

SWISS STATISTICS OF CATHETER ABLATIONS 2025



Schweizerische Stiftung für Rhythmologie
Fondation Suisse de Rythmologie
Fondazione Svizzera di Ritmologia

Overview

Ablation centers	34
Included in this statistic	30
Number of patients	12079
Number of interventions*	12610
thereof number of EPS	595
Number of ablations	14153

** All completely recorded and non-aborted interventions are evaluated.*

Ablation Centers

Clinic No.	Center	Interventions/ thereof incomplete	thereof aborted	Ablations*
101	Universitätsspital Basel	1186 / 0 (0%)	2	1282
102	Inselspital Bern	1928 / 0 (0%)	1	2239
103	Hôpital Cantonal Universitaire de Genève	375 / 0 (0%)	2	438
104	Centre Hospitalier Universitaire Vaudois (CHUV)	422 / 44 (10%)	0	404
105	Universitätsspital Zürich	634 / 0 (0%)	12	605
106	Universitäts-Kinderkliniken Zürich	77 / 0 (0%)	0	67
201	Kantonsspital Aarau	242 / 0 (0%)	2	246
202	Kantonsspital Baden	157 / 0 (0%)	0	154
205	Spitalzentrum Biel	99 / 0 (0%)	0	99
211	Hôpital Fribourgeois	282 / 0 (0%)	1	333
214	HerzZentrum & Rhythmologie Hirslanden, Zürich	322 / 0 (0%)	1	524
216	Istituto Cardiocentro Ticino	332 / 0 (0%)	1	355
217	Kantonsspital Luzern, Sursee und Wolhusen	724 / 0 (0%)	0	744
218	Klinik St. Anna, Luzern	501 / 0 (0%)	0	540
220	Hôpital de la Tour	413 / 0 (0%)	0	505
228	Hôpital de Sion	59 / 0 (0%)	0	55
230	Solothurner Spitäler AG	280 / 0 (0%)	0	277
231	Kantonsspital St. Gallen	544 / 0 (0%)	2	561
233	GZO Spital Wetzikon	192 / 0 (0%)	0	208
234	Kantonsspital Winterthur	200 / 0 (0%)	1	239
236	Stadtspital Triemli, Zürich	599 / 0 (0%)	0	681
239	Klinik Beau-Site Bern	715 / 0 (0%)	2	766
241	HerzKlinik Hirslanden, Zürich	374 / 0 (0%)	0	408
246	Hirslandenklinik Aarau	351 / 0 (0%)	1	359
250	Klinik Im Park, Zürich	791 / 0 (0%)	1	1111
251	Herz-Neuro-Zentrum Bodensee	80 / 0 (0%)	0	87
267	Clinique Cécil	437 / 0 (0%)	2	484
278	Centre de Cardiologie du Valais	69 / 0 (0%)	1	67
284	Clinique de Genolier	171 / 3 (2%)	0	169
288	Herz&Rhythmus Zentrum	133 / 0 (0%)	0	146
Total	30	12689 / 47 (0%)	32	14153

* Only ablations of completely recorded and non-aborted interventions are evaluated.

Omissions

4 centers that did not report data to SwissEPnet and are therefore not included in the statistics

No.	Center
209	Kantonsspital Graubünden, Chur
268	Clinique des Granettes
287	HerzGefässKlinik Bethanien
292	HerzKlinik Kreuzlingen
Total	4

Ablation centers

19 centers with more than 250 interventions

Interventions and Ablations

according to number of interventions

No.	Center	Interventions	thereof aborted	Ablations
102	Inselspital Bern	1928	1	2239
101	Universitätsspital Basel	1186	2	1282
250	Klinik Im Park, Zürich	791	1	1111
217	Kantonsspital Luzern, Sursee und Wolhusen	724	0	744
239	Klinik Beau-Site Bern	715	2	766
105	Universitätsspital Zürich	634	12	605
236	Stadtpital Triemli, Zürich	599	0	681
231	Kantonsspital St. Gallen	544	2	561
218	Klinik St. Anna, Luzern	501	0	540
267	Clinique Cécil	437	2	484
220	Hôpital de la Tour	413	0	505
104	Centre Hospitalier Universitaire Vaudois (CHUV)	378	0	404
103	Hôpital Cantonal Universitaire de Genève	375	2	438
241	HerzKlinik Hirslanden, Zürich	374	0	408
246	HirslandenKlinik Aarau	351	1	359
216	Istituto Cardiocentro Ticino	332	1	355
214	HerzZentrum & Rhythmologie Hirslanden, Zürich	322	1	524
211	Hôpital Fribourgeois	282	1	333
230	Solothurner Spitäler AG	280	0	277
Total	19	11166	28	12616

Ablation Procedures

according to number of interventions

No.	Center	AF	RAFlu	LAFlu	AT	AP	AVNRT	VT	PVC	AVN	AVN(R)	CN	Other
102	Inselspital Bern	1028	504	150	54	38	175	77	103	43	65	1	1
101	Universitätsspital Basel	722	194	9	47	19	124	43	63	1	56	4	0
250	Klinik Im Park, Zürich	546	324	32	30	11	97	16	29	4	22	0	0
217	Kantonsspital Luzern, Sursee und Wolhusen	441	107	31	29	15	70	14	29	2	6	0	0
239	Klinik Beau-Site Bern	447	130	33	33	8	62	1	21	4	26	1	0
105	Universitätsspital Zürich	226	94	20	22	16	93	45	67	10	8	2	2
236	Stadtpital Triemli, Zürich	352	144	29	12	12	62	2	15	5	47	0	1
231	Kantonsspital St. Gallen	332	66	11	16	13	68	8	16	0	27	4	0
218	Klinik St. Anna, Luzern	321	62	5	17	11	63	3	31	11	15	1	0
267	Clinique Cécil	204	72	15	22	12	61	3	18	16	59	1	1
220	Hôpital de la Tour	233	103	38	7	17	49	6	13	4	27	8	0
104	Centre Hospitalier Universitaire Vaudois (CHUV)	146	56	17	12	26	48	40	23	4	28	2	2
241	HerzKlinik Hirslanden, Zürich	234	79	1	8	12	42	2	18	9	3	0	0
103	Hôpital Cantonal Universitaire de Genève	147	113	51	20	16	48	8	11	0	23	0	1
246	HirslandenKlinik Aarau	199	55	6	11	7	44	4	12	3	17	0	1
216	Istituto Cardiocentro Ticino	179	69	9	6	9	38	12	17	2	14	0	0
214	HerzZentrum & Rhythmologie Hirslanden, Zürich	213	180	26	19	3	42	6	16	3	13	0	3
211	Hôpital Fribourgeois	155	73	7	13	13	41	1	8	1	18	3	0
230	Solothurner Spitäler AG	129	38	2	9	14	27	12	26	7	13	0	0
Total	19	6254	2463	492	387	272	1254	303	536	129	487	27	12

Ablation centers

6 centers with 100 to 250 interventions

Interventions and Ablations

according to number of interventions

No.	Center	Interventions	thereof aborted	Ablations
201	Kantonsspital Aarau	242	2	246
234	Kantonsspital Winterthur	200	1	239
233	GZO Spital Wetzikon	192	0	208
284	Clinique de Genolier	168	0	169
202	Kantonsspital Baden	157	0	154
288	Herz&Rhythmus Zentrum	133	0	146
Total	6	1092	3	1162

Ablation Procedures

according to number of interventions

No.	Center	AF	RAFlu	LAFlu	AT	AP	AVNRT	VT	PVC	AVN	AVN(R)	CN	Other
201	Kantonsspital Aarau	121	57	3	3	2	35	2	14	4	4	0	1
234	Kantonsspital Winterthur	131	39	15	2	6	22	0	1	10	13	0	0
233	GZO Spital Wetzikon	107	46	5	6	2	24	4	6	0	3	0	5
284	Clinique de Genolier	67	85	0	0	5	8	0	1	1	2	0	0
202	Kantonsspital Baden	95	29	6	1	0	20	0	0	0	3	0	0
288	Herz&Rhythmus Zentrum	93	20	2	7	2	10	0	3	2	6	1	0
Total	6	614	276	31	19	17	119	6	25	17	31	1	6

Ablation centers

5 centers with less than 100 interventions

Interventions and Ablations

according to number of interventions

No.	Center	Interventions	thereof aborted	Ablations
205	Spitalzentrum Biel	99	0	99
251	Herz-Neuro-Zentrum Bodensee	80	0	87
106	Universitäts-Kinderkliniken Zürich	77	0	67
278	Centre de Cardiologie du Valais	69	1	67
228	Hôpital de Sion	59	0	55
Total	5	384	1	375

Ablation procedures

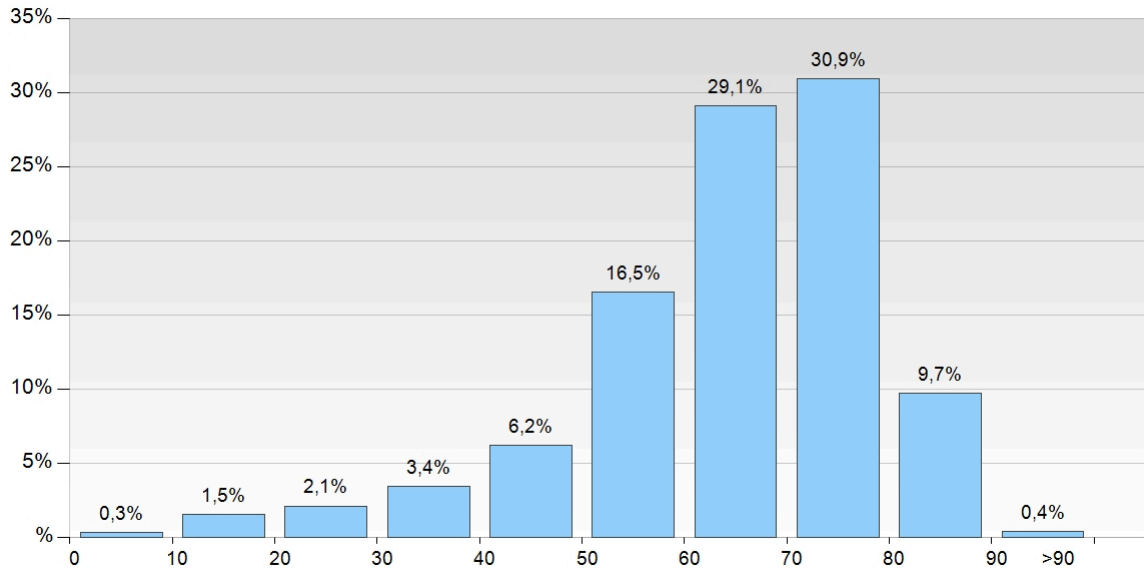
according to number of interventions

No.	Center	AF	RAFlu	LAFlu	AT	AP	AVNRT	VT	PVC	AVN	AVN(R)	CN	Other
205	Spitalzentrum Biel	55	12	0	0	3	11	0	4	1	13	0	0
251	Herz-Neuro-Zentrum Bodensee	48	20	7	1	0	9	0	1	0	1	0	0
106	Universitäts-Kinderkliniken Zürich	0	2	0	1	47	15	1	1	0	0	0	0
278	Centre de Cardiologie du Valais	36	9	0	4	0	13	0	0	0	5	0	0
228	Hôpital de Sion	3	14	2	1	7	23	0	0	1	4	0	0
Total	5	142	57	9	7	57	71	1	6	2	23	0	0

All ablation types

Number of ablations, not aborted: 14153

Age distribution (years)



Age (years)	min.	Ø	max.
Female	0	66	110
Male	0	64	104
All	0	65	110

Number of patients	n	%
Females	4427	36,65
Males	7652	63,35
Total	12079	

Anesthesia	n	%
Local	6266	49,69
Deep	1811	14,36
General	4533	35,95
Total	12610	

Combinations of ablations performed during one intervention

Number of interventions										12015
AF										5276
					AVNRT					1304
AF		RAFlu								1276
		RAFlu								1219
						PVC				539
								AVN(R)		528
				AP						326
						VT				290
					AT					255
AF	LAFIu									159
	LAFIu									158
								AVN		137
AF	LAFIu	RAFlu								109
	LAFIu	RAFlu								73
AF						AVNRT				57
AF					AT					50
		RAFlu			AT					27
								CN		24
AF		RAFlu		AT						23
		RAFlu				AVNRT				23
AF		RAFlu				AVNRT				21
				AT		AVNRT				17
	LAFIu			AT						12
									Other	10
						VT	PVC			8
					AP	AVNRT				7
AF					AP					6
AF							PVC			5
AF	LAFIu			AT						5
								AVN	AVN(R)	5
						AVNRT	PVC			4
	LAFIu	RAFlu		AT						4
						AVNRT	VT			4
AF								CN		4
AF	LAFIu	RAFlu		AT						4
		RAFlu					VT			3
AF									Other	3
				AT			PVC			3
					AP		PVC			3
AF		RAFlu		AT		AVNRT				2
		RAFlu					PVC			2
AF							VT			2
AF		RAFlu							Other	2
				AT	AP					2
				AT				AVN(R)		2
	LAFIu					AVNRT				1
		RAFlu						AVN(R)		1
				AT	AP	AVNRT				1
						AVNRT		AVN(R)		1
AF	LAFIu							AVN(R)		1
AF		RAFlu						AVN(R)		1
		RAFlu					VT	AVN(R)		1
				AT		AVNRT	PVC			1
AF	LAFIu							AVN		1
	LAFIu						PVC			1
	LAFIu			AT				AVN		1
AF	LAFIu	RAFlu						AVN		1
AF	LAFIu	RAFlu		AT	AP					1
AF								AVN		1
							PVC		Other	1
		RAFlu		AT		AVNRT				1
		RAFlu						AVN		1
	LAFIu								Other	1
				AT			VT			1
				AT				AVN		1
							VT	AVN(R)		1
		RAFlu							Other	1

Only completely documented and non-aborted interventions are counted.

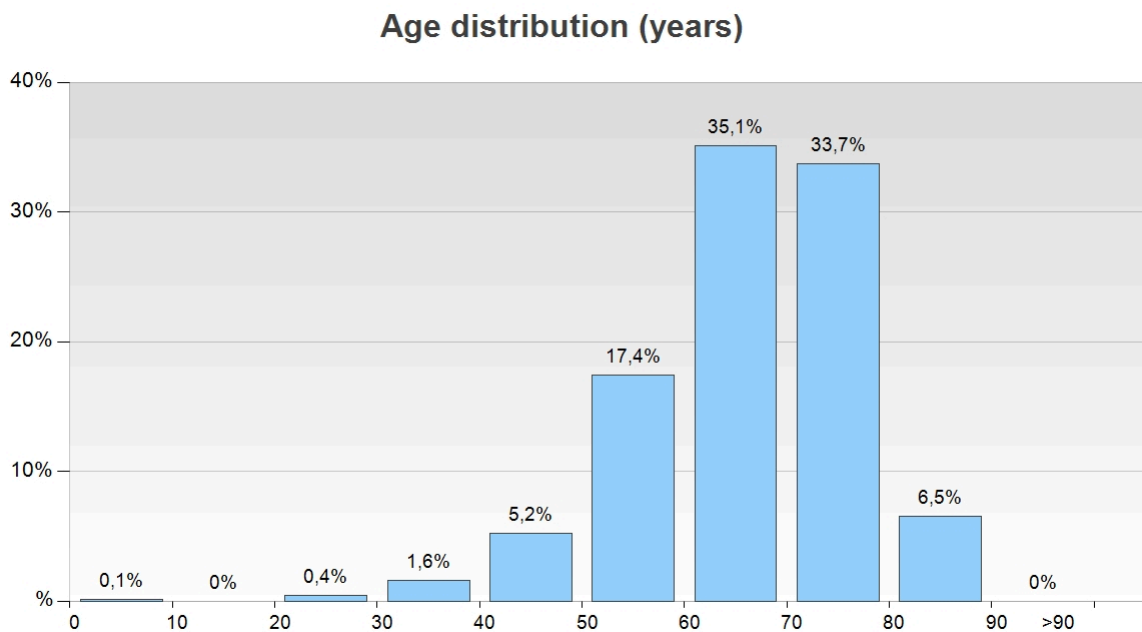
Ablation procedures or EPS

Atrial Fibrillation	7010	Right Atrial Flutter	2796
Paroxysmal	4426	Cavotricuspid	2741
Persistent	2482	Scar Related	71
Long-standing Persistent	102	Other	28
Left Atrial Flutter	532	Atrial Tachycardia	413
Roof-dependent	235	AVNRT	1444
Perimitral	274	Slow-Fast	1321
Peri-Incisional	20	Fast-Slow	54
Peri Ostial Pulm. Vein	35	Slow-Slow	84
Other	134	VT	310
Accessory Pathway	346	Monomorphic	275
Concealed	108	Polymorphic	39
WPW	210	RVOT / Cusp / PA	58
Asymptomatic Preexcitation	28	Tricuspid Annulus	10
Atrio-Fascicular	0	Right Pap Muscle	0
PJRT	3	Parahisian	8
Mahaim	1	BB Reentry	2
Other	5	LVOT / Cusp	65
AVN (to Resync.)	148	Mitral Annulus	41
AVN (Rate Control)	541	Fascicular	11
Paroxysmal	118	Left Pap Muscle	13
Persistent	273	Epicardial LV / RV	21
Long-standing Persistent	150	Other	156
Cardioneuro Ablation	28	PVC	567
Other Arrhythmia	18	Monomorphic	498
PAC	4	Polymorphic	72
JET	2	Ischemic	8
SNT	2	RVOT	262
Other	10	LVOT / Aortic Cusp	195
		Left Fascicular VT	11
		HP System	19
		Other	139
		EPS only	595

Atrial Fibrillation

Ablation of Atrial Fibrillation (AF)	n
All interventions	7010
AF combined with others	1734
AF combined with RAFla	1276
AF only	5276

