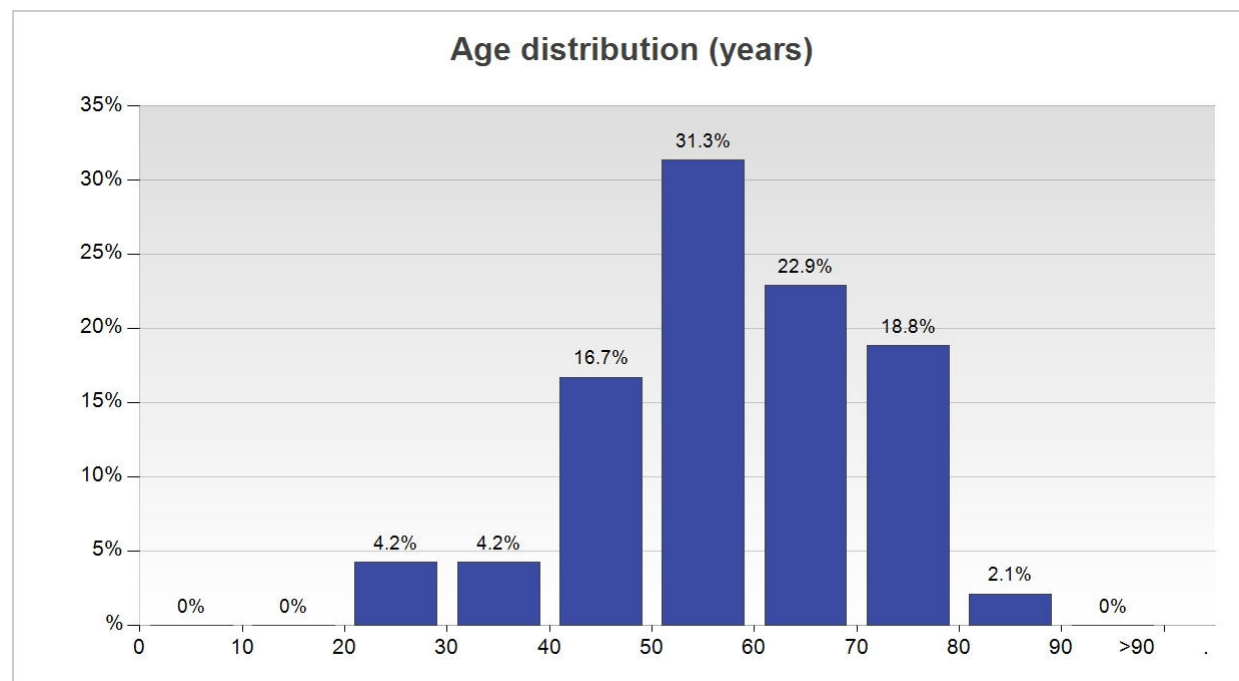
Periprocedural Complications	n
No complications	254
Pericardial Effusion	3
Tamponade	2
Other	1
Pseudoaneurysm	1
Death	1
Inguinal Hematoma	1
Pulmonary Embolism	0
AV Fistula	0
Infection	0
Pneumothorax	0
TIA	0
PV Stenosis	0
Hemothorax	0
Stroke	0
Aortic Dissection	0
Valvular Lesions	0
Transient AV Block	0
Myocardial Infarction	0
Arterial Thrombosis	0
Pulmonary Oedema	0
High Degree or Complete AV Block	0
Arterial Occlusion	0
Phrenic Nerve Paralysis	0

Left Atrial Flutter

Ablation of Left Atrial Flutter (LAFlu)

	n
All interventions	87
LAFlu combined with others	39
LAFlu only	48

The following statistics include LAFlu only procedures



Age (years)	min.	Ø	max.
Female	42	62	82
Male	24	58	79
All	24	58	82

Number of patients	n	%
Females	9	18.75
Males	39	81.25
Total	48	

Left Atrial Flutter

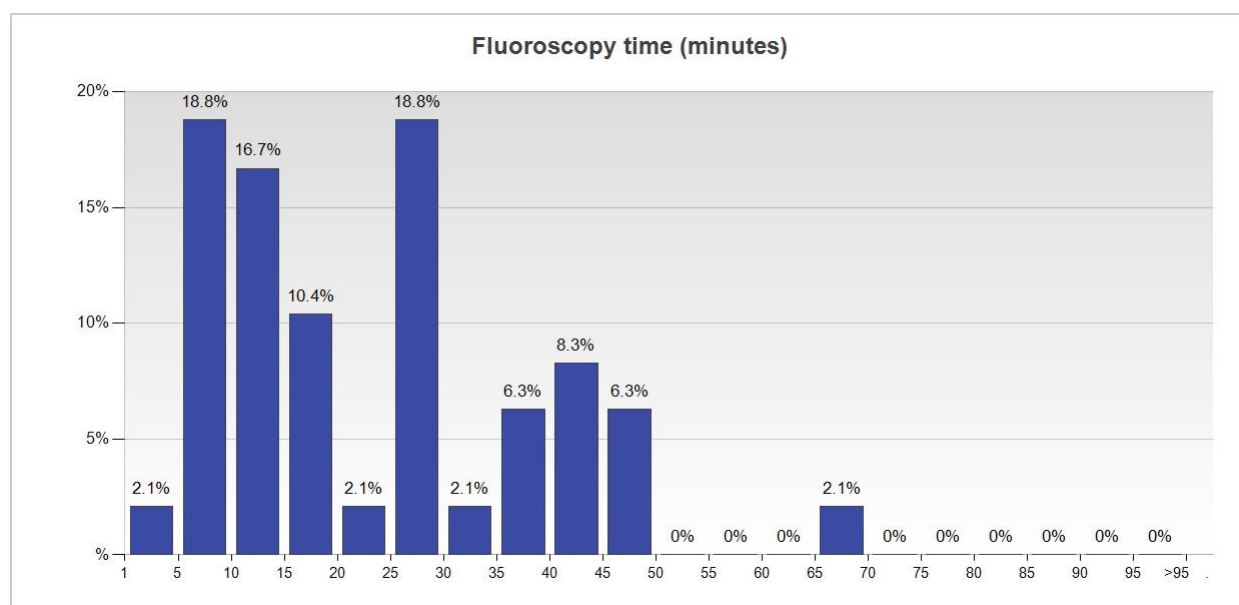
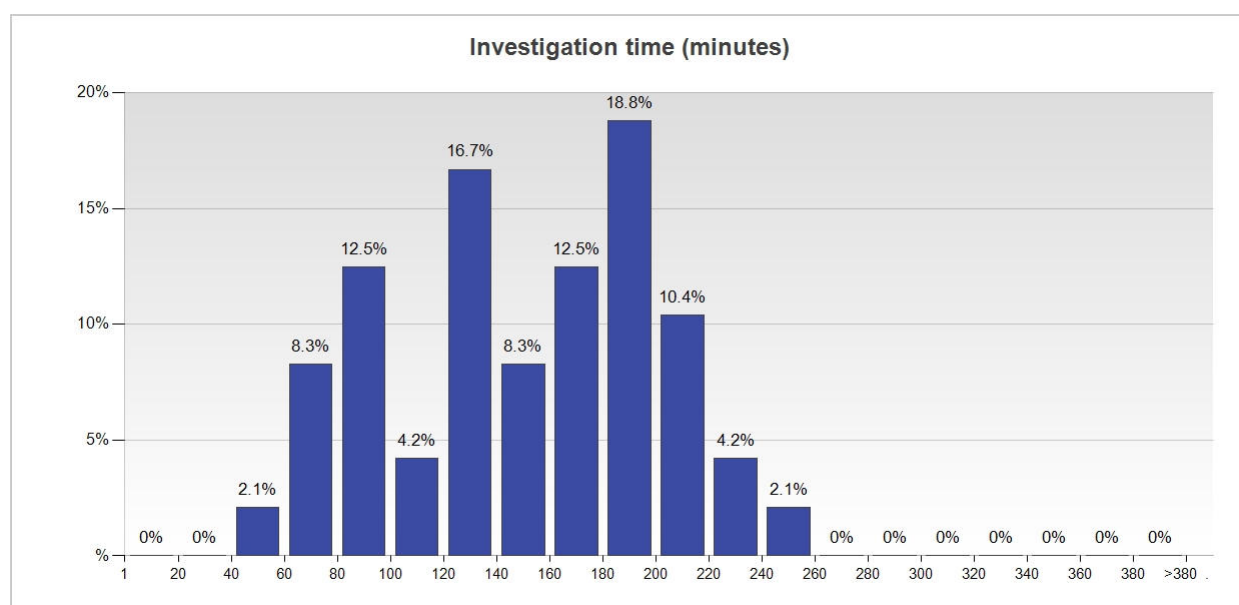
Cardiopathy (Underlying heart disease)	n	%
None	28	58.33
Other	4	8.33
Valvular	3	6.25
Congenital	3	6.25
Hypertensive Cardiomyopathy	3	6.25
Ischemic	2	4.17
Tachycardiomyopathy	2	4.17
Dilated	1	2.08
H(O)CM	1	2.08
Post Congenital Surgery	1	2.08
Infiltrative	0	0
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
RV Cardiomyopathy	0	0
CABG	0	0
Angioplasty	0	0
Post Valvular Surgery	0	0
Total	48	

Symptoms	n
Palpitations	40
Dyspnea	22
Fatigue	15
Dizziness	2
Other	1
Angina Pectoris	0
None	0
SCD	0
Syncope	0

Left Atrial Flutter

Anesthesia	n	%
Local	24	50
General	24	50
Total	48	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	45	146.3	240	48	0
Fluoroscopy time	4	22.6	65	45	3



Left Atrial Flutter

Type of Flutter

	n
Other	17
Perimitral	17
Roof-dependent	8
Peri Ostial Pulmonary Vein	7
Peri-Incisional	6

EHRA-Score	n	%
Score I	4	8.33
Score II	21	43.75
Score III	23	47.92
Score IV	0	0

Type of Intervention	n	%
Percutaneous	48	100
Hybrid (Epicardial + Endovascular)	0	0
Surgical Ablation	0	0

Intervention	n	%
Primary Intervention	22	45.83
Redo	26	54.17

Antiarrhythmic Drugs

	n
Beta Blocker	28
Amiodarone	10
None	9
Calcium Antagonist	6
Flecainide	3
Sotalol	3
Digitalis	2
Other	1
Dronedarone	0
Propafenone	0

Left Atrial Flutter

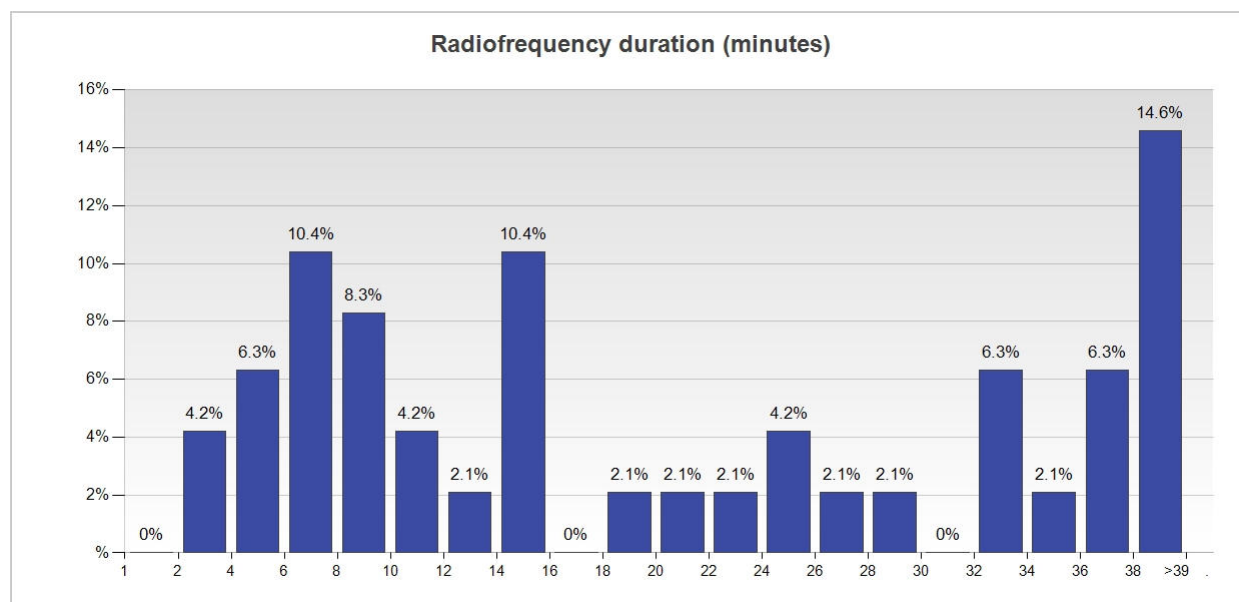
Thromboembolic Risk Factors	n
Hypertension	19
Prior MI, Per. Artery Disease, Aortic Plaque	3
Congestive Heart Failure, LV dysfunction	3
Diabetes	3
Stroke, TIA, Other Embolic Event	0

Anticoagulation, Antiaggregation	n
Vitamin K-Antagonist	28
Factor Xa-Antagonist	12
None	4
Direct Thrombin Inhibitor	2
Other	2
Aspirin	1
Clopidogrel	1
Ticagrelor	0
Prasugrel	0

