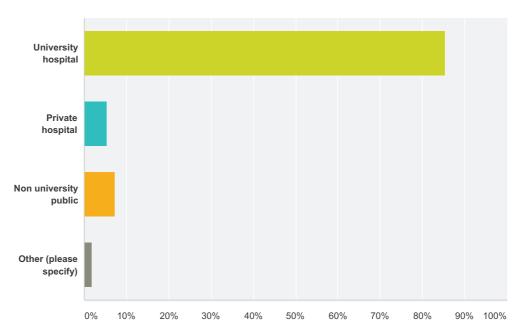
#### Q1 What type of institution do you work in?



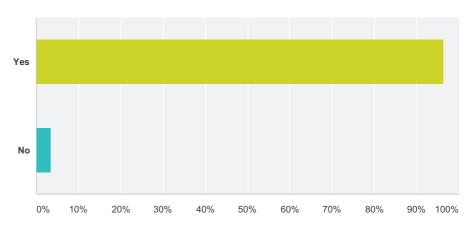


Answer Choices	Responses	
University hospital	85.45%	47
Private hospital	5.45%	3
Non university public	7.27%	4
Other (please specify)	1.82%	1
Total		55

#	Other (please specify)	Date
1	public Hospital in cooperation with university	11/16/2016 9:41 AM

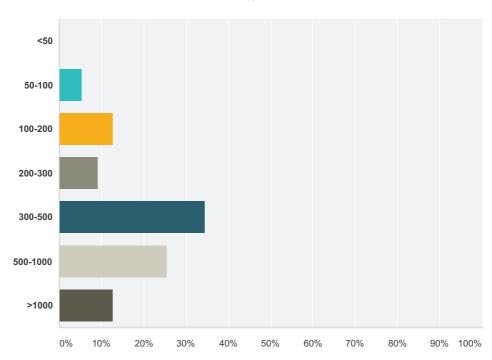
### Q2 Would you like acknowledgement of your centre in the Europace Journal and on the Website?





Answer Choices	Responses	
Yes	<b>96.36%</b> 53	3
No	3.64%	2
Total	55	5

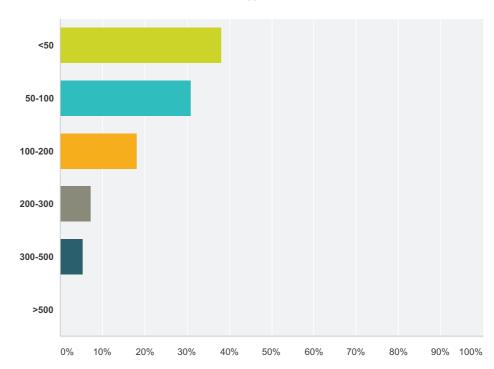
## Q3 What was the total number of catheter ablations for all types of arrhythmias at your institution last calendar year?



Answer Choices	Responses
<50	<b>0.00%</b> 0
50-100	<b>5.45%</b> 3
100-200	<b>12.73</b> % 7
200-300	<b>9.09%</b> 5
300-500	<b>34.55</b> % 19
500-1000	<b>25.45</b> % 14
>1000	<b>12.73</b> % 7
Total	55

## Q4 What was the total number of cryoablations for all types of arrhythmias at your institution last calendar year?





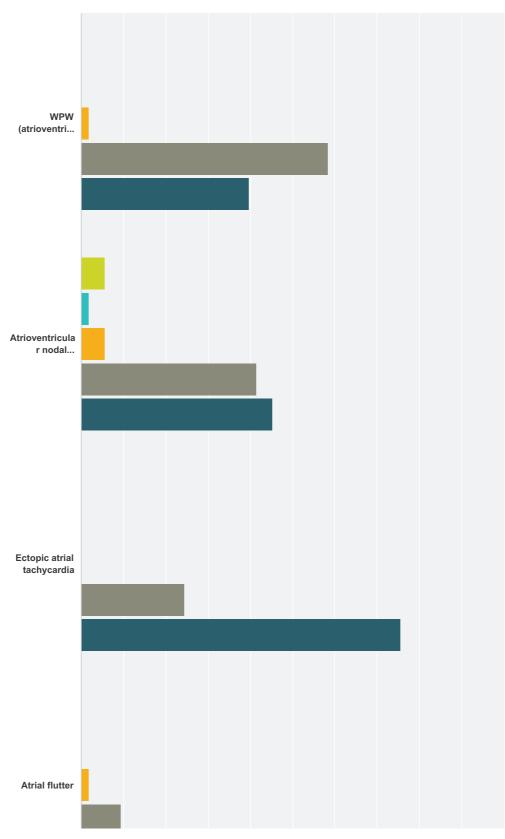
Answer Choices	Responses
<50	<b>38.18</b> % 21
50-100	<b>30.91%</b> 17
100-200	<b>18.18%</b> 10
200-300	7.27%
300-500	<b>5.45%</b> 3
>500	0.00%
Total	55