The following statistics include AF only procedures



Age (years)	min.	Ø	max.
Female	0	70	89
Male	0	65	99
All	0	67	99

Number of patients	n	%
Females	1741	33,67
Males	3430	66,33
Total	5171	

Atrial Fibrillation

Cardiopathy (Underlying heart disease)	n	%
None	3063	58,06
Hypertensive Cardiomyopathy	643	12,19
Ischemic	474	8,98
Tachycardiomyopathy	458	8,68
Valvular	274	5,19
Other	112	2,12
Dilated	111	2,1
H(O)CM	73	1,38
Congenital	23	0,44
Infiltrative	19	0,36
Post Valvular Surgery	9	0,17
Angioplasty	6	0,11
RV Cardiomyopathy	4	0,08
CABG	3	0,06
Channelopathy long QT	2	0,04
Post Congenital Surgery	1	0,02
Channelopathy short QT	1	0,02
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
Total	5276	

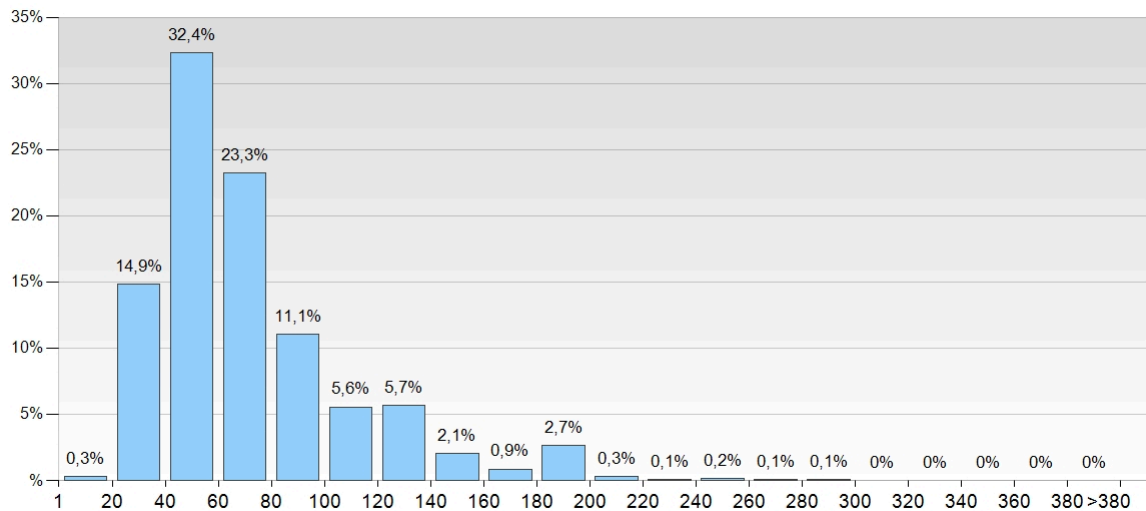
Symptoms	n
Palpitations	4278
Dyspnea	1316
Fatigue	896
Other	406
Dizziness	376
None	265
Syncope	103
Angina Pectoris	87
SCD	0

Atrial Fibrillation

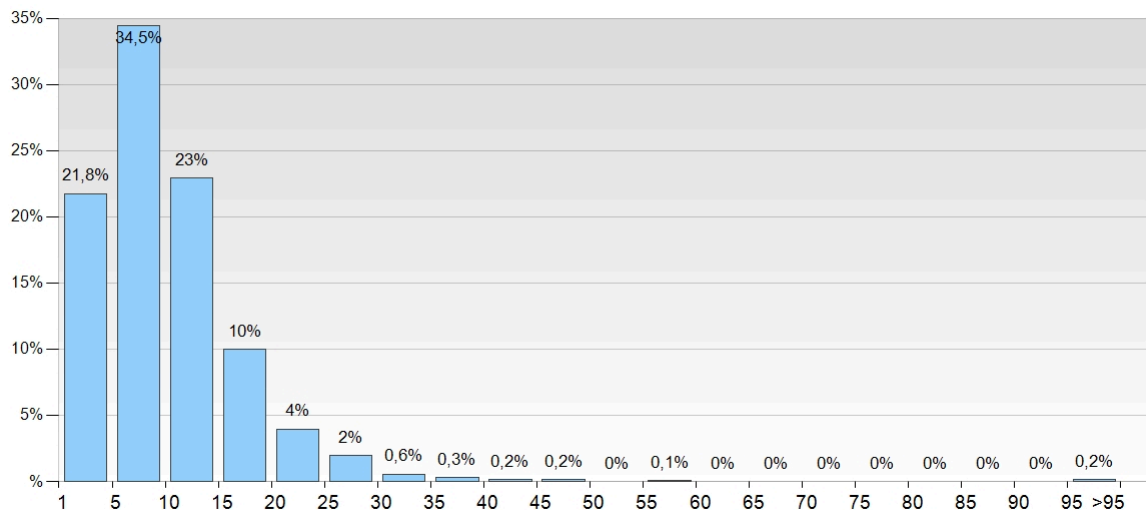
Anesthesia	n	%
Local	1409	26,71
Deep	1079	20,45
General	2788	52,84
Total	5276	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	1	70,1	475	5273	3
Fluoroscopy time	1	10	417	5122	154

Investigation time (minutes)



Fluoroscopy time (minutes)



Atrial Fibrillation

Type of AF	n	%
Paroxysmal	3343	63,36
Persistent	1853	35,12
Long-standing Persistent (>1 Year)	80	1,52

EHRA-Score	n	%
Score I	426	8,07
Score II	3190	60,46
Score III	1530	29
Score IV	130	2,46

Type of Intervention	n	%
Percutaneous	5274	99,96
Hybrid (Epicardial + Endovascular)	1	0,02
Surgical Ablation	1	0,02

Intervention	n	%
Primary Intervention	4276	81,05
Redo	1000	18,95

Antiarrhythmic Drugs	n
Beta Blocker	3500
None	1018
Amiodarone	914
Flecainide	384
Calcium Antagonist	151
Sotalol	58
Other	58
Dronedarone	22
Digitalis	9
Propafenone	5

Thromboembolic Risk Factors	n
Hypertension	2354
Diabetes	458
Prior MI, Per. Artery Disease, Aortic Plaque	447
Congestive Heart Failure, LV dysfunction	433
Stroke, TIA, Other Embolic Event	242

Atrial Fibrillation

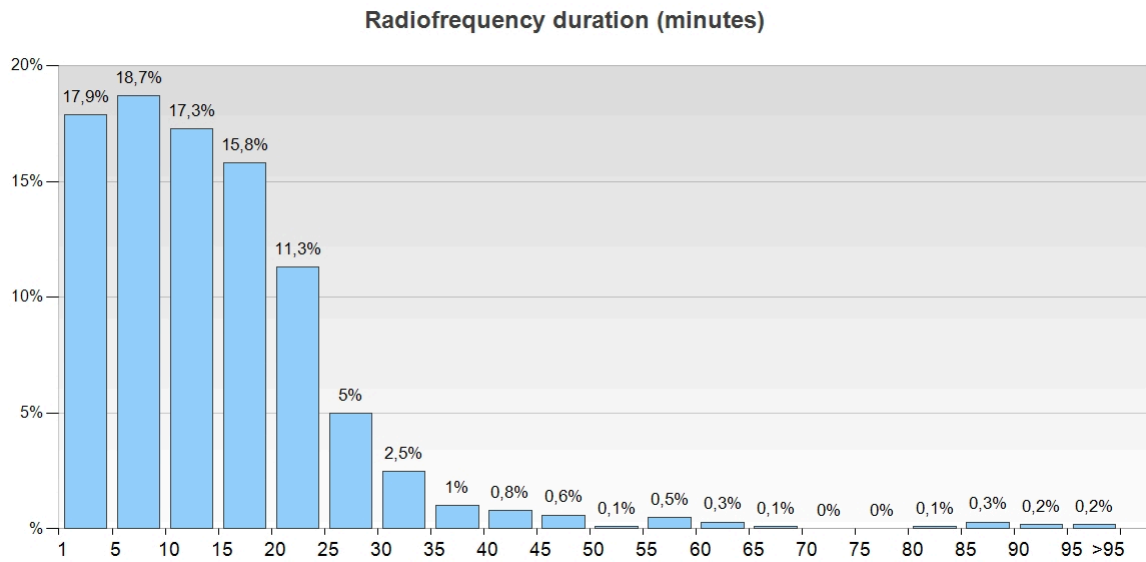
Anticoagulation, Antiaggregation	n
Factor Xa-Antagonist	4830
None	214
Direct Thrombin Inhibitor	84
Vitamin K-Antagonist	80
Other	55
Clopidogrel	36
Aspirin	28
Prasugrel	2
Ticagrelor	2

CHA₂DS₂-VASc Score	n
Score = 0	847
Score = 1	1290
Score = 2	1351
Score = 3	1037
Score = 4	512
Score = 5	176
Score = 6	56
Score = 7	7
Average Score	1,97

Site of Ablation	n
LSPV	4912
RSPV	4800
RIPV	4758
LIPV	4747
Roof Line	267
Other Lines	208
RMPV	84
Non-PV Focus	77
SVC	61
CFAE	61
Mitral Isthmus Line	56
Other Veins	49
Septal Line	49
Vein of Marshall	10

Atrial Fibrillation

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	15	513	1359	107
Irrigated Technology				1160	
RF Duty Cycled				44	



Atrial Fibrillation

Cryoablation	min.	Ø	max.	n	n₀*
Total Duration (minutes)	5	19,6	66	717	51

	n
Additional RF or Cryo Cath Needed	3

	n
Laser ablation	1

	n
Contact force	544

	n
Pulsed field	3255

	n
Ethanol	1

	n
Radio ablation	0

Access	n	%
Trans-septal, Puncture	5045	95,62
Trans-septal, PFO	227	4,3
Other	2	0,04
Epicardial, Coronary Sinus	2	0,04
Venous	0	0
Arterial	0	0
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Trans-septal Puncture+arterial	0	0
Total	5276	

Atrial Fibrillation

Mapping	n	%
3D Mapping	2439	46,23
Conventional	1965	37,24
Lasso	544	10,31
Basket	313	5,93
HD Mesh	11	0,21
Other	2	0,04
Non Contact	2	0,04
Total	5276	

Catheter Steering	n	%
Conventional	5263	99,75
Other	8	0,15
Stereotaxis	4	0,08
Hansen	1	0,02
Total	5276	

Results	n
All Veins Isolated	5253
Roof Line Block Confirmed	93
Mitral Isthmus Line Block Confirmed	29
Not All Veins Isolated	13
Roof Line Block Not Confirmed	5
Mitral Isthmus Line Block Not Confirmed	2

Sinus Rhythm	n
Spontaneous	3278
With Electrical Cardioversion / Stimulation	1369
By Ablation	622
Not Achieved	61
AAD	48

Atrial Fibrillation

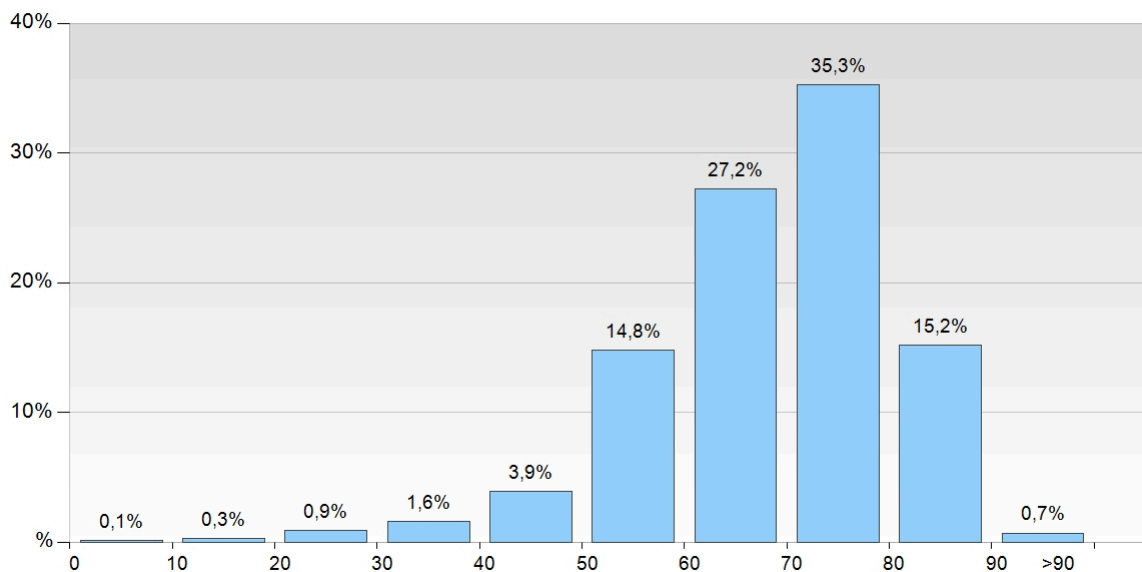
Periprocedural Complications	n
No complications	5228
Tamponade	12
Other	12
Inguinal Hematoma	9
Pericardial Effusion	6
Phrenic Nerve Paralysis	5
AV Fistula	2
Arterial Thrombosis	1
Myocardial Infarction	1
Transient AV Block	1
Pseudoaneurysm	0
Aortic Dissection	0
Arterial Occlusion	0
Pulmonary Embolism	0
TIA	0
Stroke	0
Pneumothorax	0
Hemothorax	0
High Degree or Complete AV Block	0
Infection	0
PV Stenosis	0
Valvular Lesion	0
Pulmonary Oedema	0
Death	0

Right Atrial Flutter

Ablation of Right Atrial Flutter (RAFlu)	n
All interventions	2796
RAFlu combined with others	1577
RAFlu only	1219

The following statistics include RAFlu only procedures

Age distribution (years)



Age (years)	min.	Ø	max.
Female	22	70	93
Male	0	68	93
All	0	69	93

Number of patients	n	%
Females	297	24,71
Males	905	75,29
Total	1202	

Right Atrial Flutter

Cardiopathy (Underlying heart disease)	n	%
None	608	49,88
Hypertensive Cardiomyopathy	129	10,58
Ischemic	126	10,34
Tachycardiomyopathy	115	9,43
Valvular	101	8,29
Other	39	3,2
Congenital	29	2,38
Dilated	21	1,72
Infiltrative	13	1,07
H(O)CM	12	0,98
Post Valvular Surgery	9	0,74
Post Congenital Surgery	9	0,74
CABG	5	0,41
RV Cardiomyopathy	2	0,16
Angioplasty	1	0,08
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
Total	1219	

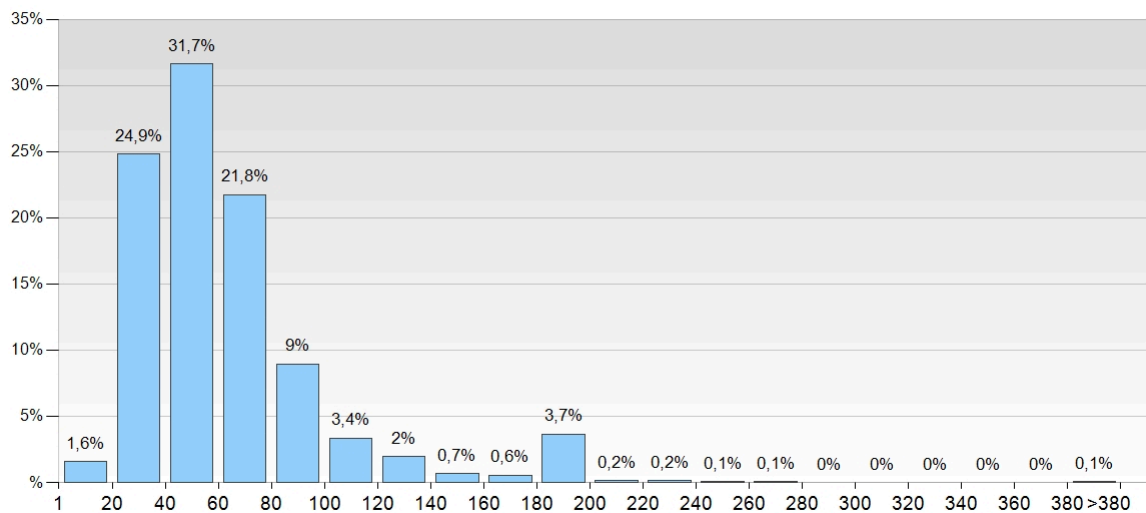
Symptoms	n
Palpitations	899
Dyspnea	319
Fatigue	256
Other	111
None	83
Dizziness	65
Syncope	25
Angina Pectoris	14
SCD	1

Right Atrial Flutter

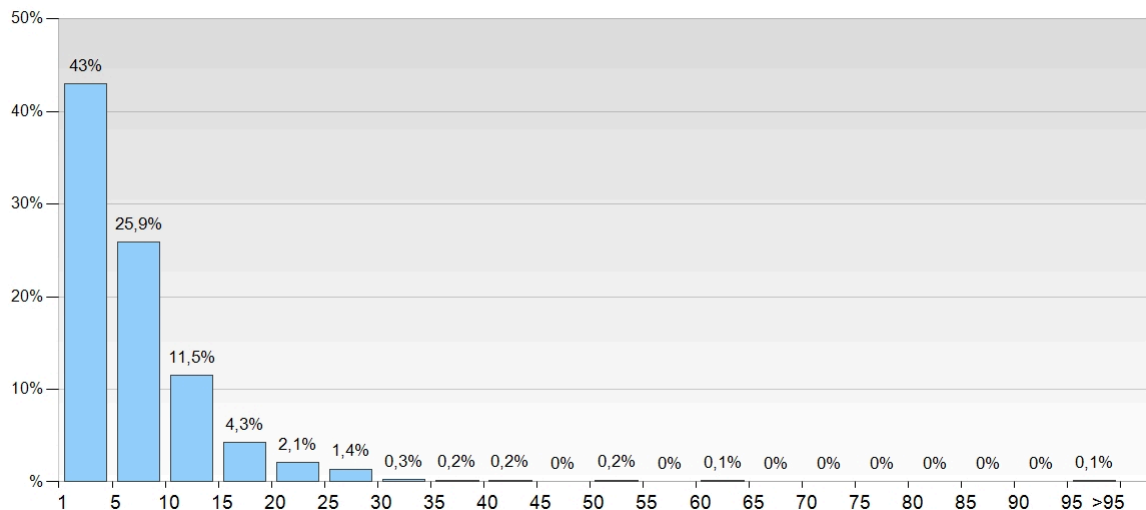
Anesthesia	n	%
Local	918	75,31
Deep	108	8,86
General	193	15,83
Total	1219	