CHA₂DS₂-VASc Score	n
Score = 0	15
Score = 1	13
Score = 2	14
Score = 3	4
Score = 4	2
Score = 5	0
Score = 6	0
Score = 7	0

Left Atrial Flutter

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	2	21.3	54	43	5
Irrigated Technology				42	
RF Duty Cycled				0	



Left Atrial Flutter

Access	n	%
Trans-septal, Puncture	29	60.42
Venous	16	33.33
Trans-septal, PFO	3	6.25
Arterial	0	0
Epicardial, Coronary Sinus	0	0
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Other	0	0
Total	48	

Mapping	n	%
3D Mapping	34	70.83
Conventional	12	25
Other	2	4.17
Lasso	0	0
Basket	0	0
Non Contact	0	0
HD Mesh	0	0
Total	48	

Catheter Steering	n	%
Conventional	45	93.75
Stereotaxis	2	4.17
Other	1	2.08
Hansen	0	0
Total	48	

Results	n	%
Block confirmed	34	70.83
Block not confirmed	14	29.17

Left Atrial Flutter

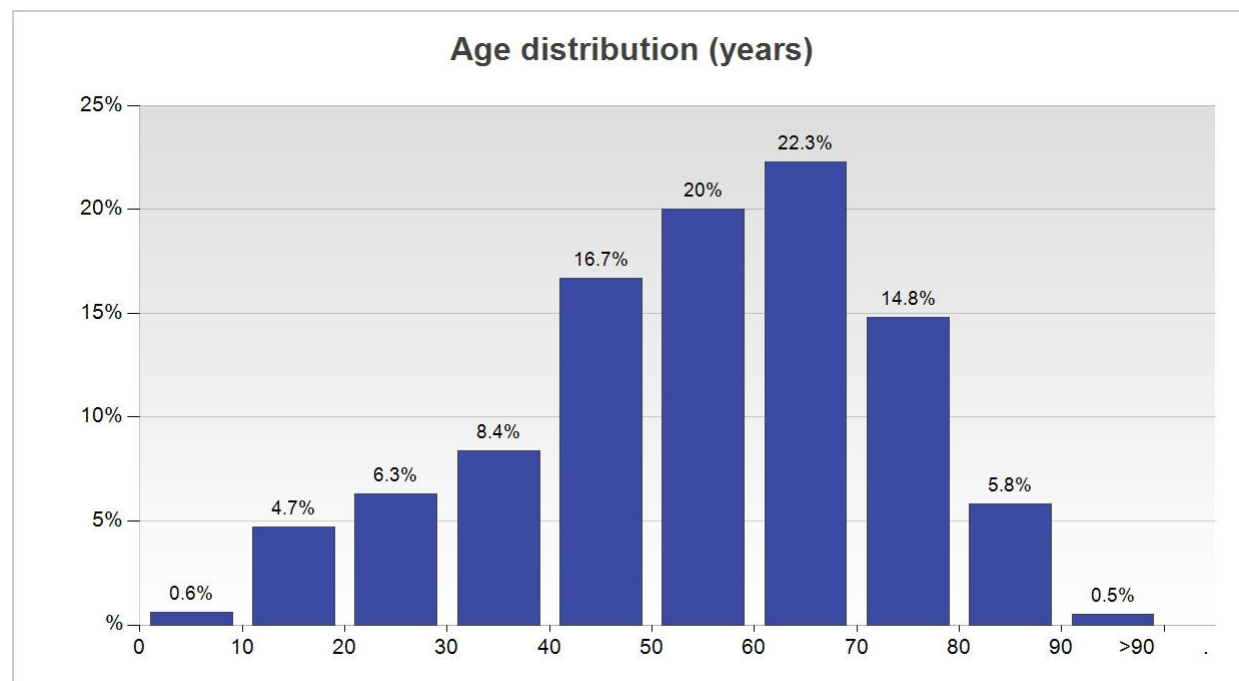
Periprocedural Complications	n
No complications	46
Other	1
AV Fistula	1
Pulmonary Embolism	0
Infection	0
Pneumothorax	0
TIA	0
Pseudoaneurysm	0
PV Stenosis	0
Hemothorax	0
Stroke	0
Aortic Dissection	0
Valvular Lesions	0
Transient AV Block	0
Myocardial Infarction	0
Arterial Thrombosis	0
Pulmonary Oedema	0
High Degree or Complete AV Block	0
Pericardial Effusion	0
Arterial Occlusion	0
Death	0
Inguinal Hematoma	0
Phrenic Nerve Paralysis	0
Tamponade	0

Atrioventricular Nodal Reentry Tachycardia (AVNRT)

Ablation of AVNRT

	n
All interventions	881
AVNRT combined with others	50
AVNRT only	831

The following statistics include AVNRT only procedures



Age (years)	min.	Ø	max.
Female	10	54	95
Male	0	57	93
All	0	55	95

Number of patients	n	%
Females	482	58
Males	349	42
Total	831	

Atrioventricular Nodal Reentry Tachycardia (AVNRT)

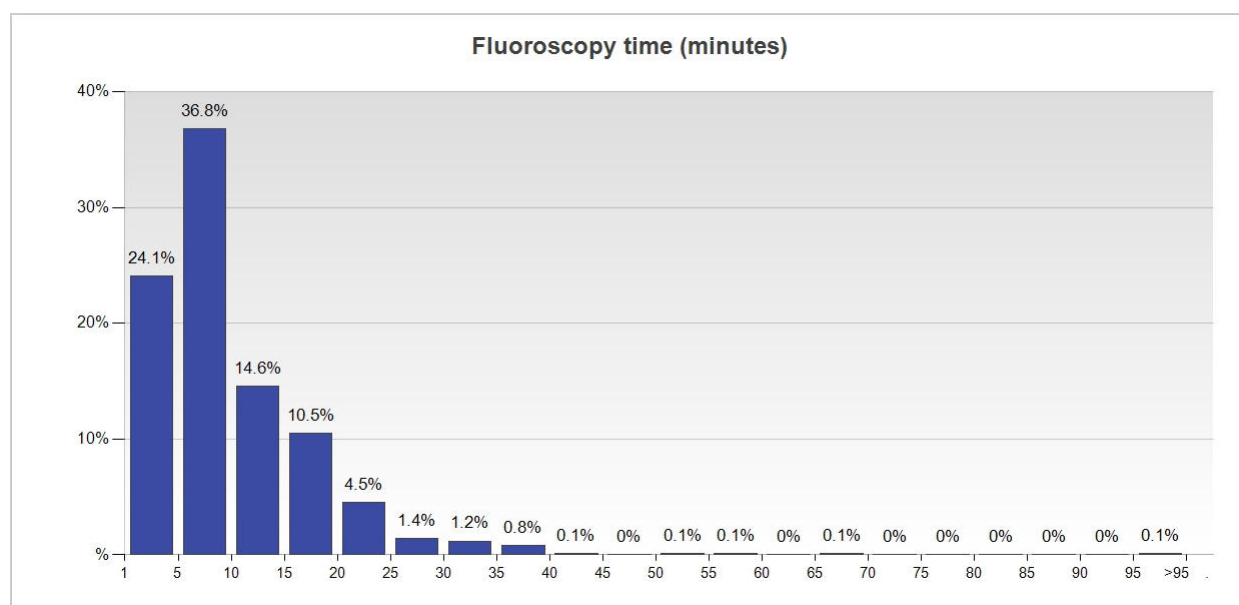
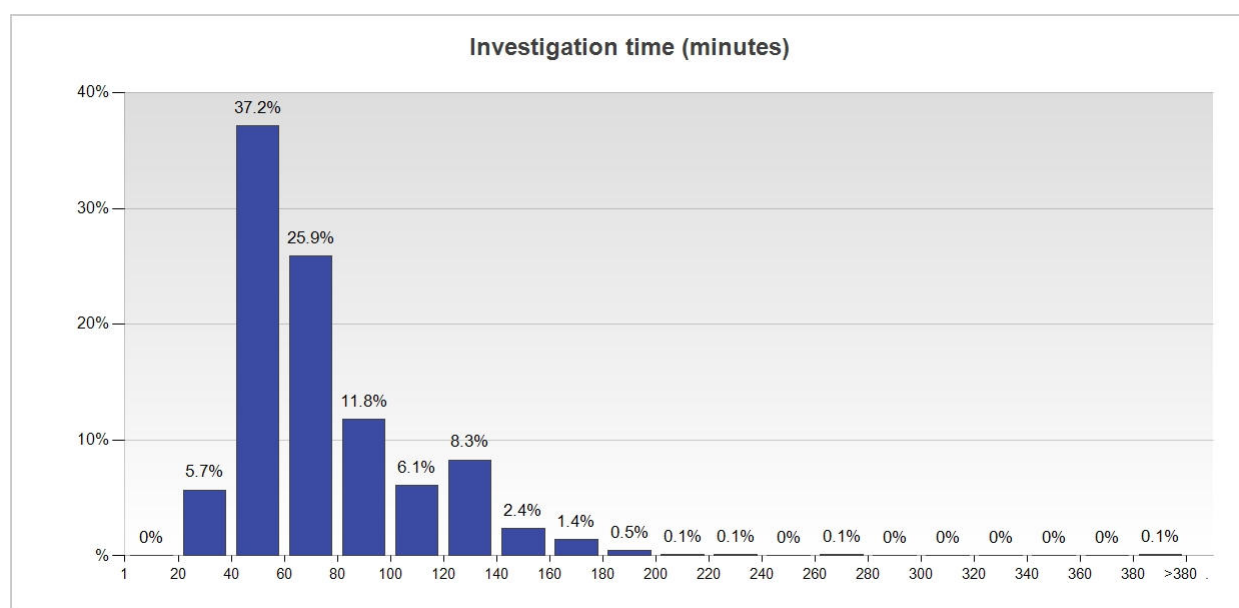
Cardiopathy (Underlying heart disease)	n	%
None	731	87.97
Ischemic	45	5.42
Hypertensive Cardiomyopathy	20	2.41
Other	19	2.29
Valvular	8	0.96
Congenital	3	0.36
Tachycardiomyopathy	2	0.24
Dilated	1	0.12
CABG	1	0.12
Angioplasty	1	0.12
H(O)CM	0	0
Infiltrative	0	0
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
RV Cardiomyopathy	0	0
Post Congenital Surgery	0	0
Post Valvular Surgery	0	0
Total	831	

Symptoms	n
Palpitations	779
Dizziness	82
Syncope	41
Dyspnea	40
Fatigue	26
Angina Pectoris	19
None	19
Other	13
SCD	0

Atrioventricular Nodal Reentry Tachycardia (AVNRT)

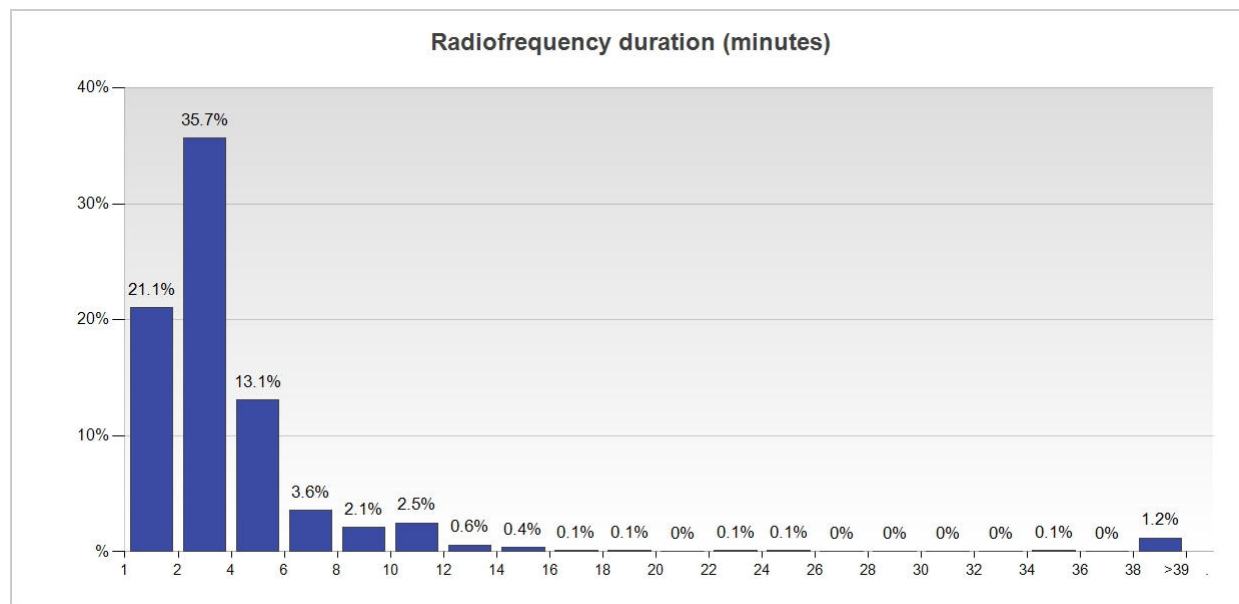
Anesthesia	n	%
Local	811	97.59
General	20	2.41
Total	831	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	23	71.5	451	829	2
Fluoroscopy time	1	9.9	223	785	46



Atrioventricular Nodal Reentry Tachycardia (AVNRT)

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	5.6	310	671	158
Irrigated Technology				38	