### Q5 In which country and city is your centre based?

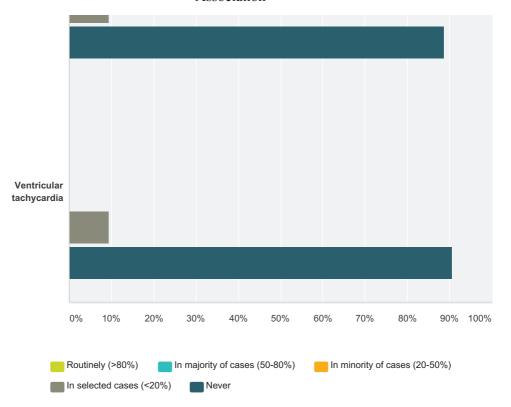
#	Responses	Date
1	Sweden, Stockholm	11/21/2016 9:08 AM
2	Serbia	11/21/2016 6:53 AM
3	Florence Italy	11/19/2016 3:12 AM
4	Norway, Oslo	11/17/2016 8:19 AM
5	Germany, Bad Nauheim	11/16/2016 9:41 AM
6	belgium	11/15/2016 12:42 PM
7	Tirgu Mures, Romania	11/14/2016 9:53 PM
8	Czech Rep.	11/14/2016 6:51 PM
9	Lund, Sweden	11/14/2016 5:08 PM
10	Finland	11/10/2016 7:28 PM
11	Sweden, Uppsala	11/9/2016 2:07 PM
12	Leipzig, Germany	11/8/2016 9:43 AM
13	Norway, Tromsø	11/7/2016 10:54 PM
14	Italy, Pisa	11/7/2016 9:46 PM
15	Italy	11/7/2016 7:57 PM
16	Denmark, Aalborg	11/7/2016 6:20 PM
17	Graz, Austria	11/7/2016 2:42 PM
18	Udine, ITALY	11/7/2016 11:29 AM
19	France - Marseilles	11/7/2016 7:48 AM
20	Sweden	11/7/2016 7:12 AM
21	Italy, Crema (CR)	11/5/2016 8:45 PM
22	Tbilisi, Georgia	11/5/2016 11:57 AM
23	netherlands	11/4/2016 10:01 PM
24	France	11/4/2016 9:48 PM
25	valencia spain	11/4/2016 7:34 PM
26	France - Toulouse	11/4/2016 6:44 PM
27	Germany	11/4/2016 12:58 AM
28	Germany	11/4/2016 12:53 AM
29	Poland	11/3/2016 10:24 PM
30	bournemouth, uk	10/31/2016 5:27 PM
31	Denmark	10/28/2016 8:02 PM
32	Poland, Warsaw	10/27/2016 4:31 PM
33	Leipzig, Germany	10/25/2016 1:00 PM

35	Spain	10/25/2016 8:22 AM
36	Brest FRANCE	10/25/2016 8:05 AM
37	Oslo, Norway	10/25/2016 7:17 AM
38	România, Bucharest	10/25/2016 5:46 AM
39	Zabrze, Poland	10/25/2016 2:20 AM
40	Spain, Madrid	10/25/2016 12:56 AM
41	madrid, spain	10/24/2016 11:02 PM
42	France	10/24/2016 10:47 PM
43	Austria, Linz	10/24/2016 10:38 PM
44	Poland, Rzeszów	10/24/2016 9:07 PM
45	belgium, hasselt	10/24/2016 8:51 PM
46	spain	10/24/2016 7:55 PM
47	SPAIN. HUELVA	10/24/2016 7:33 PM
48	Italy	10/24/2016 7:12 PM
49	Poland	10/24/2016 7:06 PM
50	Norway, Trondheim	10/24/2016 7:01 PM
51	Maastricht, the Netherlands	10/24/2016 6:53 PM
52	Germany	10/24/2016 6:15 PM
53	Bergen, Norway	10/24/2016 6:10 PM
54	Lithuania	10/24/2016 6:08 PM
55	Aberdeen, Scotland	10/24/2016 6:07 PM

### Q7 How often do you use cryoablation for treatment of SVT and VT?

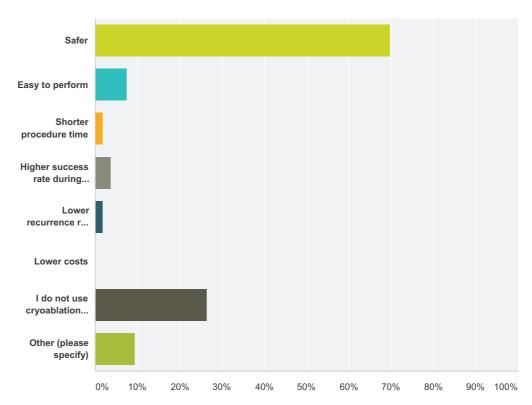


EP Wire Survey on Cryoablation of arrhythmias : a European Survey lead by the European Heart Rhythm Association