Minutes	min.	Ø	max.	n	n ₀ [*]
Investigation time	1	61,1	422	1218	1
Fluoroscopy time	1	7	323	1091	128

Investigation time (minutes)



Fluoroscopy time (minutes)



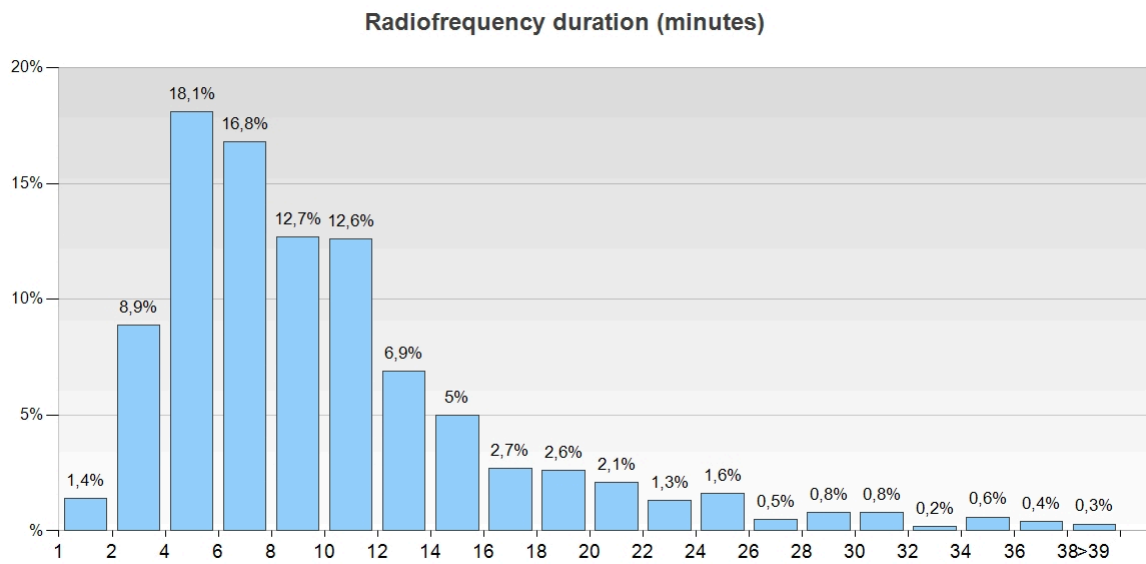
Right Atrial Flutter

Type of Flutter	n
Cavotricuspid	1197
Scar related	37
Other	8

Intervention	n	%
Primary Intervention	1117	91,63
Redo	102	8,37

Right Atrial Flutter

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	10	90	1166	43
Irrigated Technology				937	



Right Atrial Flutter

Cryoablation	min.	Ø	max.	n	n₀*
Total Duration (minutes)	9	20,1	31	9	0

	n
Additional RF or Cryo Cath Needed	0

	n
Contact force	150

	n
Pulsed field	5

	n
Ethanol	0

Access	n	%
Venous	1218	99,92
Epicardial, Thoracotomy	1	0,08
Arterial	0	0
Trans-septal, Puncture	0	0
Trans-septal, PFO	0	0
Epicardial, Coronary Sinus	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Trans-septal Puncture+arterial	0	0
Other	0	0
Total	1219	

Mapping	n	%
3D Mapping	697	57,18
Conventional	514	42,17
Basket	3	0,25
HD Mesh	3	0,25
Lasso	2	0,16
Non Contact	0	0
Other	0	0
Total	1219	

Right Atrial Flutter

Catheter Steering	n	%
Conventional	1216	99,75
Stereotaxis	2	0,16
Other	1	0,08
Hansen	0	0
Total	1219	

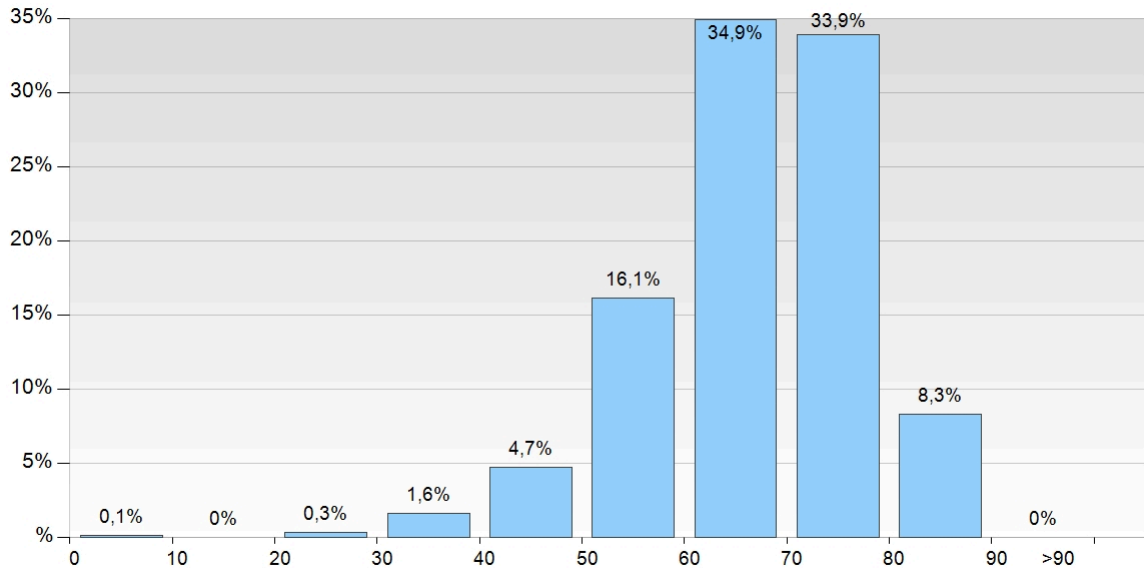
Results	n	%
Block confirmed	1195	98,03
Block not confirmed	24	1,97

Periprocedural Complications	n
No complications	1213
Inguinal Hematoma	2
Other	2
Tamponade	1
Pulmonary Oedema	1
AV Fistula	0
Pseudoaneurysm	0
Aortic Dissection	0
Arterial Thrombosis	0
Arterial Occlusion	0
Pulmonary Embolism	0
TIA	0
Stroke	0
Myocardial Infarction	0
Pericardial Effusion	0
Pneumothorax	0
Hemothorax	0
Transient AV Block	0
High Degree or Complete AV Block	0
Phrenic Nerve Paralysis	0
Infection	0
PV Stenosis	0
Valvular Lesions	0
Death	0

Atrial Fibrillation combined with Right Atrial Flutter

Number of interventions (AF with RAFlu): 1276

Age distribution (years)



Age (years)	min.	Ø	max.
Female	34	71	90
Male	0	66	88
All	0	67	90

Number of patients	n	%
Females	378	29,79
Males	891	70,21
Total	1269	

Atrial Fibrillation combined with Right Atrial Flutter

Cardiopathy (Underlying heart disease)	n	%
None	755	59,17
Tachycardiomyopathy	124	9,72
Hypertensive Cardiomyopathy	121	9,48
Ischemic	93	7,29
Valvular	84	6,58
Dilated	30	2,35
Other	27	2,12
H(O)CM	13	1,02
Congenital	9	0,71
Angioplasty	9	0,71
Infiltrative	5	0,39
Post Valvular Surgery	3	0,24
Post Congenital Surgery	1	0,08
RV Cardiomyopathy	1	0,08
CABG	1	0,08
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
Total	1276	

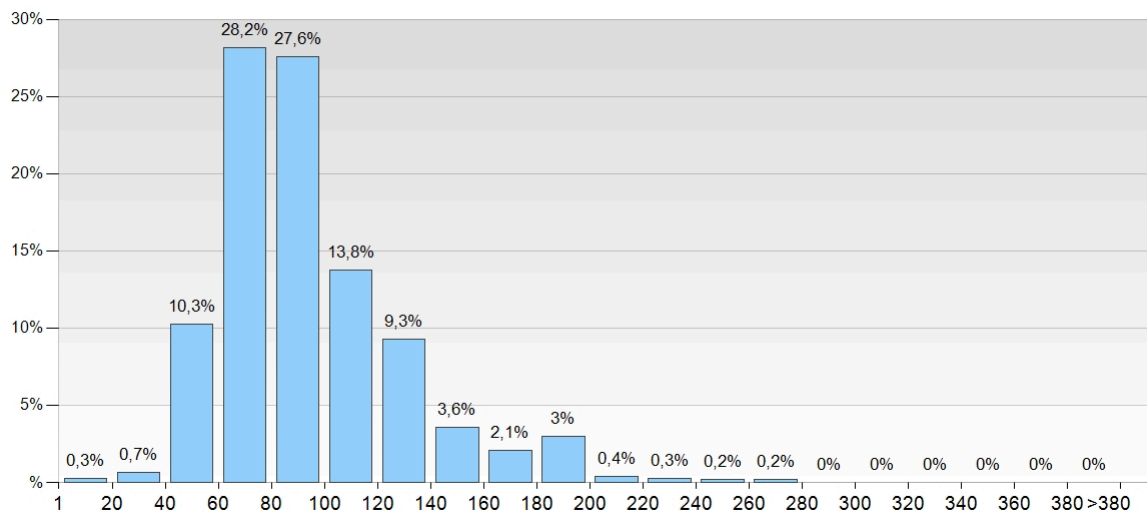
Symptoms	n
Palpitations	1060
Fatigue	358
Dyspnea	318
Other	104
Dizziness	60
None	52
Angina Pectoris	22
Syncope	15
SCD	0

Atrial Fibrillation combined with Right Atrial Flutter

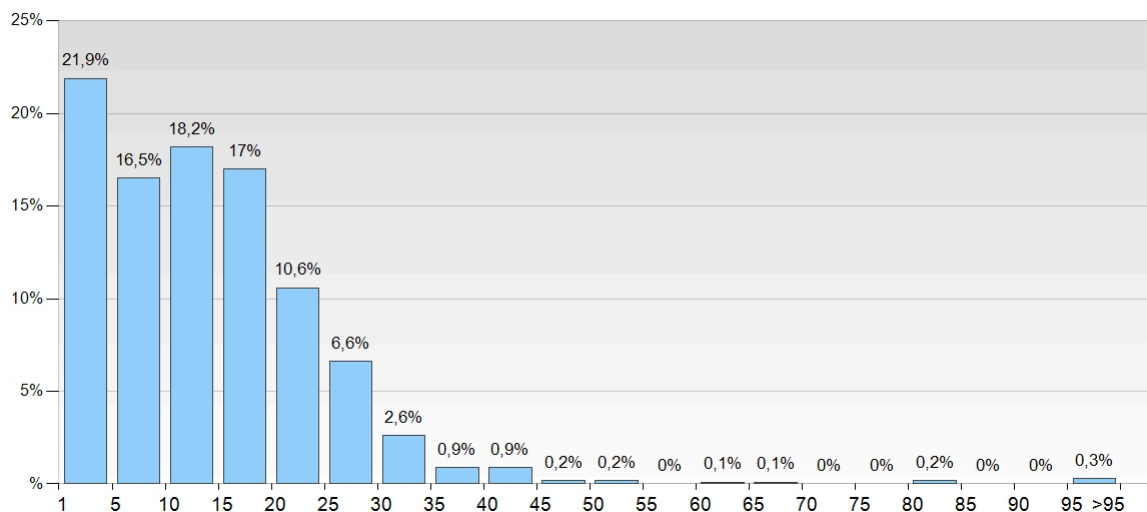
Anesthesia	n	%
Local	341	26,72
Deep	264	20,69
General	671	52,59
Total	1276	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	5	92,5	275	1276	0
Fluoroscopy time	1	14	401	1226	50

Investigation time (minutes)



Fluoroscopy time (minutes)



Atrial Fibrillation combined with Right Atrial Flutter

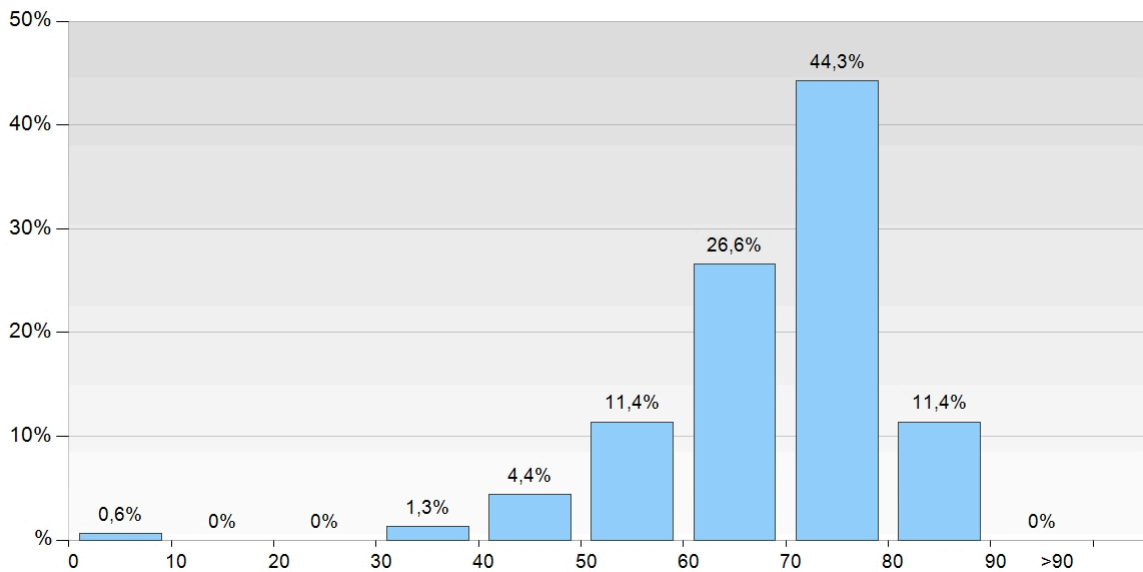
Periprocedural Complications	n
No complications	1264
Inguinal Hematoma	5
Tamponade	4
High Degree or Complete AV Block	1
Phrenic Nerve Paralysis	1
Other	1
AV Fistula	0
Pseudoaneurysm	0
Aortic Dissection	0
Arterial Thrombosis	0
Arterial Occlusion	0
Pulmonary Embolism	0
TIA	0
Stroke	0
Myocardial Infarction	0
Pericardial Effusion	0
Pneumothorax	0
Hemothorax	0
Transient AV Block	0
Infection	0
PV Stenosis	0
Valvular Lesions	0
Pulmonary Oedema	0
Death	0

Left Atrial Flutter

Ablation of Left Atrial Flutter (LAFlu)	n
All interventions	532
LAFlu combined with others	374
LAFlu only	158

The following statistics include LAFlu only procedures

Age distribution (years)



Age (years)	min.	Ø	max.
Female	0	71	88
Male	35	69	89
All	0	70	89

Number of patients	n	%
Females	54	34,62
Males	102	65,38
Total	156	

Left Atrial Flutter

Cardiopathy (Underlying heart disease)	n	%
None	60	37,97
Hypertensive Cardiomyopathy	22	13,92
Tachycardiomyopathy	17	10,76
Valvular	14	8,86
Ischemic	14	8,86
H(O)CM	11	6,96
Congenital	9	5,7
Other	4	2,53
Dilated	4	2,53
Infiltrative	2	1,27
Post Valvular Surgery	1	0,63
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	158	

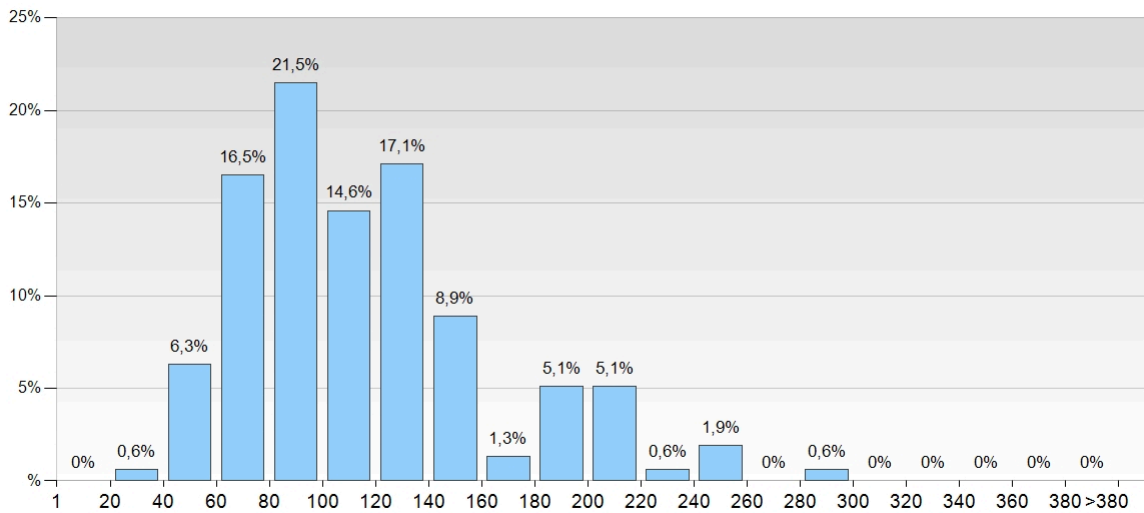
Symptoms	n
Palpitations	127
Dyspnea	50
Fatigue	47
Other	13
Dizziness	9
None	6
Syncope	2
Angina Pectoris	2
SCD	0