Atrioventricular Nodal Reentry Tachycardia (AVNRT)

Type	n
Slow-Fast	793
Fast-Slow	24
Slow-Slow	24

Intervention	n	%
Primary Intervention	800	96.27
Redo	31	3.73

Cryoablation	min.	Ø	max.	n	n ₀ *
Total Duration (minutes)	1	16.3	40	3	0

Mapping	n	%
Conventional	789	94.95
Other	33	3.97
3D Mapping	5	0.6
Lasso	4	0.48
Basket	0	0
Non Contact	0	0
HD Mesh	0	0
Total	831	

Catheter Steering	n	%
Conventional	815	98.07
Other	11	1.32
Stereotaxis	5	0.6
Hansen	0	0
Total	831	

Results	n	%
Success	825	99.28
No success	6	0.72

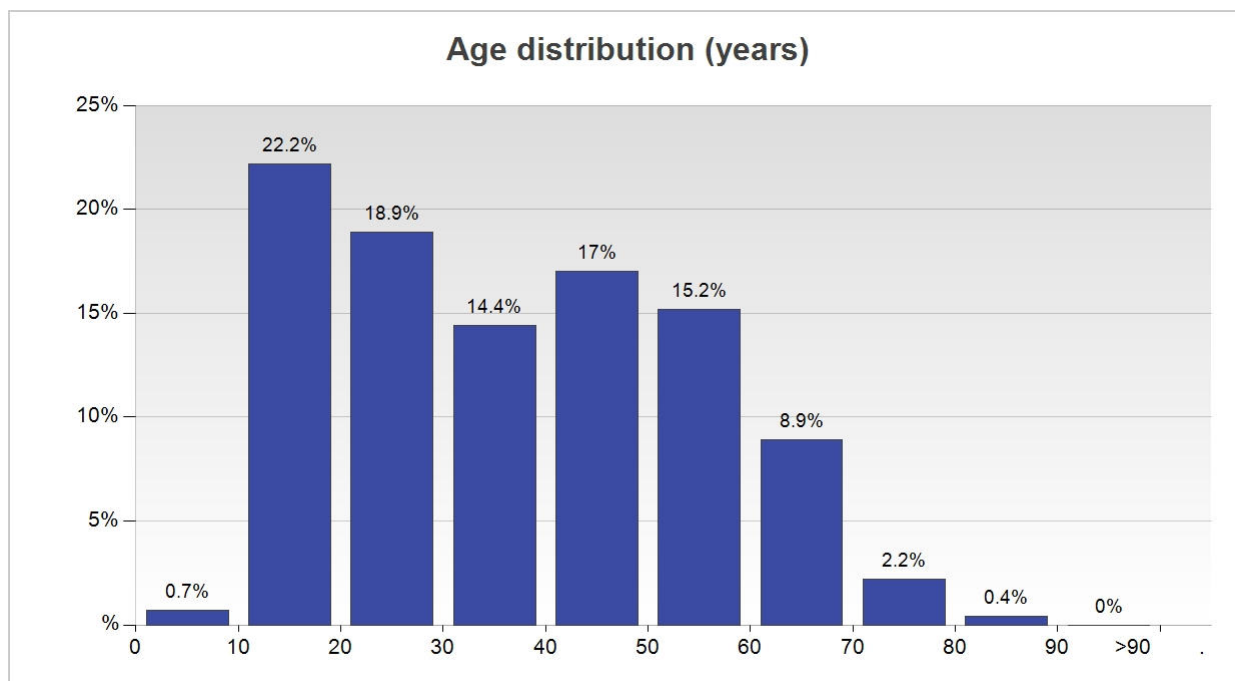
Atrioventricular Nodal Reentry Tachycardia (AVNRT)

Periprocedural Complications	n
No complications	820
Transient AV Block	3
High Degree or Complete AV Block	3
Inguinal Hematoma	2
Other	1
Pseudoaneurysm	1
Tamponade	1
Pulmonary Embolism	0
AV Fistula	0
Infection	0
Pneumothorax	0
TIA	0
PV Stenosis	0
Hemothorax	0
Stroke	0
Aortic Dissection	0
Valvular Lesions	0
Myocardial Infarction	0
Arterial Thrombosis	0
Pulmonary Oedema	0
Pericardial Effusion	0
Arterial Occlusion	0
Death	0
Phrenic Nerve Paralysis	0

Accessory Pathway

Ablation of Accessory Pathway (AP)	n
All interventions	287
AP combined with others	17
AP only	270

The following statistics include AP only procedures



Age (years)	min.	Ø	max.
Female	12	41	79
Male	7	35	81
All	7	37	81

Number of patients	n	%
Females	103	38.15
Males	167	61.85
Total	270	

Accessory Pathway

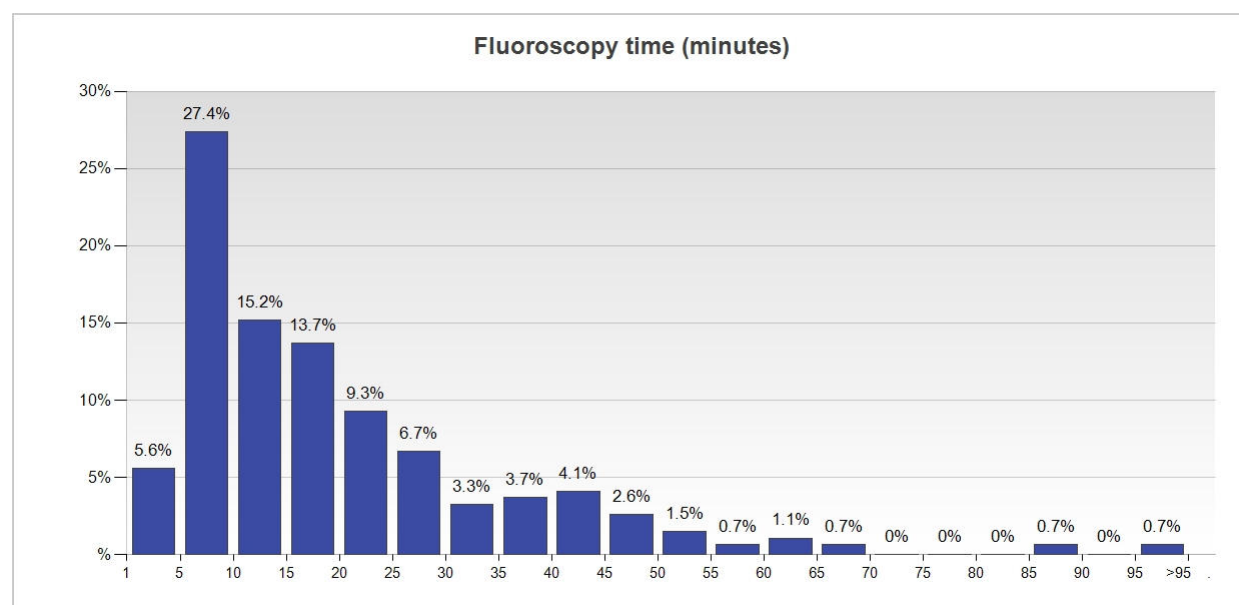
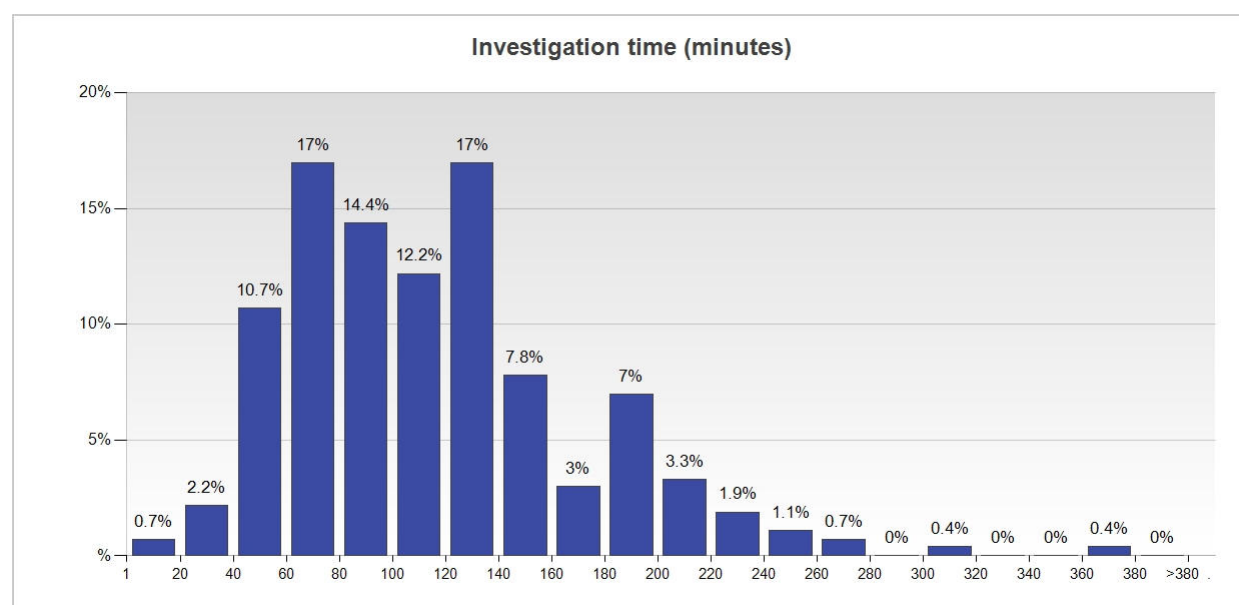
Cardiopathy (Underlying heart disease)	n	%
None	257	95.19
Congenital	6	2.22
Ischemic	4	1.48
RV Cardiomyopathy	1	0.37
Hypertensive Cardiomyopathy	1	0.37
Other	1	0.37
Valvular	0	0
Dilated	0	0
H(O)CM	0	0
Infiltrative	0	0
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
CABG	0	0
Angioplasty	0	0
Post Congenital Surgery	0	0
Post Valvular Surgery	0	0
Tachycardiomyopathy	0	0
Total	270	

Symptoms	n
Palpitations	221
None	42
Dizziness	21
Dyspnea	11
Syncope	8
Fatigue	6
Other	6
Angina Pectoris	5
SCD	2

Accessory Pathway

Anesthesia	n	%
Local	237	87.78
General	33	12.22
Total	270	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	3	111.5	373	270	0
Fluoroscopy time	1	19.8	106	262	8



Accessory Pathway

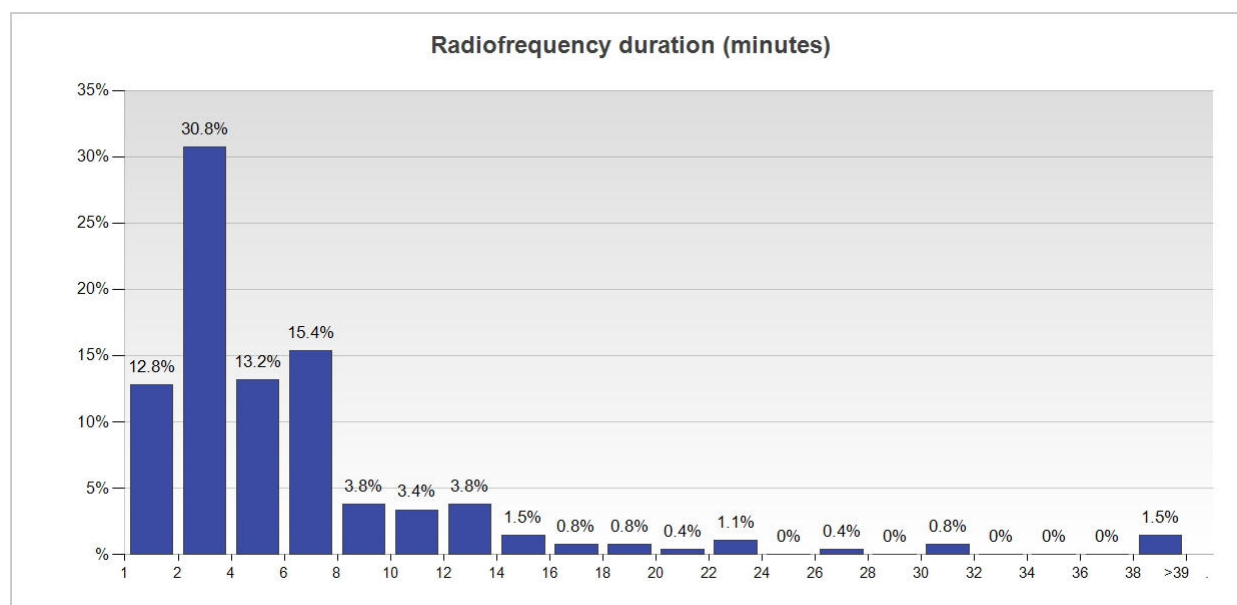
Type	n
WPW	162
Concealed	83
Asymptomatic Preexcitation	26
Other	5
Mahaim	4
PJRT	3
Atrio-Fascicular	1

Intervention	n	%
Primary Intervention	238	88.15
Redo	32	11.85

Site of Ablation	n
left	172
right	110
left: Free Wall	87
right: Posteroseptal	50
left: Posteroseptal	47
left: Posterior	45
right: Free Wall	21
right: Midseptal	12
right: Anteroseptal	12
right: Parahisian	10
right: Coronary Sinus Aneurysm	5
right: Posterior	5