Left Atrial Flutter

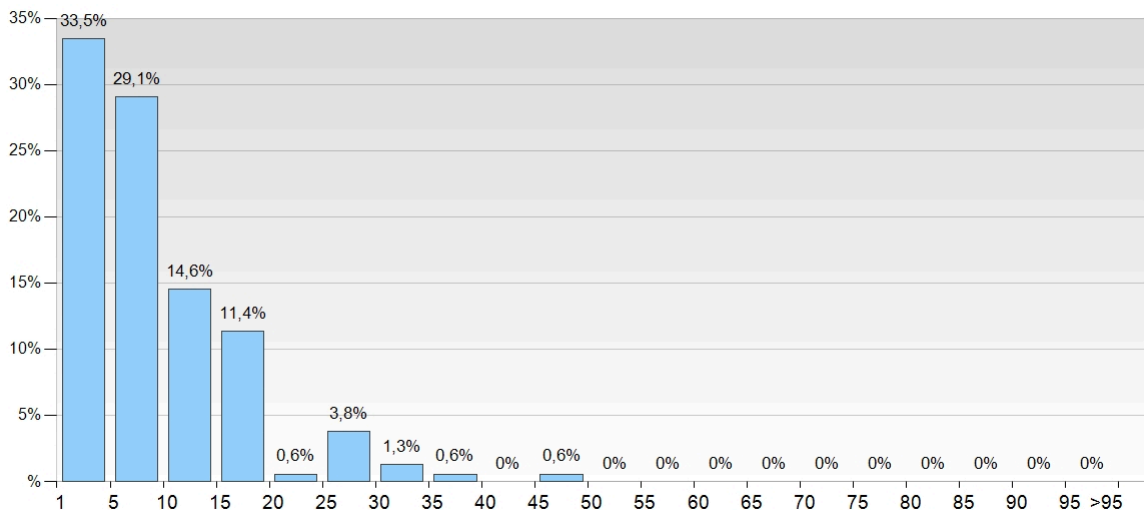
Anesthesia	n	%
Local	58	36,71
Deep	33	20,89
General	67	42,41
Total	158	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	35	113,6	292	158	0
Fluoroscopy time	1	9	49	151	7

Investigation time (minutes)



Fluoroscopy time (minutes)



Left Atrial Flutter

Type of Flutter	n
Perimitral	73
Roof-dependent	64
Other	45
Peri Ostial Pulmonary Vein	16
Peri-Incisional	5

EHRA-Score	n	%
Score I	8	5,06
Score II	89	56,33
Score III	58	36,71
Score IV	3	1,9

Type of Intervention	n	%
Percutaneous	158	100
Hybrid (Epicardial + Endovascular)	0	0
Surgical Ablation	0	0

Intervention	n	%
Primary Intervention	66	41,77
Redo	92	58,23

Antiarrhythmic Drugs	n
Beta Blocker	126
Amiodarone	26
None	21
Flecainide	5
Calcium Antagonist	4
Sotalol	3
Other	3
Dronedarone	1
Propafenone	0
Digitalis	0

Left Atrial Flutter

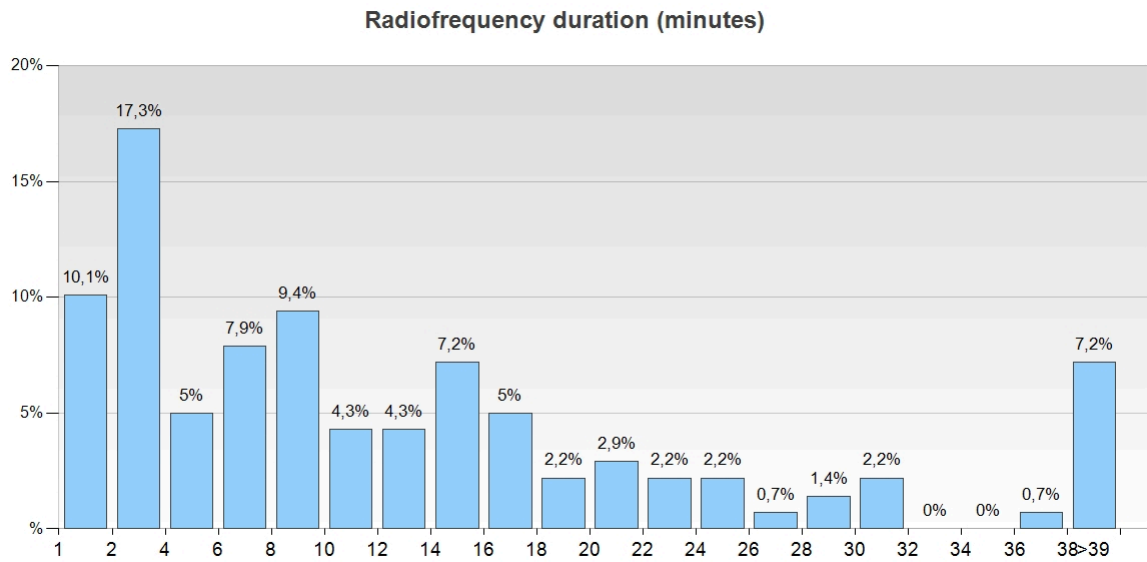
Thromboembolic Risk Factors	n
Hypertension	77
Congestive Heart Failure, LV dysfunction	23
Diabetes	22
Prior MI, Per. Artery Disease, Aortic Plaque	9
Stroke, TIA, Other Embolic Event	5

Anticoagulation, Antiaggregation	n
Factor Xa-Antagonist	148
Vitamin K-Antagonist	5
Other	2
None	2
Clopidogrel	1
Direct Thrombin Inhibitor	1
Prasugrel	0
Ticagrelor	0
Aspirin	0

CHA₂DS₂-VASc Score	n
Score = 0	13
Score = 1	31
Score = 2	46
Score = 3	35
Score = 4	24
Score = 5	8
Score = 6	1
Score = 7	0
Average Score	2,34

Left Atrial Flutter

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	13	80	128	11
Irrigated Technology				121	
RF Duty Cycled				2	



Left Atrial Flutter

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

	n
Laser ablation	0

	n
Contact force	24

	n
Pulsed field	56

	n
Ethanol	2

Access	n	%
Trans-septal, Puncture	144	91,14
Trans-septal, PFO	14	8,86
Venous	0	0
Arterial	0	0
Epicardial, Coronary Sinus	0	0
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Trans-septal Puncture+arterial	0	0
Other	0	0
Total	158	

Mapping	n	%
3D Mapping	149	94,3
Conventional	7	4,43
HD Mesh	1	0,63
Non Contact	1	0,63
Lasso	0	0
Basket	0	0
Other	0	0
Total	158	

Left Atrial Flutter

Catheter Steering	n	%
Conventional	158	100
Stereotaxis	0	0
Hansen	0	0
Other	0	0
Total	158	

Results	n	%
Block confirmed	151	95,57
Block not confirmed	7	4,43

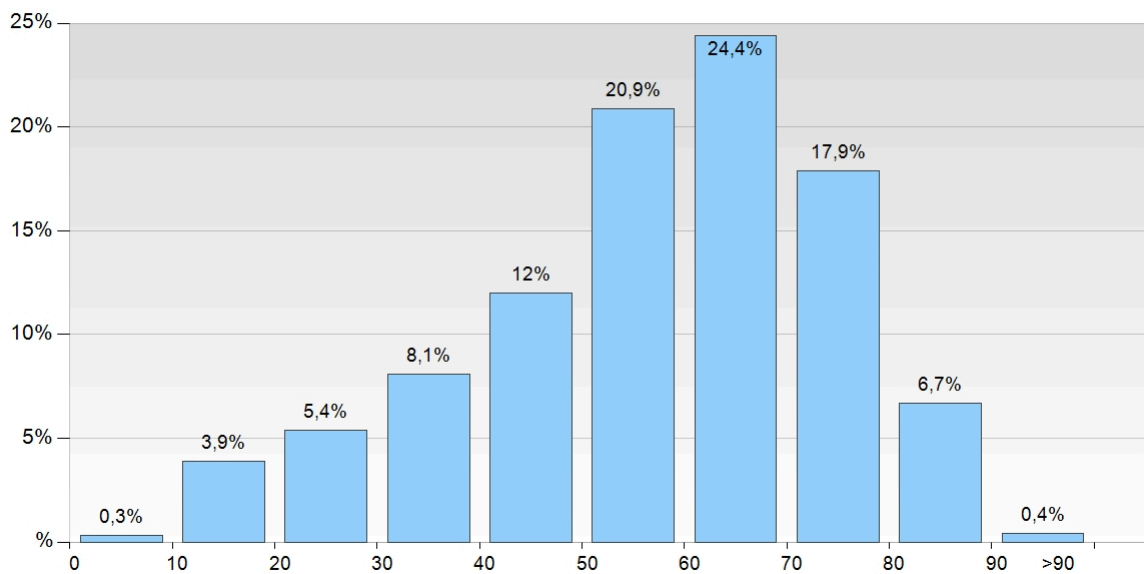
Periprocedural Complications	n
No complications	157
Tamponade	1
Inguinal Hematoma	0
AV Fistula	0
Pseudoaneurysm	0
Aortic Dissection	0
Arterial Thrombosis	0
Arterial Occlusion	0
Pulmonary Embolism	0
TIA	0
Stroke	0
Myocardial Infarction	0
Pericardial Effusion	0
Pneumothorax	0
Hemothorax	0
Transient AV Block	0
High Degree or Complete AV Block	0
Phrenic Nerve Paralysis	0
Infection	0
PV Stenosis	0
Valvular Lesions	0
Pulmonary Oedema	0
Death	0
Other	0

Atrioventricular Nodal Reentry Tachycardia (AVNRT)

Ablation of AVNRT	n
All interventions	1444
AVNRT combined with others	140
AVNRT only	1304

The following statistics include AVNRT only procedures

Age distribution (years)



Age (years)	min.	Ø	max.
Female	9	56	93
Male	1	59	90
All	1	57	93

Number of patients	n	%
Females	721	56,15
Males	563	43,85
Total	1284	

Atrioventricular Nodal Reentry Tachycardia (AVNRT)

Cardiopathy (Underlying heart disease)	n	%
None	1074	82,36
Ischemic	66	5,06
Hypertensive Cardiomyopathy	62	4,75
Valvular	31	2,38
Tachycardiomyopathy	27	2,07
Other	21	1,61
Dilated	11	0,84
H(O)CM	5	0,38
Congenital	2	0,15
Infiltrative	1	0,08
Brugada Syndrome	1	0,08
Post Valvular Surgery	1	0,08
Angioplasty	1	0,08
Post Congenital Surgery	1	0,08
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
RV Cardiomyopathy	0	0
CABG	0	0
Total	1304	

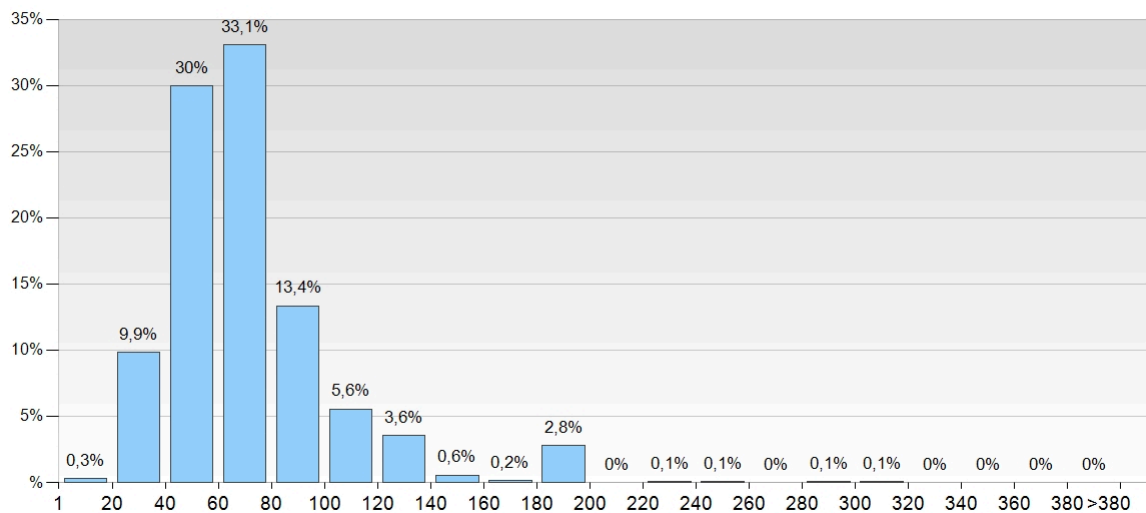
Symptoms	n
Palpitations	1174
Dizziness	136
Fatigue	101
Dyspnea	100
Other	76
Syncope	74
Angina Pectoris	45
None	44
SCD	0

Atrioventricular Nodal Reentry Tachycardia (AVNRT)

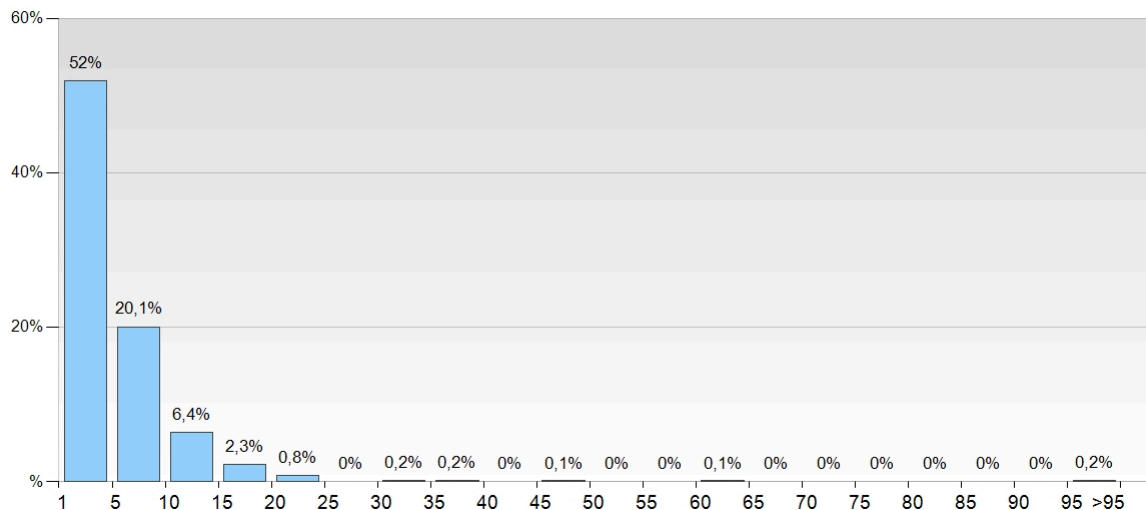
Anesthesia	n	%
Local	1168	89,57
Deep	62	4,75
General	74	5,67
Total	1304	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	3	68,9	309	1303	1
Fluoroscopy time	1	5	160	1072	232

Investigation time (minutes)



Fluoroscopy time (minutes)



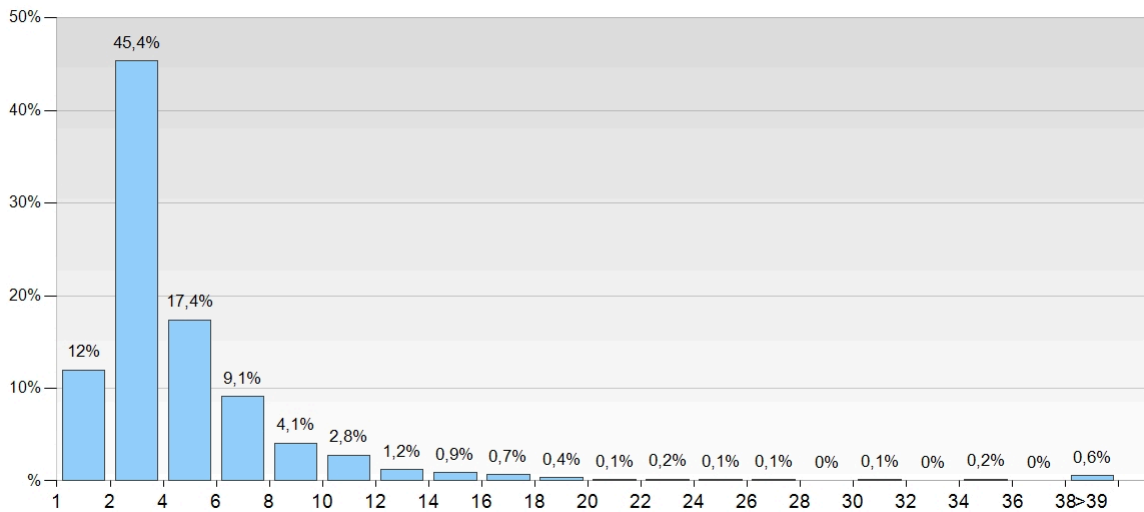
Atrioventricular Nodal Reentry Tachycardia (AVNRT)

Type	n
Slow-Fast	1195
Slow-Slow	79
Fast-Slow	44

Intervention	n	%
Primary Intervention	1233	94,56
Redo	71	5,44

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	5	462	1232	61
Irrigated Technology				220	

Radiofrequency duration (minutes)



Atrioventricular Nodal Reentry Tachycardia (AVNRT)

Cryoablation	min.	Ø	max.	n	n₀*
Total Duration (minutes)	15	24	37	10	0

	n
Contact force	71

	n
Pulsed field	0

	n
Ethanol	0

Access	n	%
Venous	1302	99,85
Other	2	0,15
Arterial	0	0
Trans-septal, Puncture	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
Trans-septal Puncture+arterial	0	0
Total	1304	

Mapping	n	%
3D Mapping	973	74,62
Conventional	329	25,23
Basket	2	0,15
Lasso	0	0
Non Contact	0	0
HD Mesh	0	0
Other	0	0
Total	1304	

Atrioventricular Nodal Reentry Tachycardia (AVNRT)

Catheter Steering	n	%
Conventional	1302	99,85
Stereotaxis	2	0,15
Hansen	0	0
Other	0	0
Total	1304	