Accessory Pathway

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	7.7	292	240	26
Irrigated Technology				84	



Accessory Pathway

Cryoablation	min.	Ø	max.	n	n₀*
Total Duration (minutes)	12	15	18	5	0

Access	n	%
Venous	120	44.44
Trans-septal, Puncture	106	39.26
Arterial	39	14.44
Trans-septal, PFO	3	1.11
Epicardial, Coronary Sinus	1	0.37
Epicardial, Sub-xiphoid	1	0.37
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Other	0	0
Total	270	

Mapping	n	%
Conventional	248	91.85
3D Mapping	13	4.81
Other	8	2.96
Lasso	1	0.37
Basket	0	0
Non Contact	0	0
HD Mesh	0	0
Total	270	

Catheter Steering	n	%
Conventional	267	98.89
Other	3	1.11
Stereotaxis	0	0
Hansen	0	0
Total	270	

Results	n	%
Success	250	92.59
No success	20	7.41

Accessory Pathway

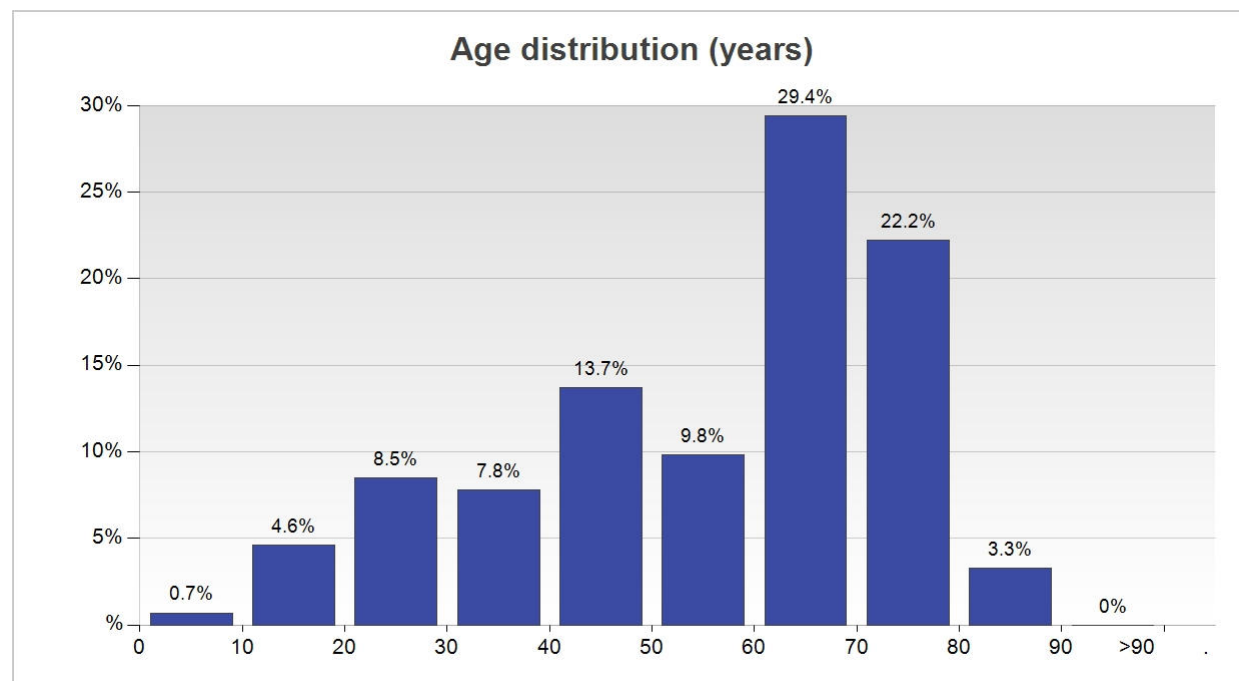
Periprocedural Complications	n
No complications	268
Other	1
Transient AV Block	1
Pulmonary Embolism	0
AV Fistula	0
Infection	0
Pneumothorax	0
TIA	0
Pseudoaneurysm	0
PV Stenosis	0
Hemothorax	0
Stroke	0
Aortic Dissection	0
Valvular Lesions	0
Myocardial Infarction	0
Arterial Thrombosis	0
Pulmonary Oedema	0
High Degree or Complete AV Block	0
Pericardial Effusion	0
Arterial Occlusion	0
Death	0
Inguinal Hematoma	0
Phrenic Nerve Paralysis	0
Tamponade	0

Atrial Tachycardia

Ablation of Atrial Tachycardia (AT)

	n
All interventions	192
AT combined with others	39
AT only	153

The following statistics include AT only procedures



Age (years)	min.	Ø	max.
Female	13	59	86
Male	10	55	85
All	10	57	86

Number of patients	n	%
Females	82	53.59
Males	71	46.41
Total	153	

Atrial Tachycardia

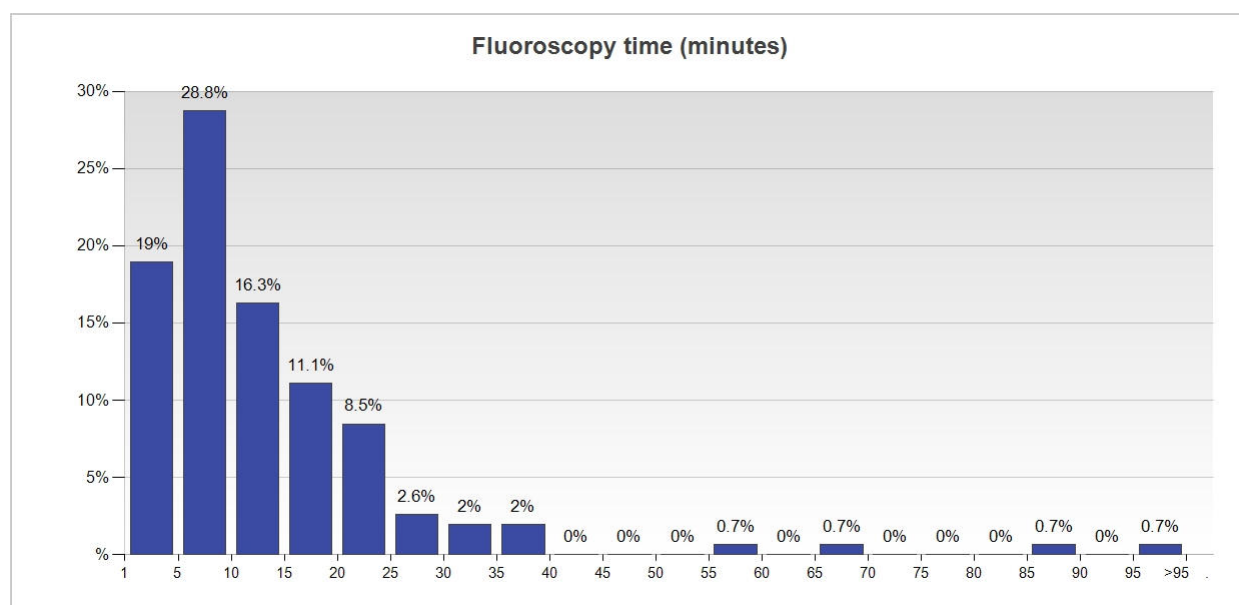
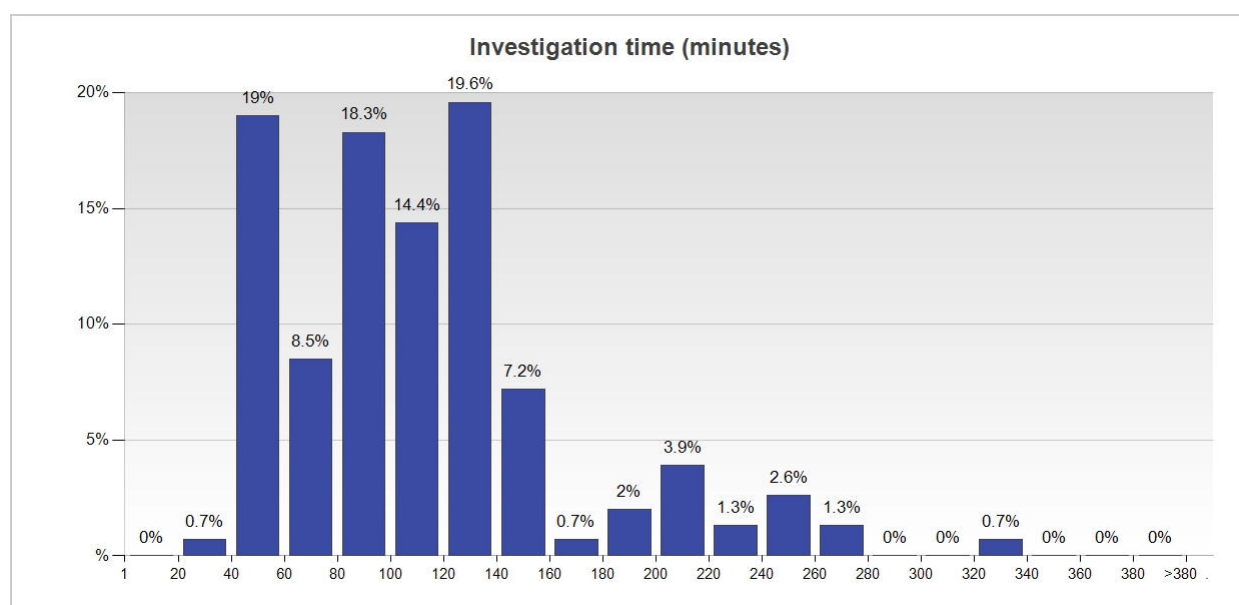
Cardiopathy (Underlying heart disease)	n	%
None	110	71.9
Hypertensive Cardiomyopathy	11	7.19
Ischemic	8	5.23
Tachycardiomyopathy	8	5.23
Valvular	7	4.58
Congenital	3	1.96
Other	3	1.96
Dilated	2	1.31
Post Valvular Surgery	1	0.65
H(O)CM	0	0
Infiltrative	0	0
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
RV Cardiomyopathy	0	0
CABG	0	0
Angioplasty	0	0
Post Congenital Surgery	0	0
Total	153	

Symptoms	n
Palpitations	132
Dyspnea	32
Fatigue	24
Dizziness	16
Syncope	8
None	6
Angina Pectoris	1
Other	1
SCD	0

Atrial Tachycardia

Anesthesia	n	%
Local	139	90.85
General	14	9.15
Total	153	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	38	108.5	320	153	0
Fluoroscopy time	1	13.1	120	142	11



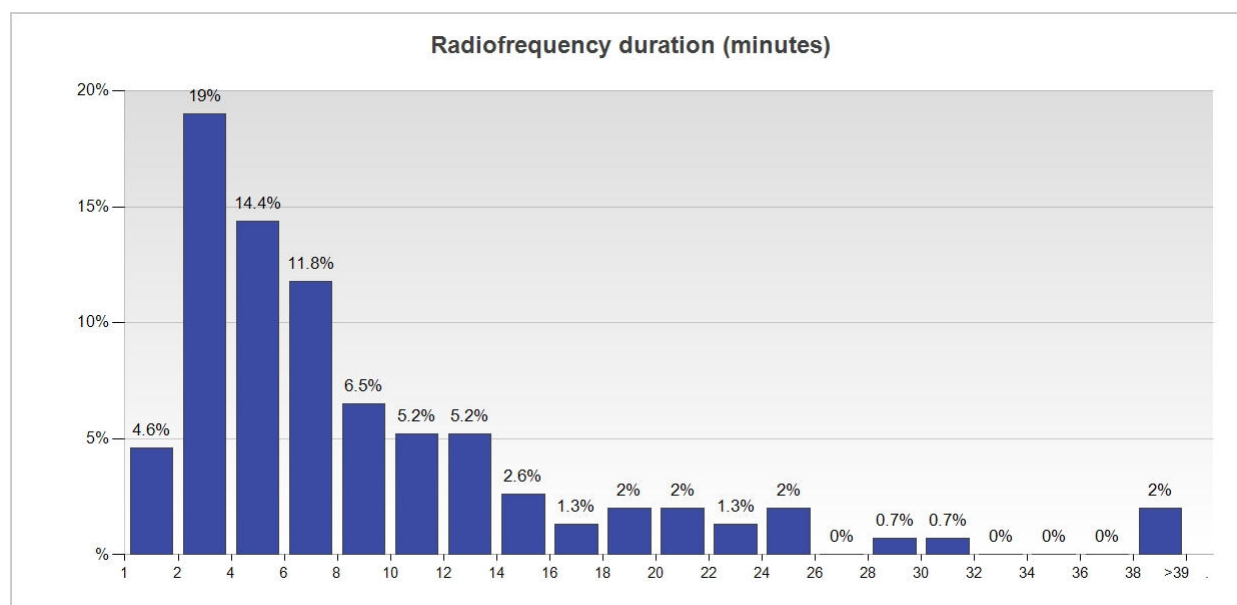
Atrial Tachycardia

Intervention	n	%
Primary Intervention	128	83.66
Redo	25	16.34

Site of Ablation	n
right	126
right: Other Right	39
left	34
right: Crista Terminalis	34
right: Septal Right	29
right: Peritricuspid	24
left: Septal Left	11
left: Other Left	8
left: Periostial PV	8
left: Left Atrial Appendage	6
left: Perimitral	6
right: Right Appendage	4

Atrial Tachycardia

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	11	240	124	29
Irrigated Technology				88	



Atrial Tachycardia

Access	n	%
Venous	126	82.35
Trans-septal, Puncture	22	14.38
Trans-septal, PFO	3	1.96
Arterial	2	1.31
Epicardial, Coronary Sinus	0	0
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Other	0	0
Total	153	

Mapping	n	%
3D Mapping	79	51.63
Conventional	68	44.44
Other	4	2.61
Lasso	1	0.65
Non Contact	1	0.65
Basket	0	0
HD Mesh	0	0
Total	153	

Catheter Steering	n	%
Conventional	150	98.04
Other	3	1.96
Stereotaxis	0	0
Hansen	0	0
Total	153	

Results	n	%
Success	125	81.7
No success	28	18.3

Atrial Tachycardia

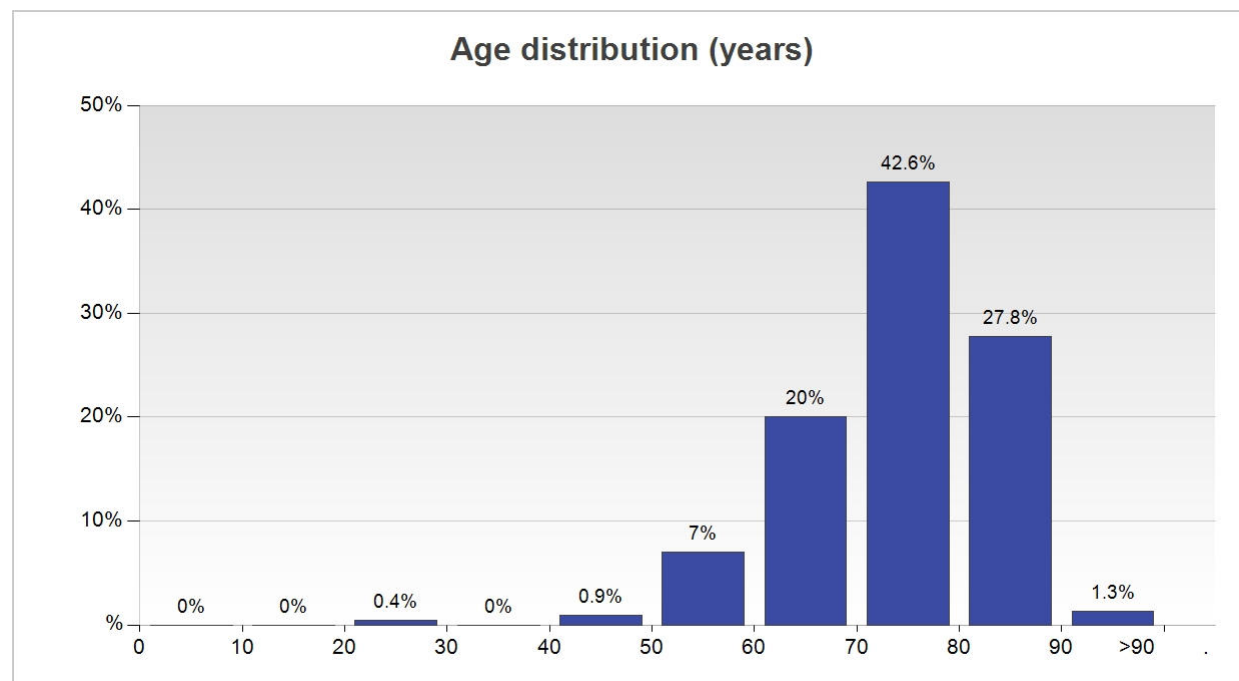
Periprocedural Complications	n
No complications	151
Other	1
Inguinal Hematoma	1
Pulmonary Embolism	0
AV Fistula	0
Infection	0
Pneumothorax	0
TIA	0
Pseudoaneurysm	0
PV Stenosis	0
Hemothorax	0
Stroke	0
Aortic Dissection	0
Valvular Lesions	0
Transient AV Block	0
Myocardial Infarction	0
Arterial Thrombosis	0
Pulmonary Oedema	0
High Degree or Complete AV Block	0
Pericardial Effusion	0
Arterial Occlusion	0
Death	0
Phrenic Nerve Paralysis	0
Tamponade	0

Atrioventricular Node (Rate Control in Atr. Fibrillation)

Ablation of AVN(R)

	n
All interventions	237
AVN(R) combined with others	7
AVN(R) only	230

The following statistics include AVN(R) only procedures



Age (years)	min.	Ø	max.
Female	50	77	92
Male	24	72	88
All	24	75	92

Number of patients	n	%
Females	117	50.87
Males	113	49.13
Total	230	

Atrioventricular Node (Rate Control in Atr. Fibrillation)

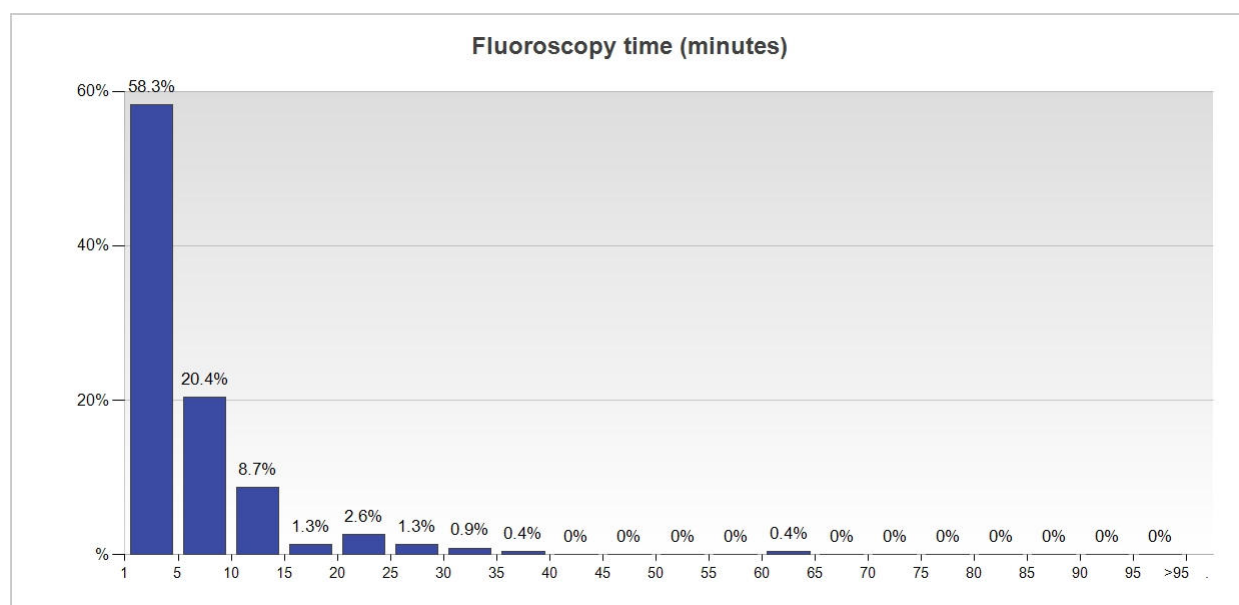
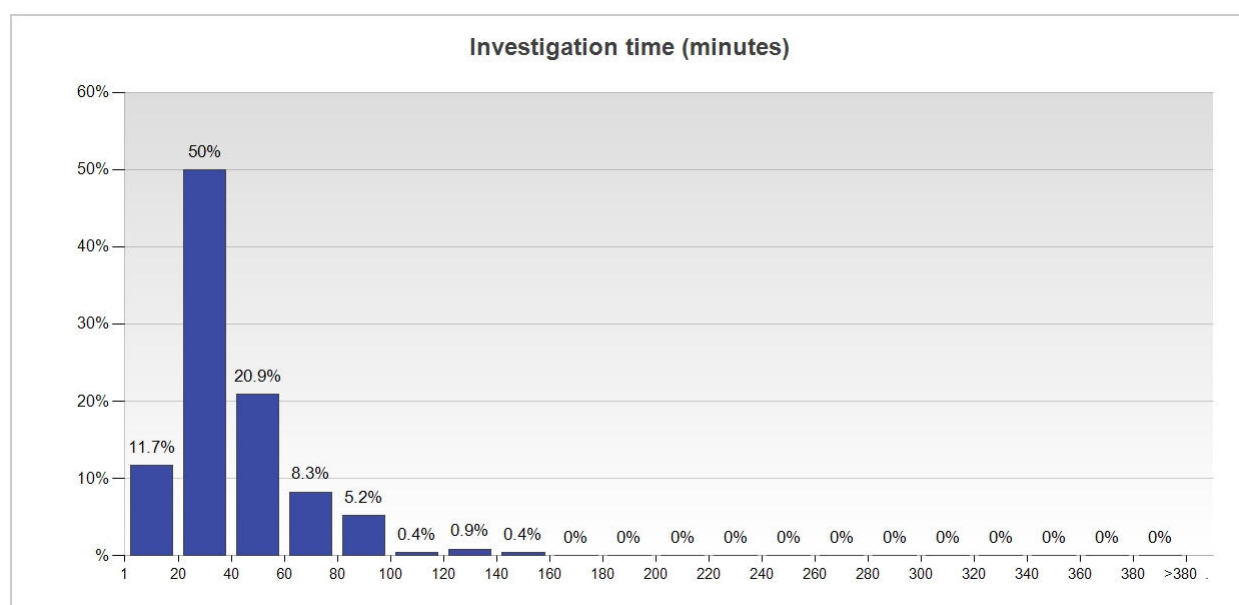
Cardiopathy (Underlying heart disease)	n	%
None	82	35.65
Hypertensive Cardiomyopathy	36	15.65
Ischemic	35	15.22
Tachycardiomyopathy	26	11.3
Dilated	21	9.13
Valvular	11	4.78
Other	9	3.91
H(O)CM	5	2.17
Congenital	2	0.87
Infiltrative	1	0.43
CABG	1	0.43
Post Valvular Surgery	1	0.43
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
RV Cardiomyopathy	0	0
Angioplasty	0	0
Post Congenital Surgery	0	0
Total	230	

Symptoms	n
Palpitations	175
Dyspnea	108
Fatigue	77
Dizziness	25
Other	13
Angina Pectoris	5
None	2
Syncope	2
SCD	0

Atrioventricular Node (Rate Control in Atr. Fibrillation)

Anesthesia	n	%
Local	228	99.13
General	2	0.87
Total	230	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	5	37.7	140	225	5
Fluoroscopy time	1	5.8	64	217	13



Atrioventricular Node (Rate Control in Atr. Fibrillation)

Type of Fibrillation	n	%
Paroxysmal	74	32.17
Persistent	76	33.04
Long-standing Persistent (>1 Year)	80	34.78

EHRA-Score	n	%
Score I	15	6.52
Score II	52	22.61
Score III	140	60.87
Score IV	23	10

Intervention	n	%
Primary Intervention	198	86.09
Redo	18	7.83
Previous AF Abl. Procedure	14	6.09

Antiarrhythmic Drugs

	n
Beta Blocker	162
Amiodarone	62
Calcium Antagonist	40
Digitalis	37
None	32
Sotalol	14
Dronedarone	9
Flecainide	6
Other	4
Propafenone	4

Atrioventricular Node (Rate Control in Atr. Fibrillation)

Thromboembolic Risk Factors	n
Hypertension	118
Congestive Heart Failure, LV dysfunction	52
Prior MI, Per. Artery Disease, Aortic Plaque	25
Diabetes	20
Stroke, TIA, Pther Embolic Event	15

Anticoagulation, Antiaggregation	n
Vitamin K-Antagonist	155
None	24
Factor Xa-Antagonist	20
Aspirin	16
Direct Thrombin Inhibitor	14
Clopidogrel	7
Other	7
Ticagrelor	0
Prasugrel	0

CHA₂DS₂-VASc Score	n
Score = 0	4
Score = 1	29
Score = 2	56
Score = 3	58
Score = 4	62
Score = 5	14
Score = 6	5
Score = 7	1

Atrioventricular Node (Rate Control in Atr. Fibrillation)