Results	n	%
Success	1291	99
No success	13	1

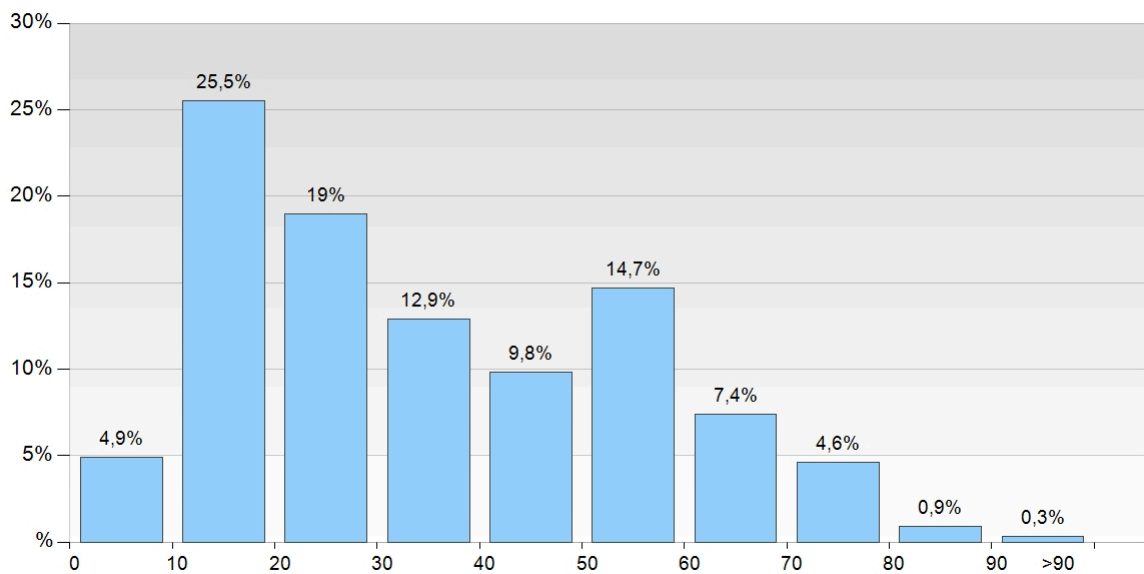
Periprocedural Complications	n
No complications	1298
Transient AV Block	3
Inguinal Hematoma	1
High Degree or Complete AV Block	1
Other	1
AV Fistula	0
Pseudoaneurysm	0
Aortic Dissection	0
Arterial Thrombosis	0
Arterial Occlusion	0
Pulmonary Embolism	0
TIA	0
Stroke	0
Myocardial Infarction	0
Pericardial Effusion	0
Tamponade	0
Pneumothorax	0
Hemothorax	0
Phrenic Nerve Paralysis	0
Infection	0
PV Stenosis	0
Valvular Lesions	0
Pulmonary Oedema	0
Death	0

Accessory Pathway

Ablation of Accessory Pathway (AP)	n
All interventions	346
AP combined with others	20
AP only	326

The following statistics include AP only procedures

Age distribution (years)



Age (years)	min.	Ø	max.
Female	4	37	92
Male	8	35	84
All	4	36	92

Number of patients	n	%
Females	114	36,08
Males	202	63,92
Total	316	

Accessory Pathway

Cardiopathy (Underlying heart disease)	n	%
None	294	90,18
Ischemic	7	2,15
Other	7	2,15
Congenital	6	1,84
Tachycardiomyopathy	5	1,53
Hypertensive Cardiomyopathy	3	0,92
H(O)CM	2	0,61
Post Congenital Surgery	1	0,31
Dilated	1	0,31
Valvular	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 Valvular Surgery	0	0
Total	326	

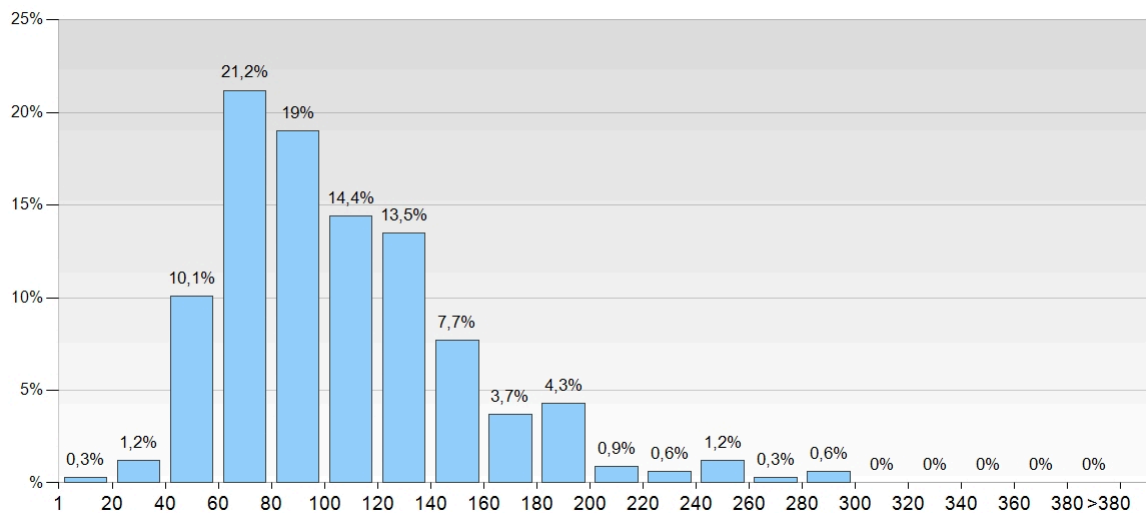
Symptoms	n
Palpitations	270
None	40
Dizziness	29
Fatigue	17
Other	16
Dyspnea	14
Syncope	9
Angina Pectoris	4
SCD	0

Accessory Pathway

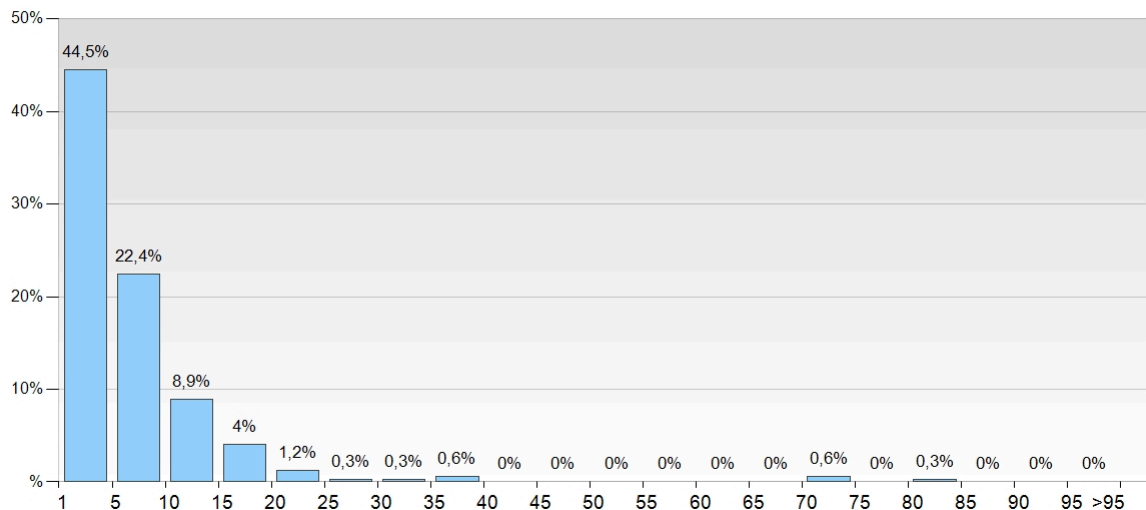
Anesthesia	n	%
Local	215	65,95
Deep	18	5,52
General	93	28,53
Total	326	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	2	104,4	296	323	3
Fluoroscopy time	1	6,6	83	271	55

Investigation time (minutes)



Fluoroscopy time (minutes)



Accessory Pathway

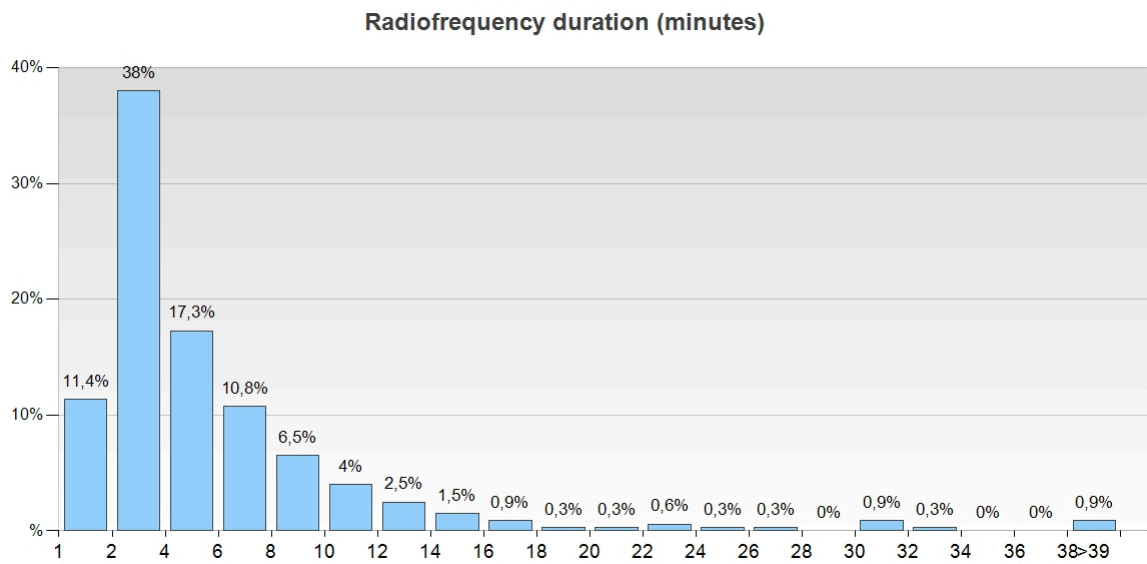
Type	n
WPW	203
Concealed	99
Asymptomatic Preexcitation	25
Other	5
PJRT	2
Mahaim	1
Atrio-Fascicular	0

Intervention	n	%
Primary Intervention	290	88,96
Redo	36	11,04

Site of Ablation	n
left	201
right	131
left: Free Wall	130
right: Posteroseptal	64
left: Posteroseptal	39
left: Posterior	35
right: Parahisian	21
right: Anteroseptal	18
right: Free Wall	16
right: Midseptal	13
right: Coronary Sinus Aneurysm	5
right: Posterior	3

Accessory Pathway

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	6	90	314	10
Irrigated Technology				250	



Accessory Pathway

Cryoablation	min.	Ø	max.	n	n₀*
Total Duration (minutes)	4	4	4	1	1

	n
Contact force	118

	n
Pulsed field	4

	n
Ethanol	0

Access	n	%
Venous	156	47,85
Trans-septal, Puncture	138	42,33
Arterial	18	5,52
Trans-septal, PFO	12	3,68
Epicardial, Coronary Sinus	2	0,61
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Trans-septal Puncture+arterial	0	0
Other	0	0
Total	326	

Mapping	n	%
3D Mapping	291	89,26
Conventional	32	9,82
HD Mesh	2	0,61
Basket	1	0,31
Lasso	0	0
Non Contact	0	0
Other	0	0
Total	326	

Accessory Pathway

Catheter Steering	n	%
Conventional	326	100
Stereotaxis	0	0
Hansen	0	0
Other	0	0
Total	326	

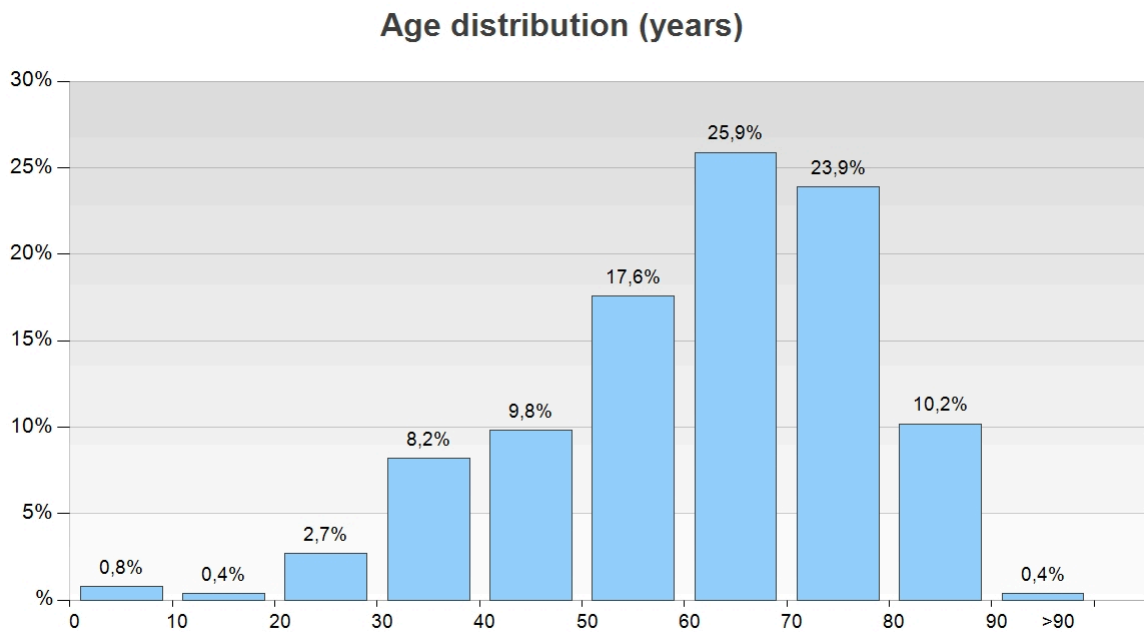
Results	n	%
Success	308	94,48
No success	18	5,52

Periprocedural Complications	n
No complications	317
Transient AV Block	4
Inguinal Hematoma	3
Pericardial Effusion	1
Other	1
AV Fistula	0
Pseudoaneurysm	0
Aortic Dissection	0
Arterial Thrombosis	0
Arterial Occlusion	0
Pulmonary Embolism	0
TIA	0
Stroke	0
Myocardial Infarction	0
Tamponade	0
Pneumothorax	0
Hemothorax	0
High Degree or Complete AV Block	0
Phrenic Nerve Paralysis	0
Infection	0
PV Stenosis	0
Valvular Lesions	0
Pulmonary Oedema	0
Death	0

Atrial Tachycardia

Ablation of Atrial Tachycardia (AT)	n
All interventions	413
AT combined with others	158
AT only	255

The following statistics include AT only procedures



Age (years)	min.	Ø	max.
Female	9	62	98
Male	18	62	90
All	9	62	98

Number of patients	n	%
Females	145	58,7
Males	102	41,3
Total	247	

Atrial Tachycardia

Cardiopathy (Underlying heart disease)	n	%
None	154	60,39
Valvular	23	9,02
Hypertensive Cardiomyopathy	18	7,06
Tachycardiomyopathy	17	6,67
Ischemic	15	5,88
Dilated	9	3,53
Congenital	8	3,14
Other	7	2,75
H(O)CM	2	0,78
RV Cardiomyopathy	1	0,39
Post Valvular Surgery	1	0,39
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
Total	255	

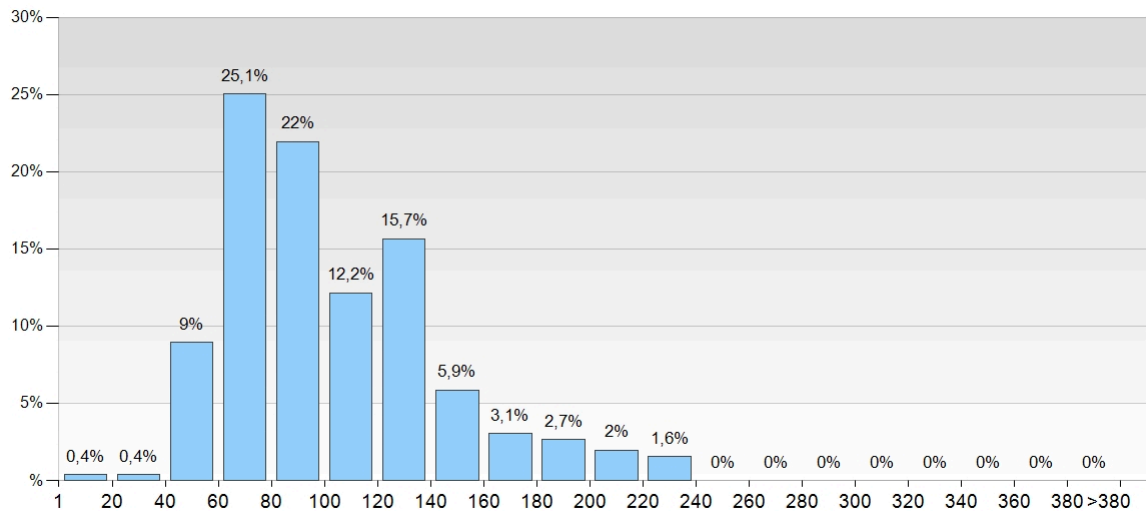
Symptoms	n
Palpitations	217
Dyspnea	39
Fatigue	23
Dizziness	19
Other	17
None	9
Syncope	7
Angina Pectoris	5
SCD	0

Atrial Tachycardia

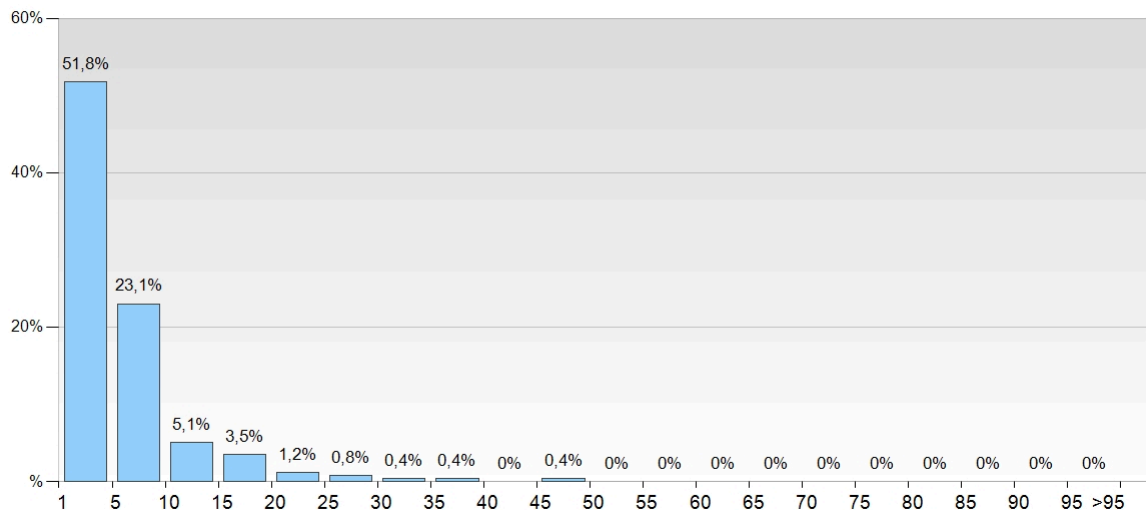
Anesthesia	n	%
Local	191	74,9
Deep	33	12,94
General	31	12,16
Total	255	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	1	100,4	235	255	0
Fluoroscopy time	1	5,5	48	221	34

Investigation time (minutes)



Fluoroscopy time (minutes)



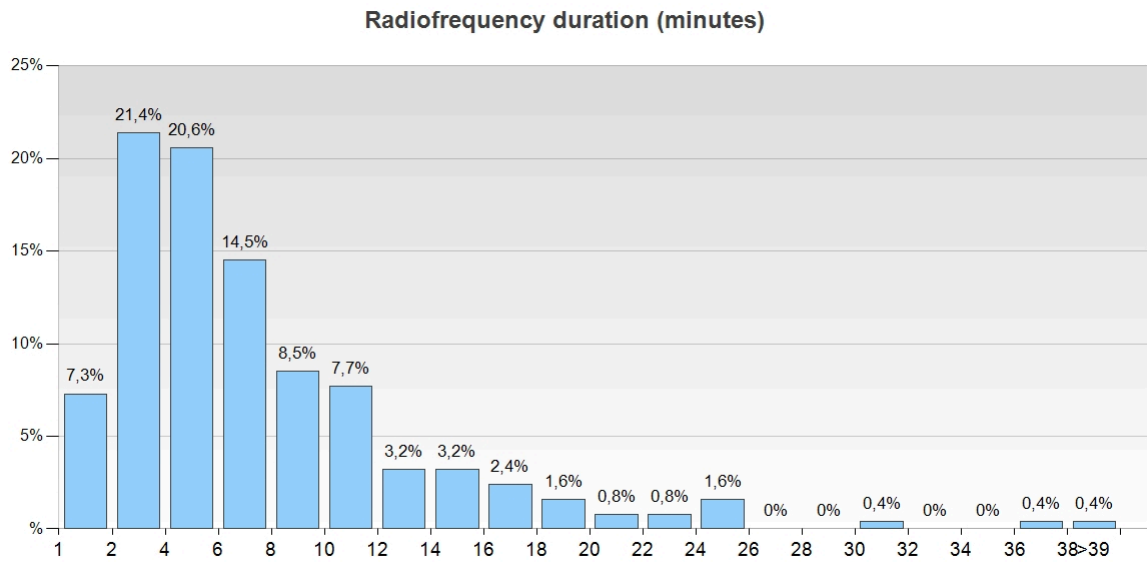
Atrial Tachycardia

Intervention	n	%
Primary Intervention	214	83,92
Redo	41	16,08

Site of Ablation	n
right	203
left	81
right: Other Right	75
right: Crista Terminalis	62
right: Septal Right	38
left: Other Left	34
right: Peritricuspid	31
left: Septal Left	27
left: Periostial PV	13
left: Perimitral	13
right: Right Appendage	12
left: Left Atrial Appendage	6

Atrial Tachycardia

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	9	454	235	13
Irrigated Technology				200	



Atrial Tachycardia

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

	n
Contact force	62

	n
Pulsed field	16

	n
Ethanol	0

Access	n	%
Venous	188	73,73
Trans-septal, Puncture	48	18,82
Arterial	12	4,71
Trans-septal, PFO	7	2,75
Epicardial, Coronary Sinus	0	0
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Trans-septal Puncture+arterial	0	0
Other	0	0
Total	255	

Mapping	n	%
3D Mapping	228	89,41
Conventional	23	9,02
HD Mesh	3	1,18
Basket	1	0,39
Lasso	0	0
Non Contact	0	0
Other	0	0
Total	255	

Atrial Tachycardia

Catheter Steering	n	%
Conventional	254	99,61
Other	1	0,39
Stereotaxis	0	0
Hansen	0	0
Total	255	

Results	n	%
Success	239	93,73
No success	16	6,27

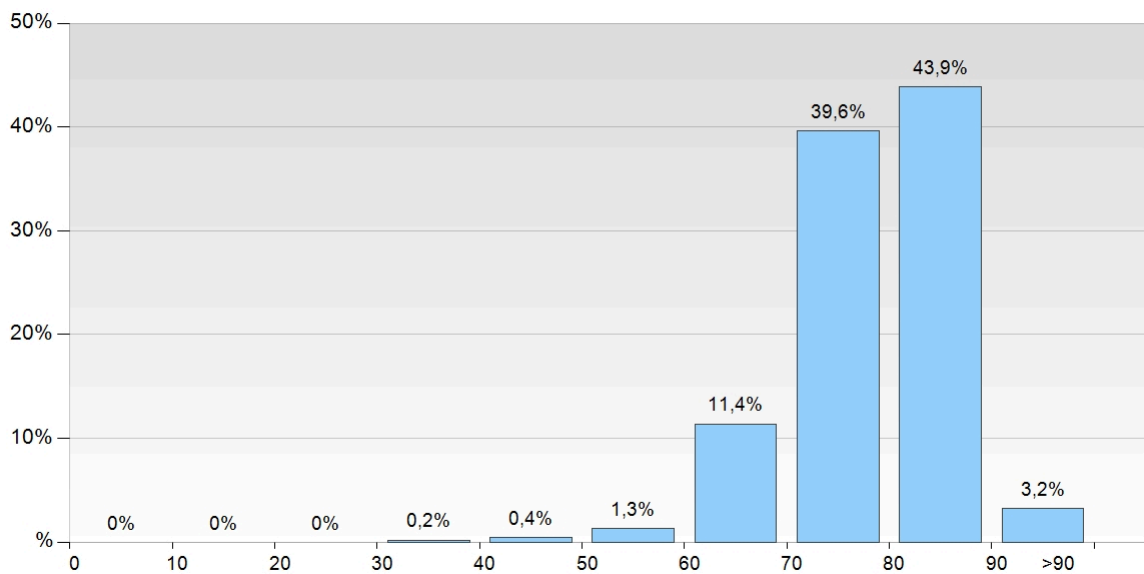
Periprocedural Complications	n
No complications	253
Inguinal Hematoma	1
Tamponade	1
AV Fistula	0
Pseudoaneurysm	0
Aortic Dissection	0
Arterial Thrombosis	0
Arterial Occlusion	0
Pulmonary Embolism	0
TIA	0
Stroke	0
Myocardial Infarction	0
Pericardial Effusion	0
Pneumothorax	0
Hemothorax	0
Transient AV Block	0
High Degree or Complete AV Block	0
Phrenic Nerve Paralysis	0
Infection	0
PV Stenosis	0
Valvular Lesions	0
Pulmonary Oedema	0
Death	0
Other	0

Atrioventricular Node (Rate Control in Atr. Fibrillation)

Ablation of AVN(R)	n
All interventions	541
AVN(R) combined with others	13
AVN(R) only	528

The following statistics include AVN(R) only procedures

Age distribution (years)



Age (years)	min.	Ø	max.
Female	34	81	97
Male	47	77	93
All	34	79	97

Number of patients	n	%
Females	306	58,62
Males	216	41,38
Total	522	

Atrioventricular Node (Rate Control in Atr. Fibrillation)

Cardiopathy (Underlying heart disease)	n	%
None	166	31,44
Tachycardiomyopathy	128	24,24
Hypertensive Cardiomyopathy	68	12,88
Ischemic	52	9,85
Valvular	51	9,66
Dilated	24	4,55
Other	15	2,84
Infiltrative	8	1,52
H(O)CM	7	1,33
Post Valvular Surgery	4	0,76
RV Cardiomyopathy	2	0,38
Congenital	2	0,38
CABG	1	0,19
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Brugada Syndrome	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
Angioplasty	0	0
Post Congenital Surgery	0	0
Total	528	

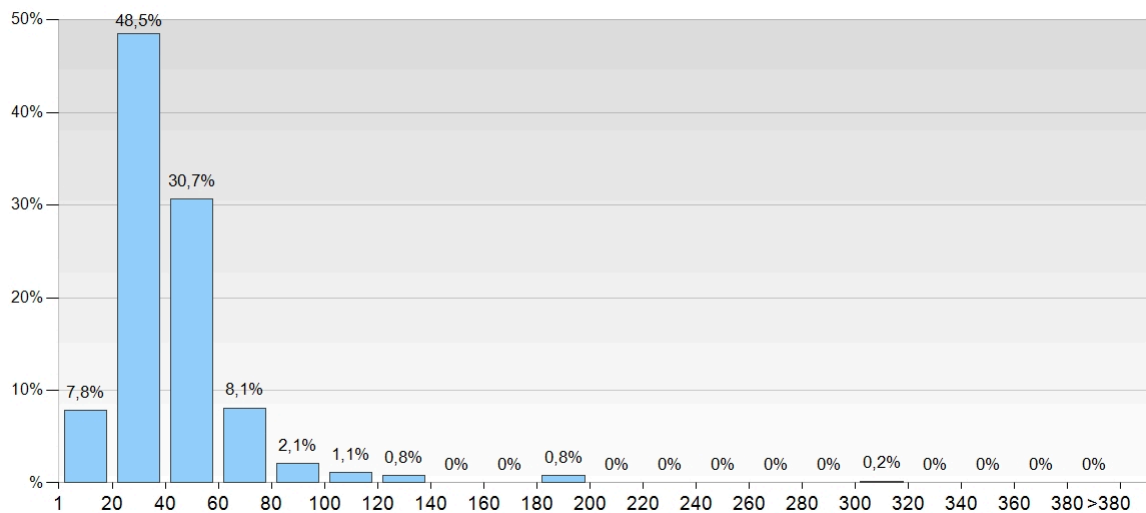
Symptoms	n
Palpitations	350
Dyspnea	230
Fatigue	136
None	37
Other	36
Dizziness	34
Syncope	10
Angina Pectoris	10
SCD	0

Atrioventricular Node (Rate Control in Atr. Fibrillation)

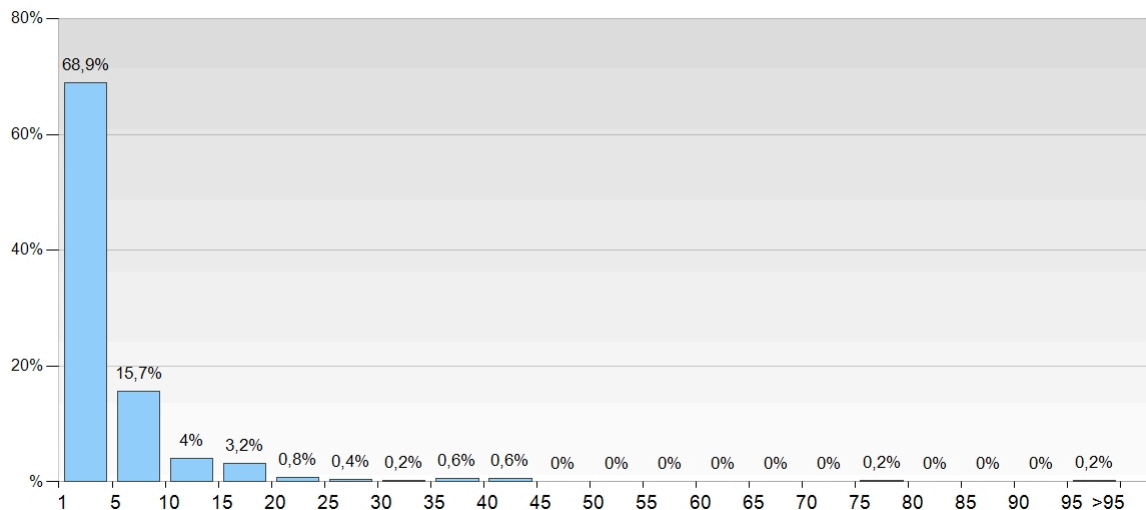
Anesthesia	n	%
Local	488	92,42
Deep	21	3,98
General	19	3,6
Total	528	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	7	39,9	302	528	0
Fluoroscopy time	1	5,3	412	500	28

Investigation time (minutes)



Fluoroscopy time (minutes)



Atrioventricular Node (Rate Control in Atr. Fibrillation)

Type of Fibrillation	n	%
Paroxysmal	112	21,21
Persistent	270	51,14
Long-standing Persistent (>1 Year)	146	27,65

EHRA-Score	n	%
Score I	23	4,36
Score II	222	42,05
Score III	235	44,51
Score IV	48	9,09

Intervention	n	%
Primary Intervention	474	89,77
Redo	36	6,82
Previous AF Abl. Procedure	18	3,41

Antiarrhythmic Drugs	n
Beta Blocker	428
Amiodarone	123
None	46
Calcium Antagonist	31
Digitalis	14
Other	10
Sotalol	6
Flecainide	5
Dronedarone	4
Propafenone	0

Atrioventricular Node (Rate Control in Atr. Fibrillation)

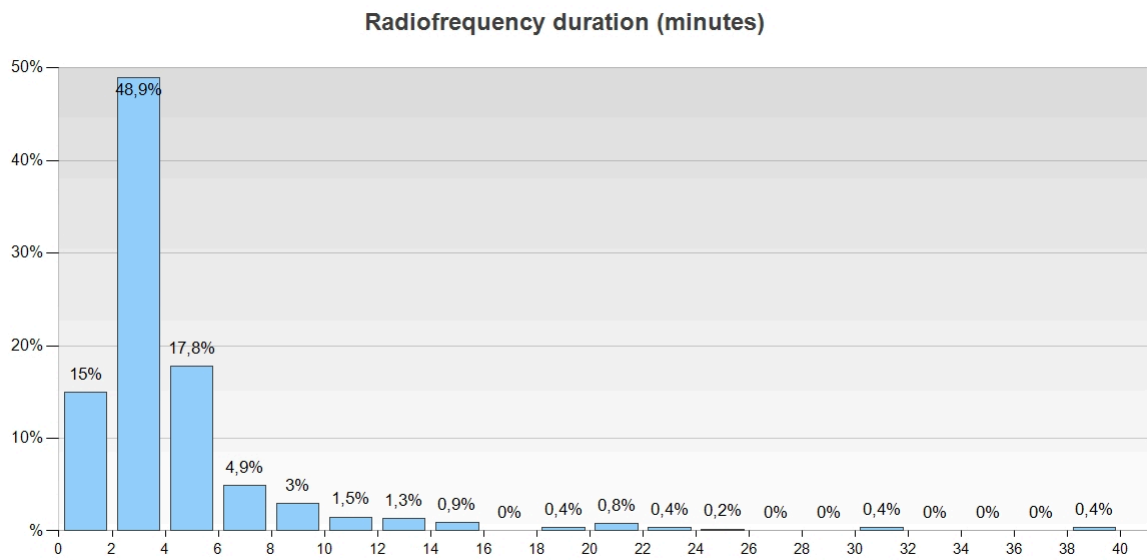
Thromboembolic Risk Factors	n
Hypertension	284
Congestive Heart Failure, LV dysfunction	103
Prior MI, Per. Artery Disease, Aortic Plaque	50
Diabetes	47
Stroke, TIA, Pther Embolic Event	18

Anticoagulation, Antiaggregation	n
Factor Xa-Antagonist	444
Vitamin K-Antagonist	34
None	18
Direct Thrombin Inhibitor	12
Other	12
Aspirin	10
Clopidogrel	2
Ticagrelor	1
Prasugrel	0

CHA₂DS₂-VASc Score	n
Score = 0	6
Score = 1	28
Score = 2	105
Score = 3	170
Score = 4	154
Score = 5	39
Score = 6	20
Score = 7	6
Average Score	3,26

Atrioventricular Node (Rate Control in Atr. Fibrillation)

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	4	120	506	22
Irrigated Technology				375	



Atrioventricular Node (Rate Control in Atr. Fibrillation)

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

	n
Contact force	34

	n
Pulsed field	1

	n
Ethanol	0

Access	n	%
Venous	520	98,48
Trans-septal, Puncture	7	1,33
Arterial	1	0,19
Trans-septal, PFO	0	0
Epicardial, Coronary Sinus	0	0
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Trans-septal Puncture+arterial	0	0
Other	0	0
Total	528	

Mapping	n	%
Conventional	405	76,7
3D Mapping	121	22,92
Lasso	1	0,19
Basket	1	0,19
Non Contact	0	0
HD Mesh	0	0
Other	0	0
Total	528	

Atrioventricular Node (Rate Control in Atr. Fibrillation)

Catheter Steering	n	%
Conventional	527	99,81
Other	1	0,19
Stereotaxis	0	0
Hansen	0	0
Total	528	

Results	n	%
Success	525	99,43
No success	3	0,57

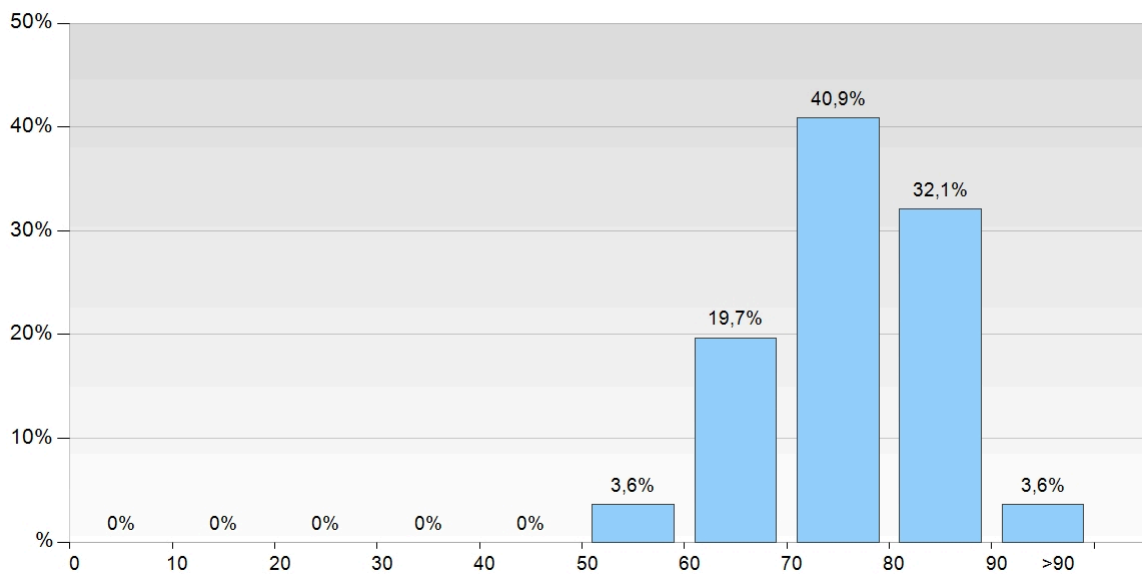
Periprocedural Complications	n
No complications	525
Other	2
TIA	1
Pulmonary Oedema	1
Inguinal Hematoma	0
AV Fistula	0
Pseudoaneurysm	0
Aortic Dissection	0
Arterial Thrombosis	0
Arterial Occlusion	0
Pulmonary Embolism	0
Stroke	0
Myocardial Infarction	0
Pericardial Effusion	0
Tamponade	0
Pneumothorax	0
Hemothorax	0
Transient AV Block	0
High Degree or Complete AV Block	0
Phrenic Nerve Paralysis	0
Infection	0
PV Stenosis	0
Valvular Lesions	0
Death	0