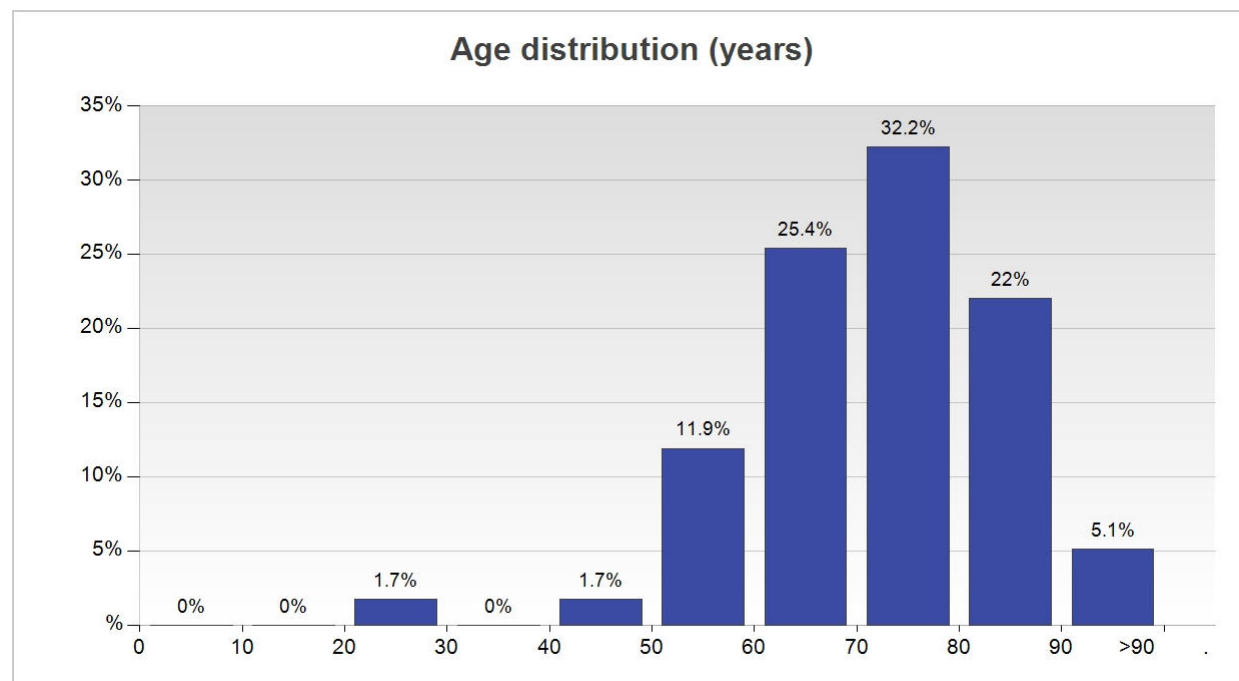
Periprocedural Complications	n
No complications	230
Pulmonary Embolism	0
Other	0
AV Fistula	0
Infection	0
Pneumothorax	0
TIA	0
Pseudoaneurysm	0
PV Stenosis	0
Hemothorax	0
Stroke	0
Aortic Dissection	0
Valvular Lesions	0
Transient AV Block	0
Myocardial Infarction	0
Arterial Thrombosis	0
Pulmonary Oedema	0
High Degree or Complete AV Block	0
Pericardial Effusion	0
Arterial Occlusion	0
Death	0
Inguinal Hematoma	0
Phrenic Nerve Paralysis	0
Tamponade	0

Atrioventricular Node (to resynchronisation)

Ablation of AVN

	n
All interventions	64
AVN combined with others	5
AVN only	59

The following statistics include AVN only procedures



Age (years)	min.	Ø	max.
Female	46	75	93
Male	28	71	89
All	28	73	93

Number of patients	n	%
Females	24	40.68
Males	35	59.32
Total	59	

Atrioventricular Node (to resynchronisation)

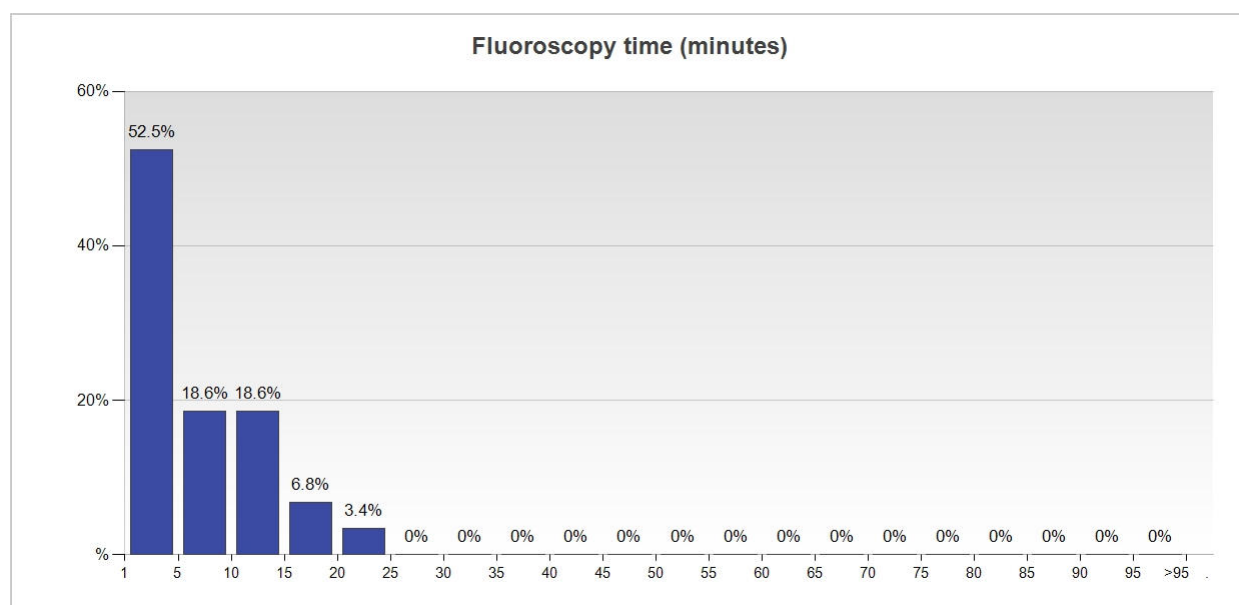
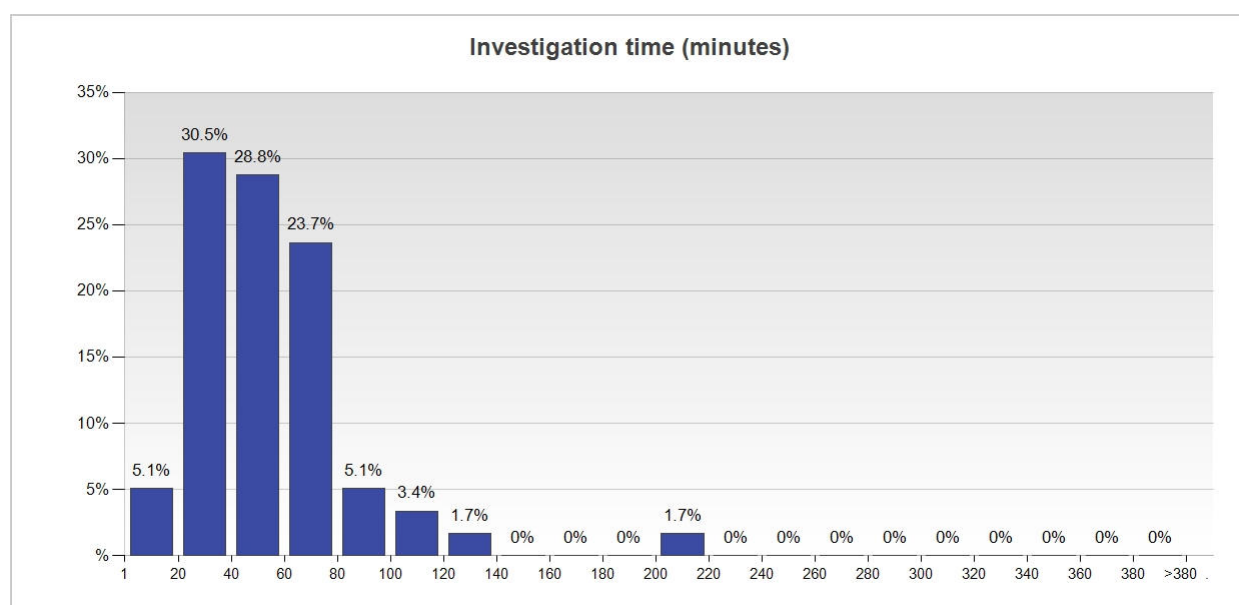
Cardiopathy (Underlying heart disease)	n	%
Dilated	14	23.73
Ischemic	12	20.34
None	9	15.25
Other	7	11.86
Valvular	5	8.47
Tachycardiomyopathy	5	8.47
Hypertensive Cardiomyopathy	4	6.78
Congenital	1	1.69
H(O)CM	1	1.69
CABG	1	1.69
Infiltrative	0	0
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
RV Cardiomyopathy	0	0
Angioplasty	0	0
Post Congenital Surgery	0	0
Post Valvular Surgery	0	0
Total	59	

Symptoms	n
Palpitations	35
Dyspnea	33
Fatigue	22
Dizziness	11
Other	7
Syncope	6
None	2
SCD	2
Angina Pectoris	1

Atrioventricular Node (to resynchronisation)

Anesthesia	n	%
Local	59	100
General	0	0
Total	59	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	15	50.2	200	59	0
Fluoroscopy time	1	6.5	24	59	0



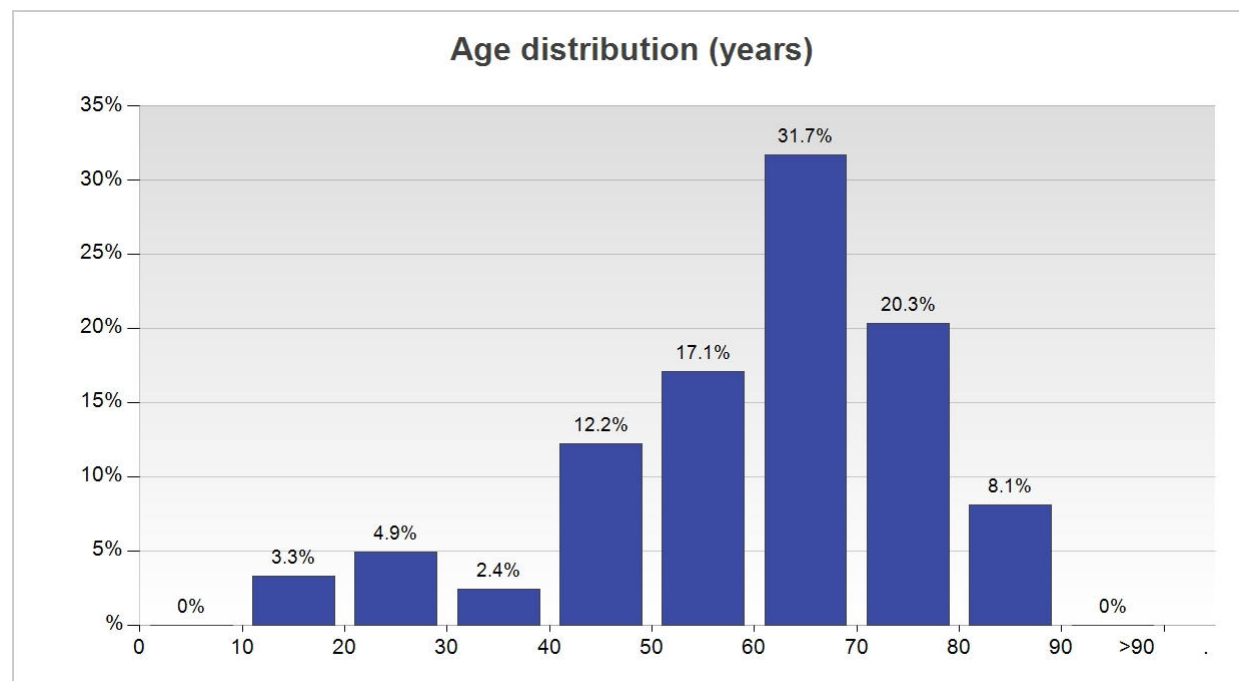
Atrioventricular Node (to resynchronisation)

Periprocedural Complications	n
No complications	59
Pulmonary Embolism	0
Other	0
AV Fistula	0
Infection	0
Pneumothorax	0
TIA	0
Pseudoaneurysm	0
PV Stenosis	0
Hemothorax	0
Stroke	0
Aortic Dissection	0
Valvular Lesions	0
Transient AV Block	0
Myocardial Infarction	0
Arterial Thrombosis	0
Pulmonary Oedema	0
High Degree or Complete AV Block	0
Pericardial Effusion	0
Arterial Occlusion	0
Death	0
Inguinal Hematoma	0
Phrenic Nerve Paralysis	0
Tamponade	0

Ventricular Tachycardia

Ablation of Ventricular Tachycardia (VT)	n
All interventions	128
VT combined with others	5
VT only	123

The following statistics include VT only procedures



Age (years)	min.	Ø	max.
Female	14	50	84
Male	13	64	88
All	13	61	88

Number of patients	n	%
Females	29	23.58
Males	94	76.42
Total	123	

Ventricular Tachycardia

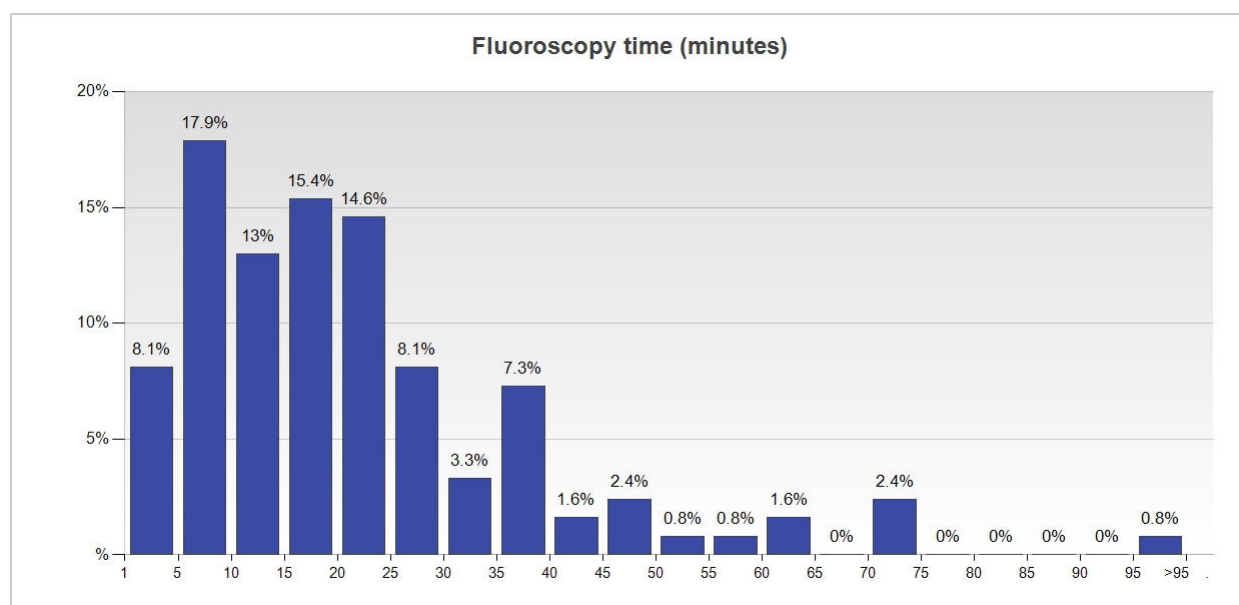
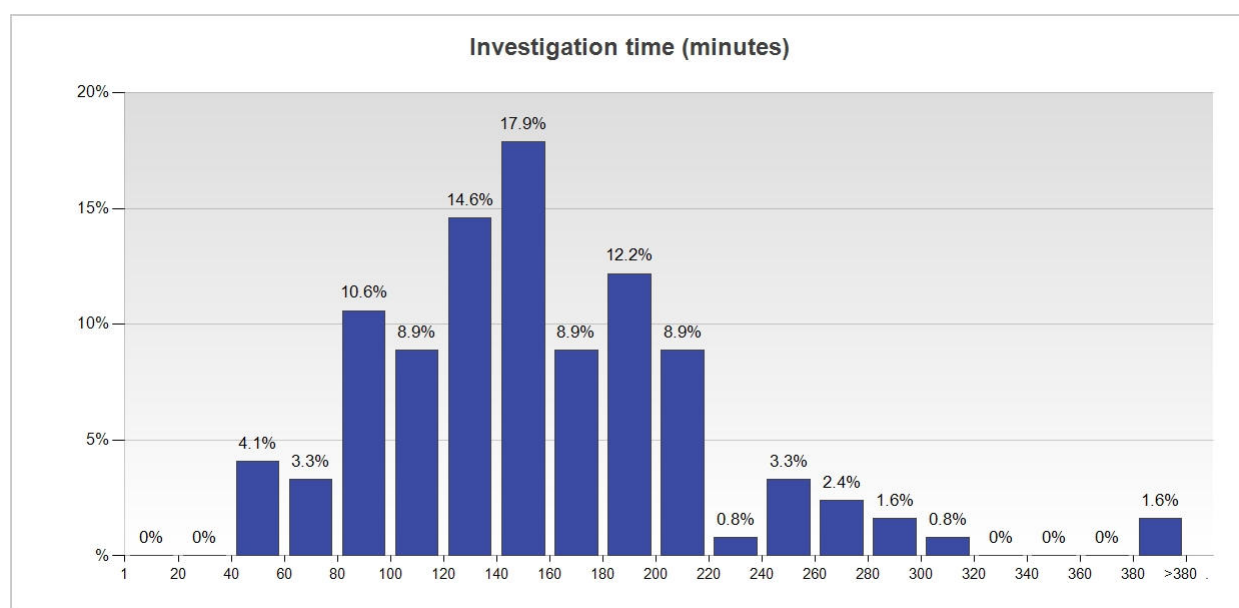
Cardiopathy (Underlying heart disease)	n	%
Ischemic	53	43.09
None	36	29.27
Dilated	10	8.13
RV Cardiomyopathy	6	4.88
Other	6	4.88
Hypertensive Cardiomyopathy	4	3.25
Valvular	3	2.44
Congenital	2	1.63
Catecholaminergic Polymorphic VT	1	0.81
Angioplasty	1	0.81
Tachycardiomyopathy	1	0.81
H(O)CM	0	0
Infiltrative	0	0
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
CABG	0	0
Post Congenital Surgery	0	0
Post Valvular Surgery	0	0
Total	123	

Symptoms	n
Palpitations	90
Dyspnea	36
Dizziness	28
Syncope	22
Other	16
Fatigue	13
Angina Pectoris	4
None	3
SCD	3

Ventricular Tachycardia

Anesthesia	n	%
Local	106	86.18
General	17	13.82
Total	123	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	40	152.8	380	123	0
Fluoroscopy time	1	21.8	150	121	2



Ventricular Tachycardia

Type	n
Monomorphic	78
Ischemic	17
Polymorphic	12

Location	n
RVOT	25
LVOT / Aortic Cusp	9
Left Fascicular VT	9
Other	8
Epicardial	5
BB Reentry	2

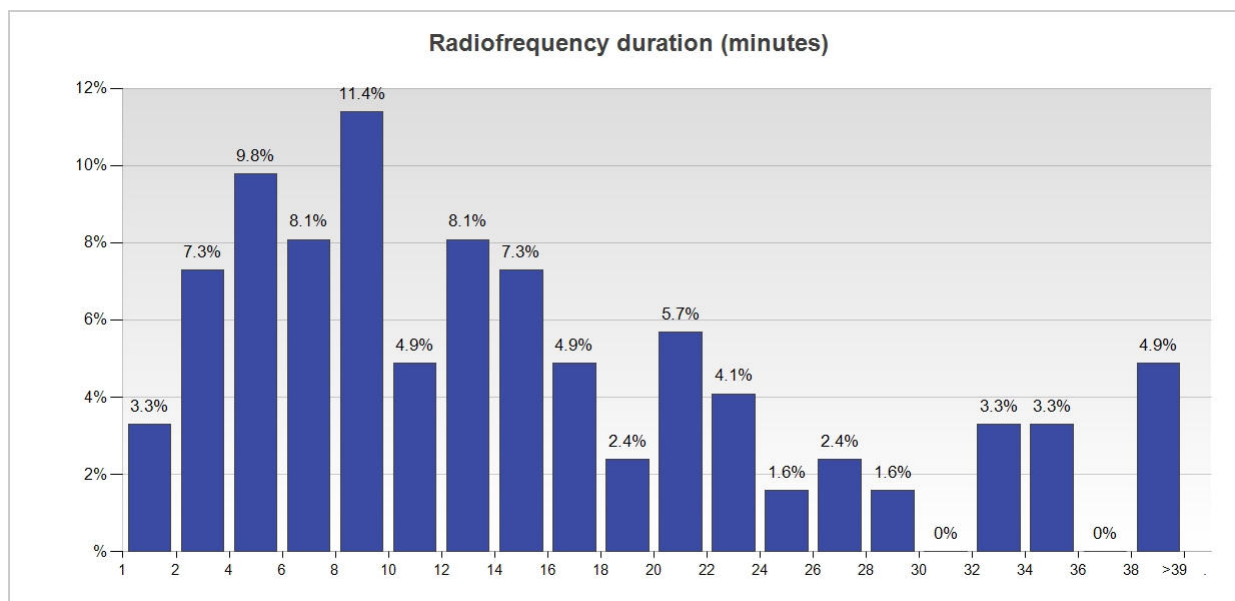
Intervention	n	%
Primary Intervention	94	76.42
Redo	29	23.58

Antiarrhythmic Drugs	n
Beta Blocker	72
Amiodarone	56
None	18
Calcium Antagonist	8
Other	7
Sotalol	4
Flecainide	1
Propafenone	0

Ventricular Tachycardia

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	15.1	63	117	6
Irrigated Technology				101	

Number of Induced VT: 141



Ventricular Tachycardia

Access	n	%
Venous	53	43.09
Arterial	41	33.33
Trans-septal, Puncture	24	19.51
Epicardial, Sub-xiphoid	4	3.25
Trans-septal, PFO	1	0.81
Epicardial, Coronary Sinus	0	0
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Other	0	0
Total	123	

Mapping	n	%
3D Mapping	99	80.49
Conventional	18	14.63
Other	3	2.44
Lasso	2	1.63
Non Contact	1	0.81
Basket	0	0
HD Mesh	0	0
Total	123	

Catheter Steering	n	%
Conventional	119	96.75
Other	3	2.44
Stereotaxis	1	0.81
Hansen	0	0
Total	123	

Results	n	%
All Induces VT Ablated	52	42.28
Target VT Ablated	62	50.41
Failure	9	7.32

Ventricular Tachycardia

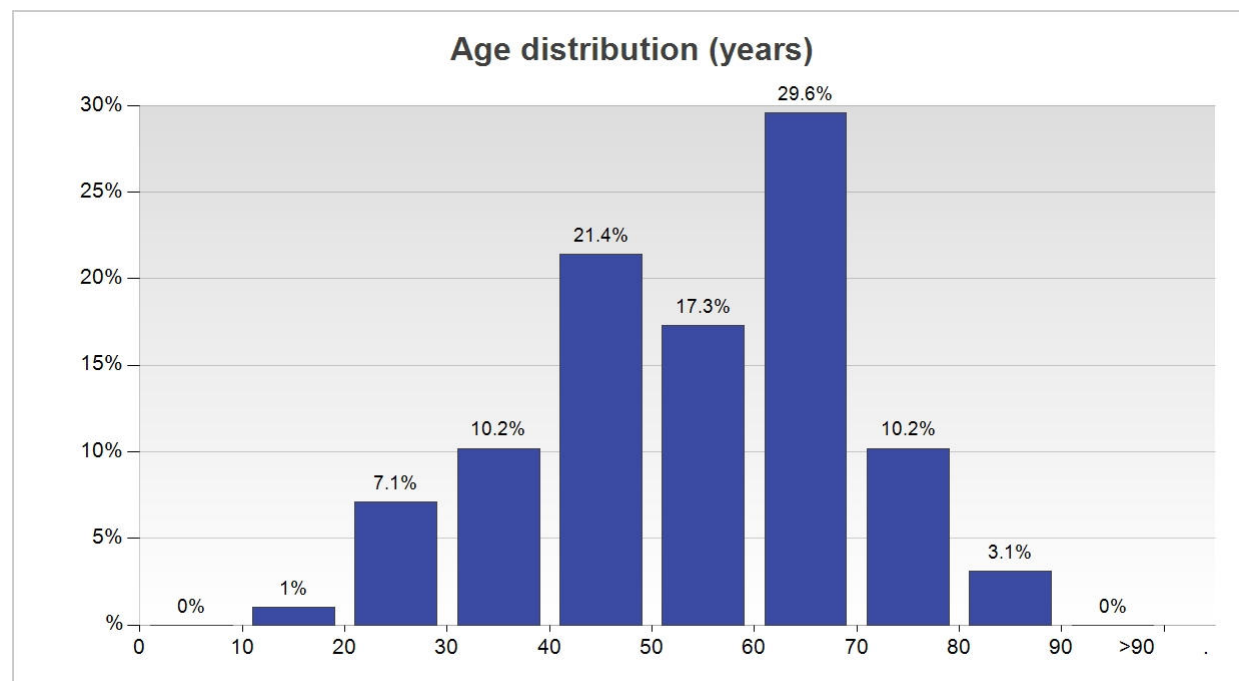
Periprocedural Complications	n
No complications	121
Aortic Dissection	1
High Degree or Complete AV Block	1
Pulmonary Embolism	0
Other	0
AV Fistula	0
Infection	0
Pneumothorax	0
TIA	0
Pseudoaneurysm	0
PV Stenosis	0
Hemothorax	0
Stroke	0
Valvular Lesions	0
Transient AV Block	0
Myocardial Infarction	0
Arterial Thrombosis	0
Pulmonary Oedema	0
Pericardial Effusion	0
Arterial Occlusion	0
Death	0
Inguinal Hematoma	0
Phrenic Nerve Paralysis	0
Tamponade	0