Atrioventricular Node (to resynchronisation)

Ablation of AVN	n
All interventions	148
AVN combined with others	11
AVN only	137

The following statistics include AVN only procedures

Age distribution (years)



Age (years)	min.	Ø	max.
Female	57	80	92
Male	52	75	93
All	52	77	93

Number of patients	n	%
Females	51	37,5
Males	85	62,5
Total	136	

Atrioventricular Node (to resynchronisation)

Cardiopathy (Underlying heart disease)	n	%
Tachycardiomyopathy	32	23,36
Ischemic	24	17,52
Dilated	22	16,06
None	21	15,33
Hypertensive Cardiomyopathy	18	13,14
Valvular	11	8,03
Other	5	3,65
H(O)CM	2	1,46
Congenital	1	0,73
CABG	1	0,73
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	137	

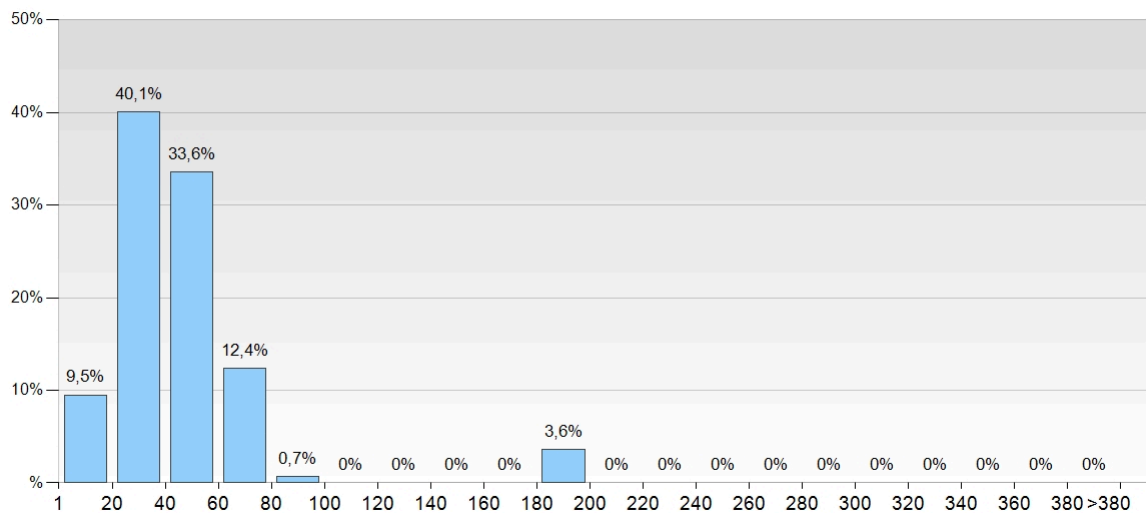
Symptoms	n
Palpitations	78
Dyspnea	61
Other	28
Fatigue	27
Dizziness	17
None	9
Syncope	4
Angina Pectoris	2
SCD	0

Atrioventricular Node (to resynchronisation)

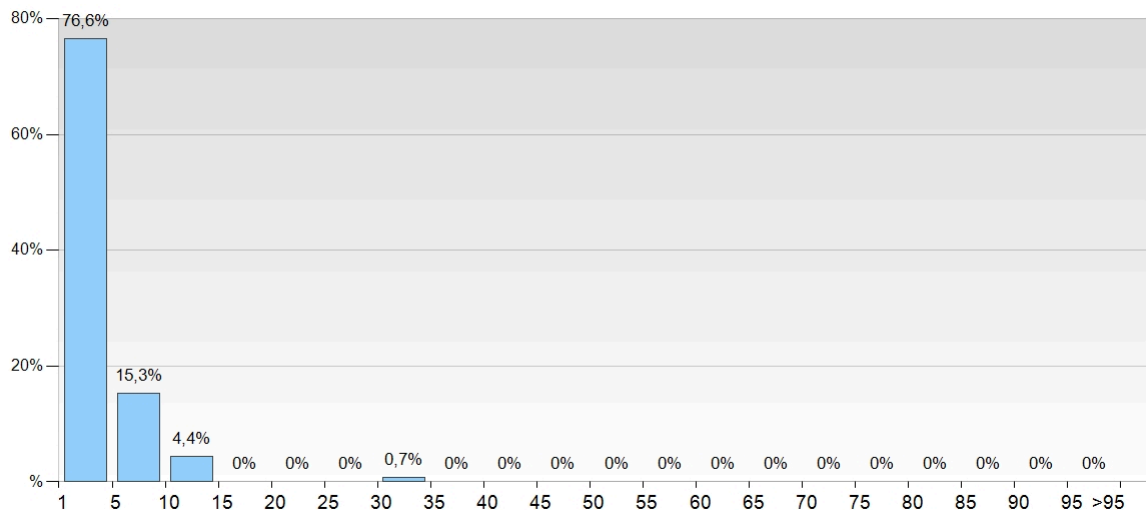
Anesthesia	n	%
Local	131	95,62
Deep	3	2,19
General	3	2,19
Total	137	

Minutes	min.	Ø	max.	n	n ₀ [*]
Investigation time	2	43,5	194	137	0
Fluoroscopy time	1	3,3	30	133	4

Investigation time (minutes)



Fluoroscopy time (minutes)



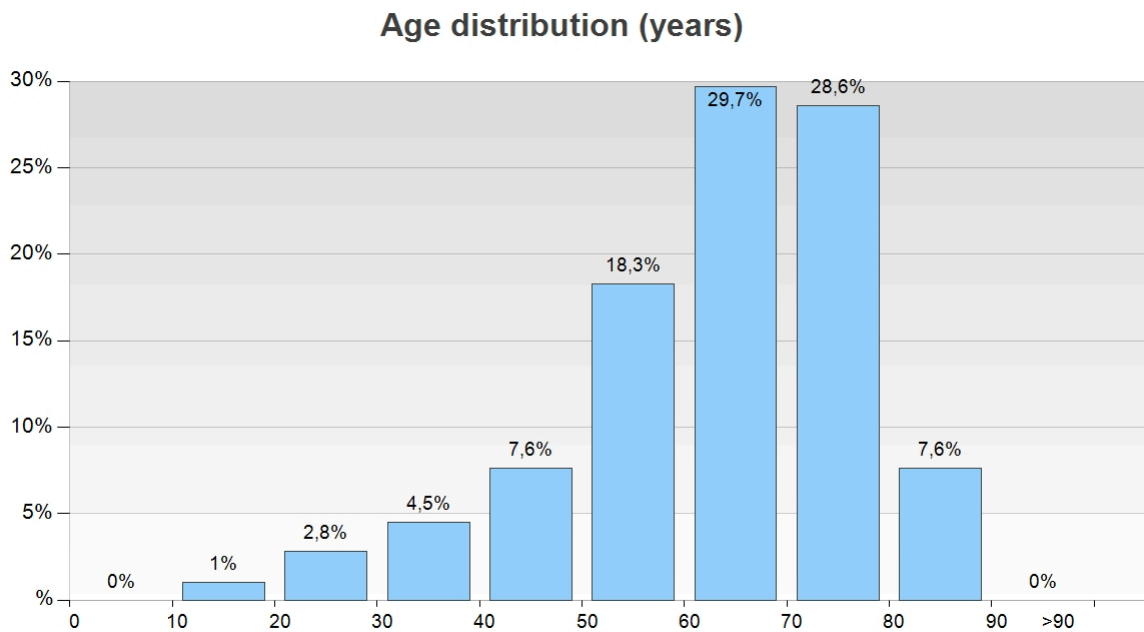
Atrioventricular Node (to resynchronisation)

Periprocedural Complications	n
No complications	137
Inguinal Hematoma	0
AV Fistula	0
Pseudoaneurysm	0
Aortic Dissection	0
Arterial Thrombosis	0
Arterial Occlusion	0
Pulmonary Embolism	0
TIA	0
Stroke	0
Myocardial Infarction	0
Pericardial Effusion	0
Tamponade	0
Pneumothorax	0
Hemothorax	0
Transient AV Block	0
High Degree or Complete AV Block	0
Phrenic Nerve Paralysis	0
Infection	0
PV Stenosis	0
Valvular Lesions	0
Pulmonary Oedema	0
Death	0
Other	0

Ventricular Tachycardia

Ablation of Ventricular Tachycardia (VT)	n
All interventions	310
VT combined with others	20
VT only	290

The following statistics include VT only procedures



Age (years)	min.	Ø	max.
Female	11	58	82
Male	17	65	90
All	11	64	90

Number of patients	n	%
Females	42	15,73
Males	225	84,27
Total	267	

Ventricular Tachycardia

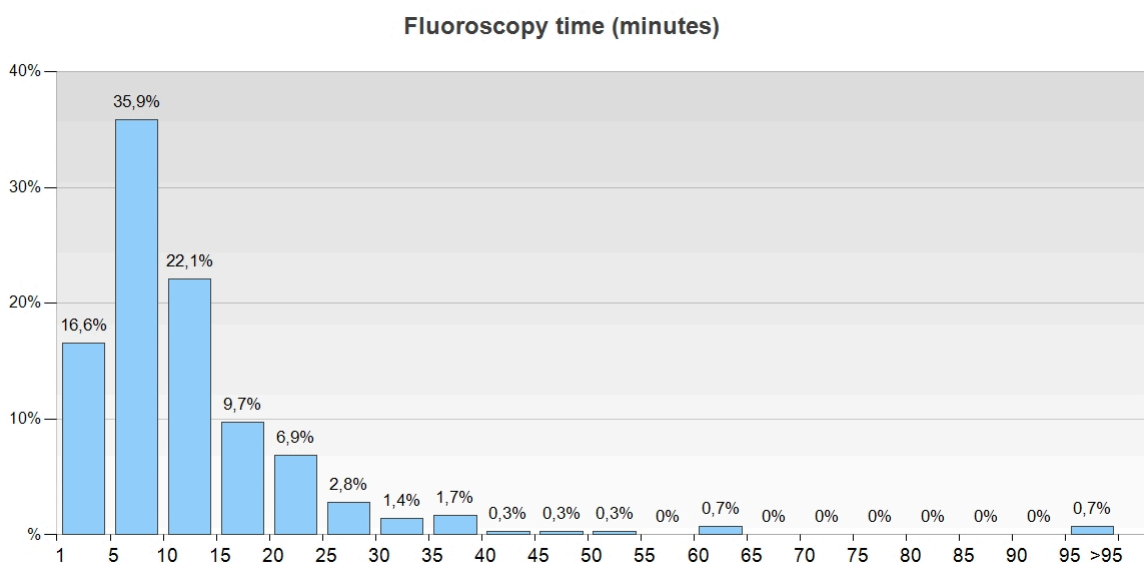
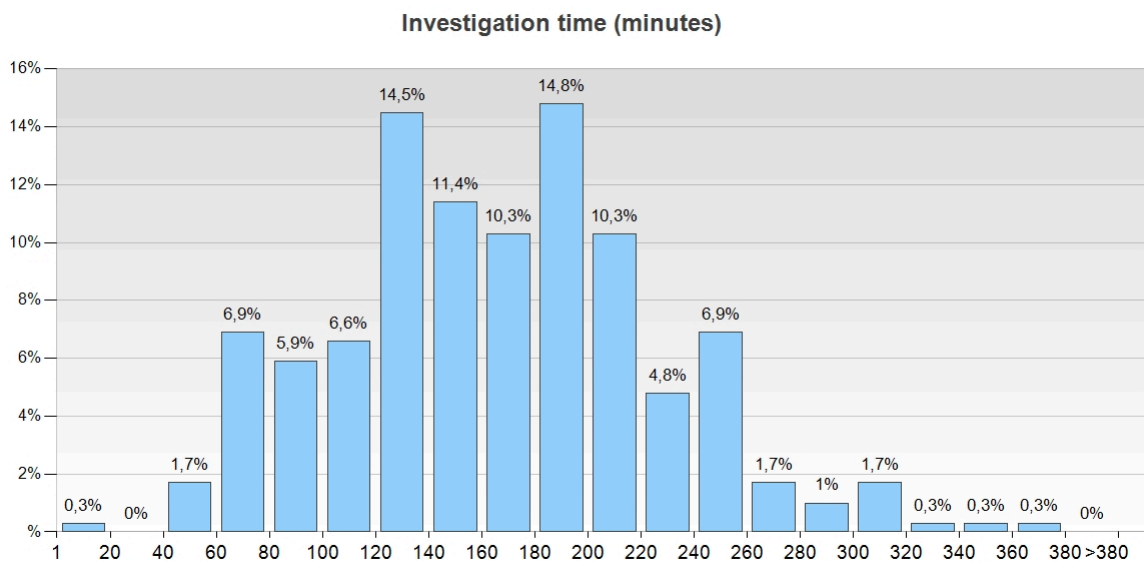
Cardiopathy (Underlying heart disease)	n	%
Ischemic	134	46,21
None	55	18,97
Dilated	26	8,97
RV Cardiomyopathy	16	5,52
Tachycardiomyopathy	14	4,83
Other	14	4,83
Valvular	8	2,76
Congenital	7	2,41
Hypertensive Cardiomyopathy	6	2,07
H(O)CM	5	1,72
Brugada Syndrome	2	0,69
Infiltrative	2	0,69
Early Repolarization Syndrome	1	0,34
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Catecholaminergic Polymorphic VT	0	0
CABG	0	0
Angioplasty	0	0
Post Congenital Surgery	0	0
Post Valvular Surgery	0	0
Total	290	

Symptoms	n
Palpitations	201
Other	53
Dizziness	50
Syncope	45
Dyspnea	45
Fatigue	27
None	10
SCD	8
Angina Pectoris	5

Ventricular Tachycardia

Anesthesia	n	%
Local	112	38,62
Deep	25	8,62
General	153	52,76
Total	290	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	10	163,8	362	290	0
Fluoroscopy time	1	12,3	180	288	2



Ventricular Tachycardia

Type	n
Monomorphic	257
Polymorphic	37

Underlying heart disease	n
Ischemic	95
Non-Ischemic	64
Other	18
AVC	7
Valvular	5

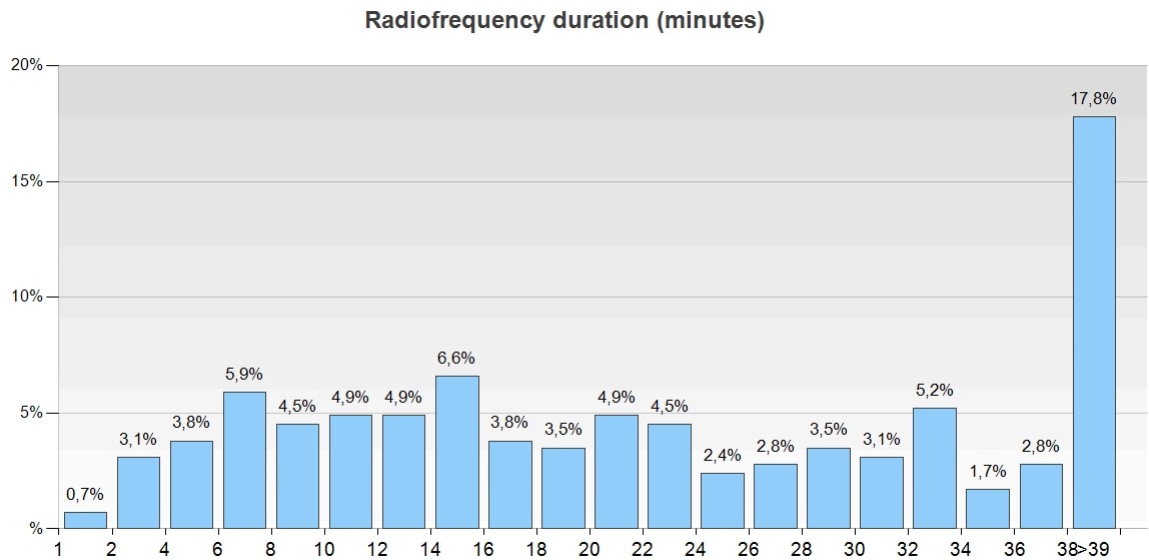
Location	n
Other	152
LVOT / Cusp	60
RVOT / Cusp / PA	51
Mitral Annulus	37
Epicardial LV / RV	20
Left Pap Muscle	13
Tricuspid Annulus	9
Fascicular	9
Parahisian	8
BB Reentry	2
Right Pap Muscle	0

Intervention	n	%
Primary Intervention	208	71,72
Redo	82	28,28

Antiarrhythmic Drugs	n
Beta Blocker	204
Amiodarone	138
None	32
Calcium Antagonist	16
Other	16
Flecainide	10
Sotalol	9
Propafenone	0

Ventricular Tachycardia

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	25	109	267	20
Irrigated Technology				253	



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

	n
Laser ablation	0
Contact force	39
Pulsed field	42
Ethanol	0
Radio ablation	0
Bipolar ablation	0

Number of Induced VT: 534

Ventricular Tachycardia

Access	n	%
Trans-septal, Puncture	124	42,76
Venous	84	28,97
Arterial	41	14,14
Epicardial, Sub-xiphoid	17	5,86
Trans-septal Puncture+arterial	12	4,14
Trans-septal, PFO	9	3,1
Epicardial, Coronary Sinus	2	0,69
Epicardial, Thoracoscopy	1	0,34
Epicardial, Thoracotomy	0	0
Other	0	0
Total	290	

Mapping	n	%
3D Mapping	274	94,48
Conventional	11	3,79
HD Mesh	2	0,69
Other	1	0,34
Basket	1	0,34
Lasso	1	0,34
Non Contact	0	0
Total	290	