Premature Ventricular Contraction

Ablation of PVC

	n
All interventions	102
PVC combined with others	4
PVC only	98

The following statistics include PVC only procedures



Age (years)	min.	Ø	max.
Female	25	51	81
Male	19	57	82
All	19	54	82

Number of patients	n	%
Females	42	42.86
Males	56	57.14
Total	98	

Premature Ventricular Contraction

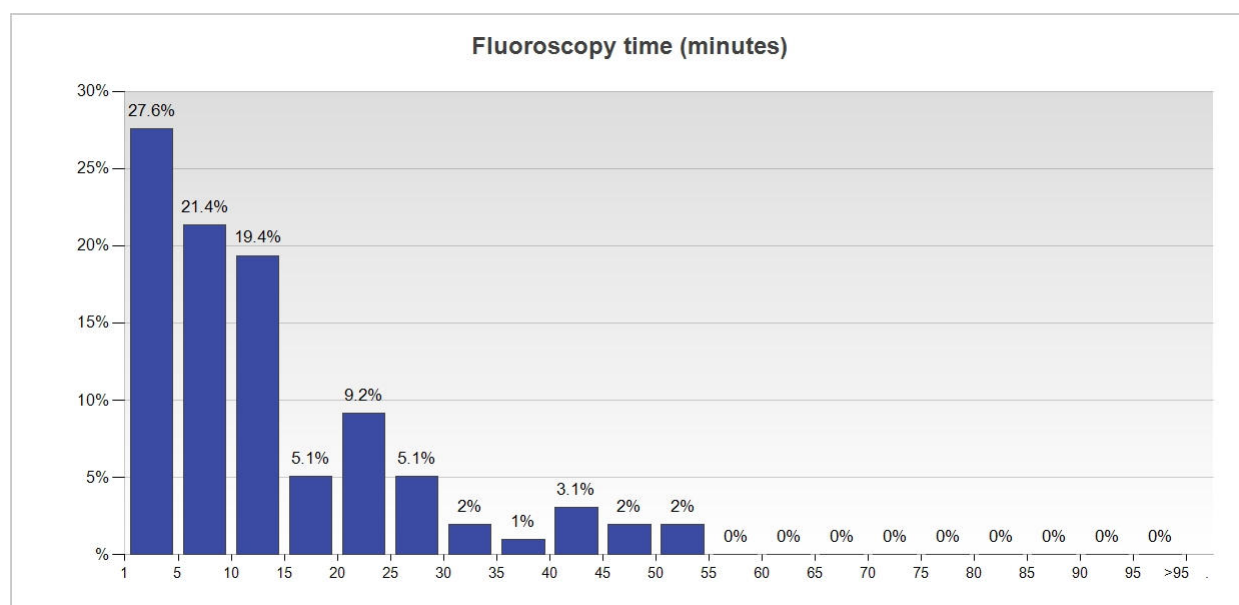
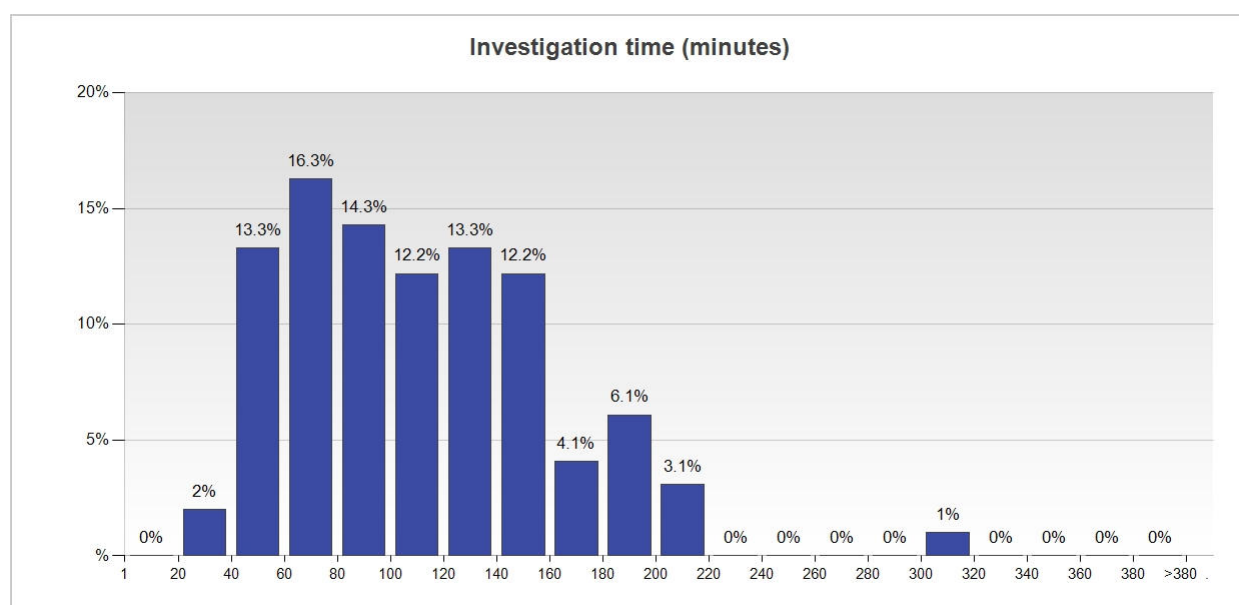
Cardiopathy (Underlying heart disease)	n	%
None	61	62.24
Dilated	11	11.22
Ischemic	10	10.2
Hypertensive Cardiomyopathy	7	7.14
Tachycardiomyopathy	3	3.06
Valvular	2	2.04
Congenital	2	2.04
Other	2	2.04
H(O)CM	0	0
Infiltrative	0	0
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
RV Cardiomyopathy	0	0
CABG	0	0
Angioplasty	0	0
Post Congenital Surgery	0	0
Post Valvular Surgery	0	0
Total	98	

Symptoms	n
Palpitations	69
Fatigue	20
Dizziness	13
Dyspnea	13
None	13
Other	2
SCD	1
Syncope	1
Angina Pectoris	0

Premature Ventricular Contraction

Anesthesia	n	%
Local	96	97.96
General	2	2.04
Total	98	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	25	107.7	300	96	2
Fluoroscopy time	1	13.2	53	96	2



Premature Ventricular Contraction

Type	n
Monomorphic	68
Polymorphic	6
Ischemic	1

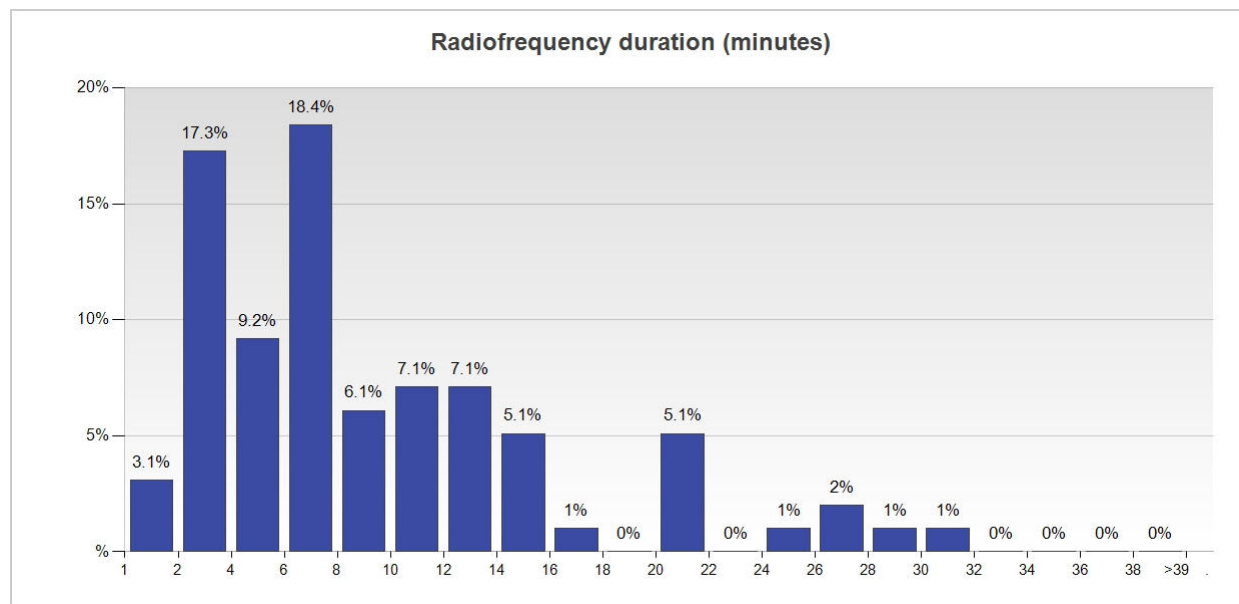
Location	n
RVOT	46
LVOT / Aortic Cusp	25
Other	5
HP System	3
Left Fascicular PVC	2

Site of Ablation	n
Right Ventricle	58
Left Ventricle	48

Intervention	n	%
Primary Intervention	89	90.82
Redo	9	9.18

Premature Ventricular Contraction

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	9	30	83	15
Irrigated Technology				68	



Premature Ventricular Contraction

Access	n	%
Venous	54	55.1
Arterial	35	35.71
Trans-septal, Puncture	9	9.18
Trans-septal, PFO	0	0
Epicardial, Coronary Sinus	0	0
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Other	0	0
Total	98	

Mapping	n	%
3D Mapping	67	68.37
Conventional	21	21.43
Other	6	6.12
Lasso	3	3.06
Basket	1	1.02
Non Contact	0	0
HD Mesh	0	0
Total	98	

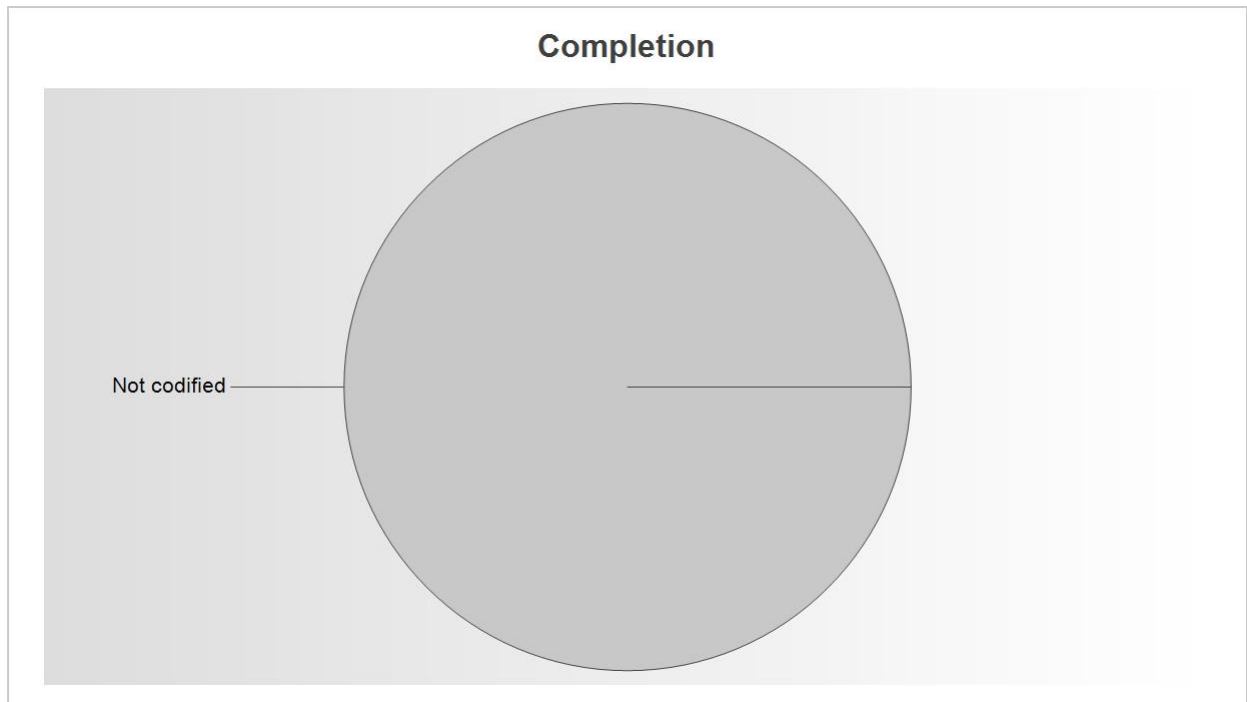
Catheter Steering	n	%
Conventional	97	98.98
Other	1	1.02
Stereotaxis	0	0
Hansen	0	0
Total	98	

Results	n	%
Success	80	81.63
No Success	18	18.37

Premature Ventricular Contraction

Periprocedural Complications	n
No complications	92
Inguinal Hematoma	3
Other	1
Transient AV Block	1
Pericardial Effusion	1
Pulmonary Embolism	0
AV Fistula	0
Infection	0
Pneumothorax	0
TIA	0
Pseudoaneurysm	0
PV Stenosis	0
Hemothorax	0
Stroke	0
Aortic Dissection	0
Valvular Lesions	0
Myocardial Infarction	0
Arterial Thrombosis	0
Pulmonary Oedema	0
High Degree or Complete AV Block	0
Arterial Occlusion	0
Death	0
Phrenic Nerve Paralysis	0
Tamponade	0

Completion



Cause of completion	n	%
Not codified	2	100
Regular End of Follow-Up	0	0
Lost to Follow-Up	0	0
Death	0	0
Change from Rhythm Control to Rate Control	0	0
Total	2	

The statistics are based on the data from CHPACE WEB from 01.01.2013 to 31.12.2013. Its completeness and correctness depends on the complete and correct data entry in the respective hospital. EPS are counted as interventions.

0.0% incomplete records are not included in these statistics.

n₀*: Investigations were reported with 0 minutes and are not included in these statistics.

Ø depicts the arithmetic mean.

Text, numbers, and figures may only be copied with permission by the Foundation for Cardiac Pacing and Electrophysiology, which cannot be held liable for the content.

Abbreviations

AF = Atrial Fibrillation
RAFlu = Right Atrial Flutter
LAFlu = Left Atrial Flutter
AT = Atrial Tachycardia
AP = Accessory Pathway
AVNRT = Atrioventricular Nodal Reentry Tachycardia
VT = Ventricular Tachycardia
PVC = Premature Ventricular Contraction
AVN = Atrioventricular Node (to resynchronisation)
AVN(R) = Atrioventricular Node (Rate Control in Atr. Fibrillation)
Other = Other Arrhythmia

The cover picture shows a steerable ablation catheter from the late 90's