Ventricular Tachycardia

Catheter Steering	n	%
Conventional	289	99,66
Stereotaxis	1	0,34
Hansen	0	0
Other	0	0
Total	290	

Results	n	%
All Induces VT Ablated	197	67,93
Target VT Ablated	74	25,52
Failure	19	6,55

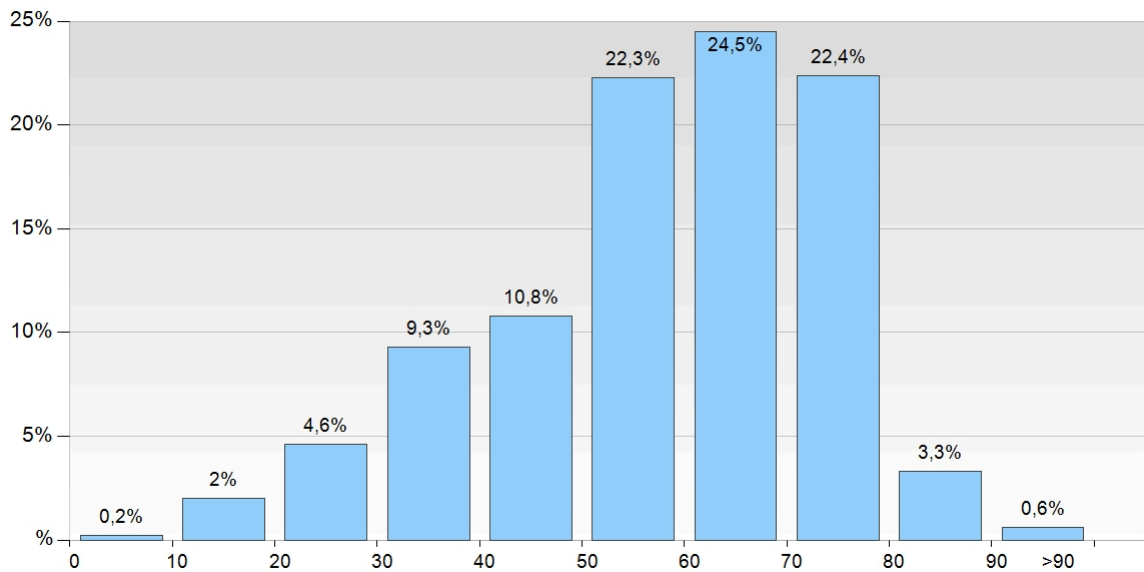
Periprocedural Complications	n
No complications	285
Myocardial Infarction	1
Tamponade	1
Transient AV Block	1
High Degree or Complete AV Block	1
Other	1
Inguinal Hematoma	0
AV Fistula	0
Pseudoaneurysm	0
Aortic Dissection	0
Arterial Thrombosis	0
Arterial Occlusion	0
Pulmonary Embolism	0
TIA	0
Stroke	0
Pericardial Effusion	0
Pneumothorax	0
Hemothorax	0
Phrenic Nerve Paralysis	0
Infection	0
PV Stenosis	0
Valvular Lesions	0
Pulmonary Oedema	0
Death	0

Premature Ventricular Contraction

Ablation of PVC	n
All interventions	567
PVC combined with others	28
PVC only	539

The following statistics include PVC only procedures

Age distribution (years)



Age (years)	min.	Ø	max.
Female	0	54	93
Male	16	61	102
All	0	59	102

Number of patients	n	%
Females	203	38,81
Males	320	61,19
Total	523	

Premature Ventricular Contraction

Cardiopathy (Underlying heart disease)	n	%
None	302	56,03
Ischemic	61	11,32
Dilated	49	9,09
Tachycardiomyopathy	36	6,68
Hypertensive Cardiomyopathy	30	5,57
Other	20	3,71
Valvular	18	3,34
H(O)CM	7	1,3
RV Cardiomyopathy	5	0,93
Congenital	4	0,74
Angioplasty	3	0,56
Infiltrative	2	0,37
Post Valvular Surgery	1	0,19
Brugada Syndrome	1	0,19
Channelopathy long QT	0	0
Channelopathy short QT	0	0
Early Repolarization Syndrome	0	0
Catecholaminergic Polymorphic VT	0	0
CABG	0	0
Post Congenital Surgery	0	0
Total	539	

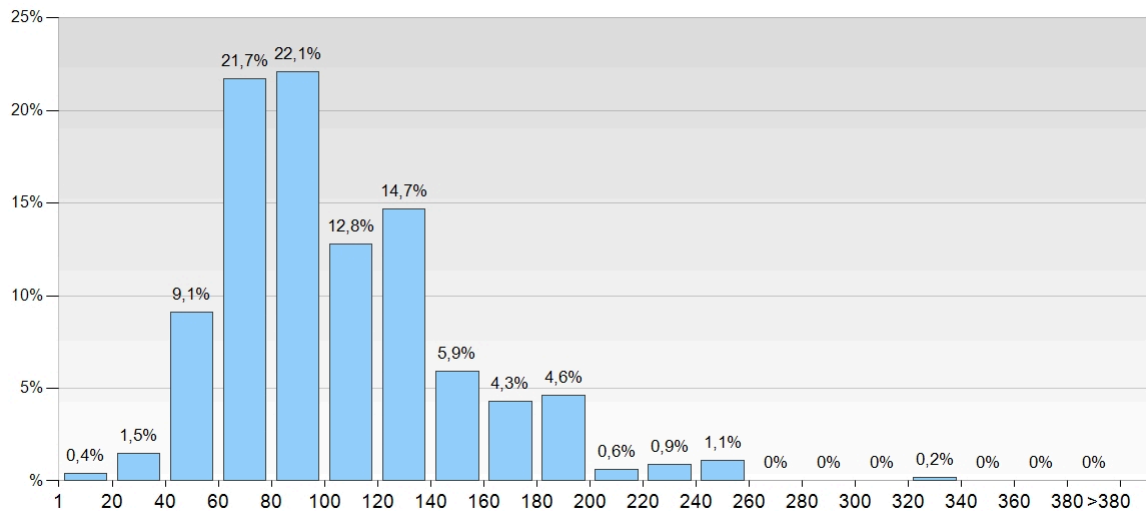
Symptoms	n
Palpitations	393
Dyspnea	84
Fatigue	62
Other	50
None	46
Dizziness	45
Syncope	27
Angina Pectoris	5
SCD	1

Premature Ventricular Contraction

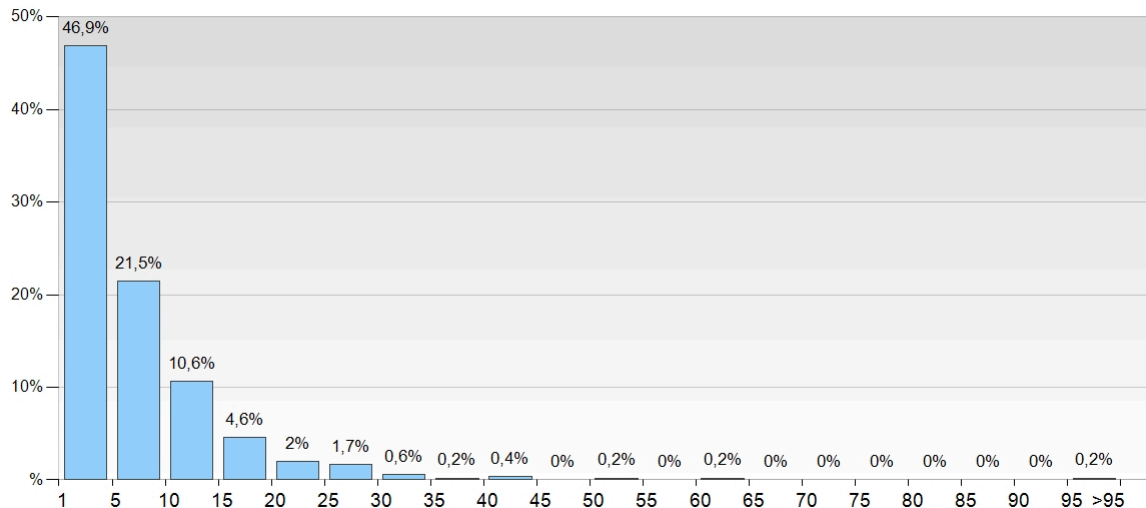
Anesthesia	n	%
Local	477	88,5
Deep	31	5,75
General	31	5,75
Total	539	

Minutes	min.	Ø	max.	n	n ₀ *
Investigation time	11	102,4	330	538	1
Fluoroscopy time	1	7,1	120	480	59

Investigation time (minutes)



Fluoroscopy time (minutes)



Premature Ventricular Contraction

Type	n
Monomorphic	475
Polymorphic	66
Ischemic	7

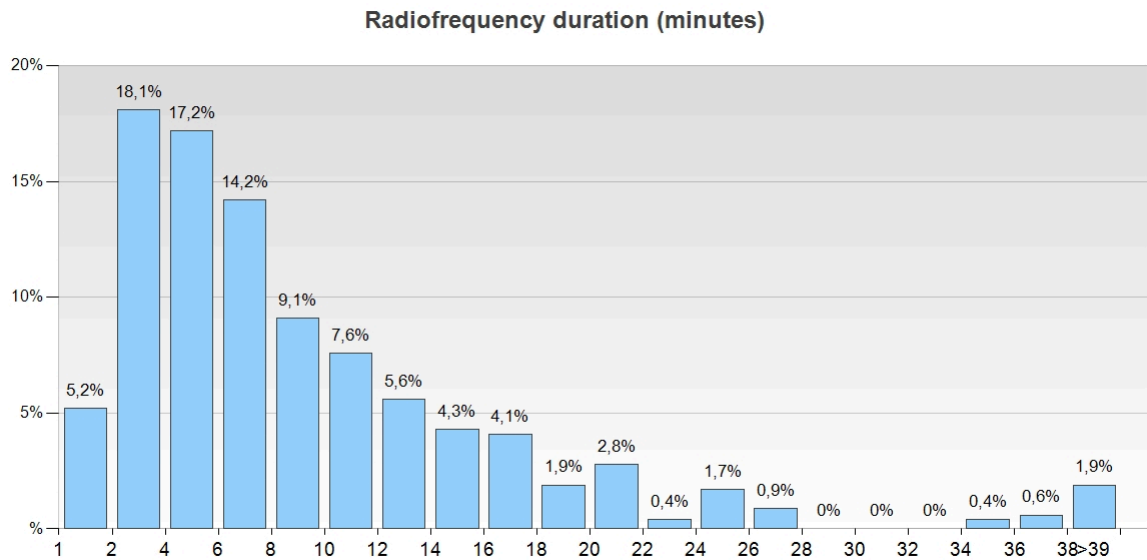
Location	n
RVOT	253
LVOT / Aortic Cusp	185
Other	127
HP System	19
Left Fascicular PVC	10

Site of Ablation	n
Right Ventricle	298
Left Ventricle	291

Intervention	n	%
Primary Intervention	481	89,24
Redo	58	10,76

Premature Ventricular Contraction

Radiofrequency	min.	Ø	max.	n	n ₀ *
Duration (minutes)	1	10	240	515	21
Irrigated Technology				435	



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

	n
Laser ablation	0

	n
Contact force	122

	n
Pulsed field	19

	n
Ethanol	0

	n
Radio ablation	0

	n
Bipolar ablation	0

Premature Ventricular Contraction

Access	n	%
Venous	277	51,39
Arterial	149	27,64
Trans-septal, Puncture	105	19,48
Trans-septal, PFO	3	0,56
Trans-septal Puncture+arterial	3	0,56
Other	1	0,19
Epicardial, Coronary Sinus	1	0,19
Epicardial, Thoracotomy	0	0
Epicardial, Thoracoscopy	0	0
Epicardial, Sub-xiphoid	0	0
Total	539	

Mapping	n	%
3D Mapping	505	93,69
Conventional	28	5,19
HD Mesh	4	0,74
Basket	2	0,37
Lasso	0	0
Non Contact	0	0
Other	0	0
Total	539	

Premature Ventricular Contraction

Catheter Steering	n	%
Conventional	538	99,81
Other	1	0,19
Stereotaxis	0	0
Hansen	0	0
Total	539	

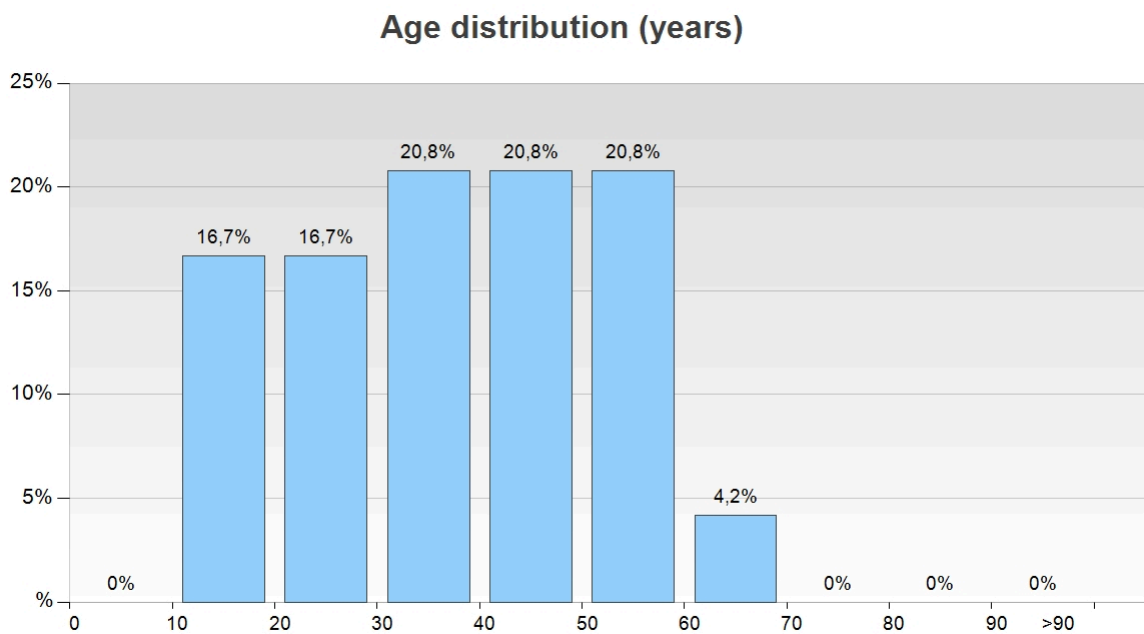
Results	n	%
Success	497	92,21
No Success	42	7,79

Periprocedural Complications	n
No complications	527
Inguinal Hematoma	5
Tamponade	3
Pericardial Effusion	2
Arterial Occlusion	1
Transient AV Block	1
Other	1
AV Fistula	0
Pseudoaneurysm	0
Aortic Dissection	0
Arterial Thrombosis	0
Pulmonary Embolism	0
TIA	0
Stroke	0
Myocardial Infarction	0
Pneumothorax	0
Hemothorax	0
High Degree or Complete AV Block	0
Phrenic Nerve Paralysis	0
Infection	0
PV Stenosis	0
Valvular Lesions	0
Pulmonary Oedema	0
Death	0

Cardioneuro Ablation

Cardioneuro Ablation	n
All interventions	28
Cardioneuro Ablation combined with others	4
Cardioneuro Ablation only	24

The following statistics include Cardioneuro Ablation only procedures

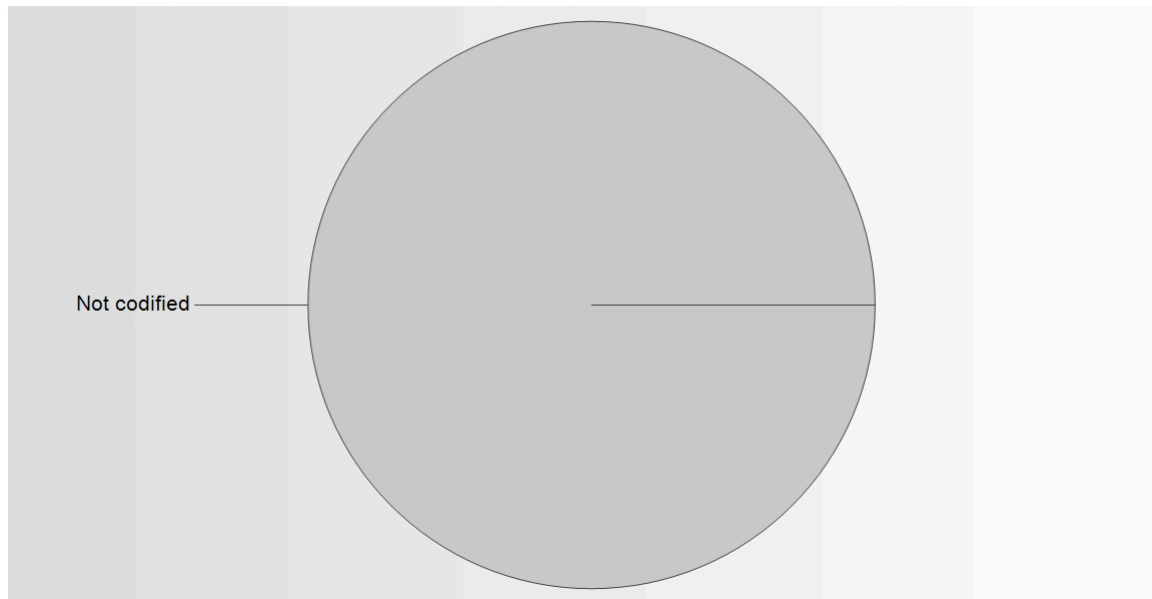


Age (years)	min.	Ø	max.
Female	19	35	63
Male	16	39	55
All	16	38	63

Number of patients	n	%
Females	8	33,33
Males	16	66,67
Total	24	

Completion

Completion



Cause of completion	n	%
Not codified	1	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	1	

The statistics are based on the data from SwissEPnet from 01.01.2025 to 31.12.2025. Its completeness and correctness depends on the complete and correct data entry in the respective hospital. EPS are counted as interventions.

0,4% incomplete records are not included in these statistics.

n_0^* : Investigations were reported with 0 minutes and are not included in these statistics.

Ø depicts the arithmetic mean.

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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)
CN = Cardioneuro Ablation
Other = Other Arrhythmia

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