	Routinely (>80%)	In majority of cases (50-80%)	In minority of cases (20- 50%)	In selected cases (<20%)	Never	Total
WPW (atrioventricular reentrant	0.00%	0.00%	1.89%	58.49%	39.62%	
tachycardia)	0	0	1	31	21	53
Atrioventricular nodal reentrant	5.66%	1.89%	5.66%	41.51%	45.28%	
tachycardia	3	1	3	22	24	53
Ectopic atrial tachycardia	0.00%	0.00%	0.00%	24.53%	75.47%	
	0	0	0	13	40	5
Atrial flutter	0.00%	0.00%	1.89%	9.43%	88.68%	
	0	0	1	5	47	53
Ventricular tachycardia	0.00%	0.00%	0.00%	9.43%	90.57%	
	0	0	0	5	48	5

## Q8 What are the reasons for choosing cryoablation technique (rather than other energy sources) for treatment of SVT, excluding atrial fibrillation? (choose all that apply)

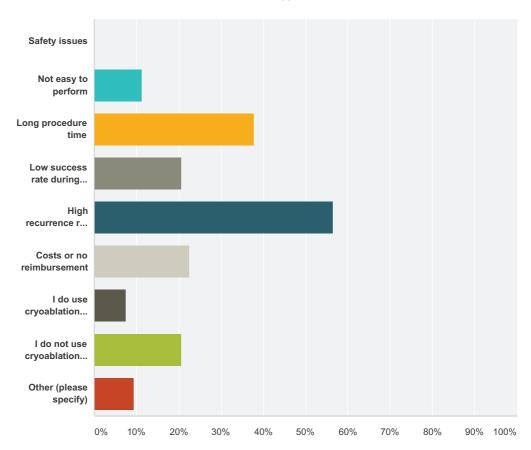


Answer Choices	Responses	
Safer	69.81%	37
Easy to perform	7.55%	4
Shorter procedure time	1.89%	1
Higher success rate during procedure	3.77%	2
Lower recurrence rate during long-term follow-up	1.89%	1
Lower costs	0.00%	0
I do not use cryoablation for treatment of SVT	26.42%	14
Other (please specify)	9.43%	5
Total Respondents: 53		

#	Other (please specify)	Date
1	I do not have cryoablation in my centre	11/21/2016 6:54 AM
2	We use cryo for safety reason to treat selekcted arrhythmias close to His bundle	11/10/2016 7:30 PM

3	Only in select cases of AP close to His	11/9/2016 2:12 PM
4	We only use it in para-Hisian pathways or selected cases of AVNRT in patients < 18 years	11/7/2016 7:15 AM
5	We use it only when the source of arrhythmia is close to His bundle	10/27/2016 4:36 PM

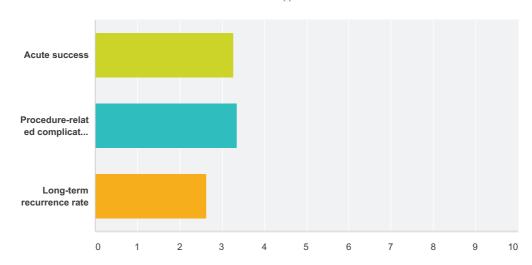
## Q9 What are the reasons that discourage you from using cryoablation technique for treatment of SVT (excluding atrial fibrillation)? (choose all that apply)



Answer Choices	Responses	
Safety issues	0.00%	0
Not easy to perform	11.32%	6
Long procedure time	37.74%	20
Low success rate during procedure	20.75%	11
High recurrence rate during long-term follow-up	56.60%	30
Costs or no reimbursement	22.64%	12
I do use cryoablation routinely for treatment of SVT without any problem	7.55%	4
I do not use cryoablation for treatment of SVT	20.75%	11
Other (please specify)	9.43%	5
Total Respondents: 53		

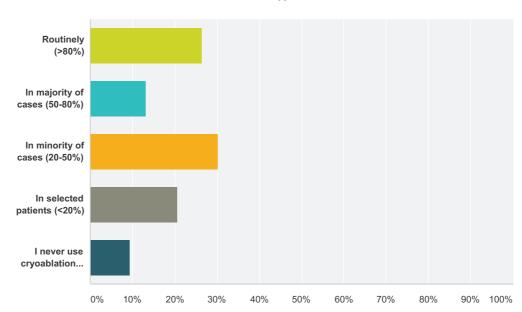
#	Other (please specify)	Date
1	We use cryo for all AVNRT and for selected other SVT	11/21/2016 9:10 AM
2	I do not have cryoablation in my centre	11/21/2016 6:54 AM
3	I haven't cryo aparature while.	11/14/2016 6:58 PM
4	High success rate, low complication rate with RF- no need to change regime	11/9/2016 2:12 PM
5	Technologically very poor catheter: unbends very poorly, stiff.	10/27/2016 4:36 PM

# Q10 What is your experience with acute success, procedure-related complication and long-term recurrence rates for SVT treatment (excluding atrial fibrillation) with cryoablation compared to radiofrequency ablation?



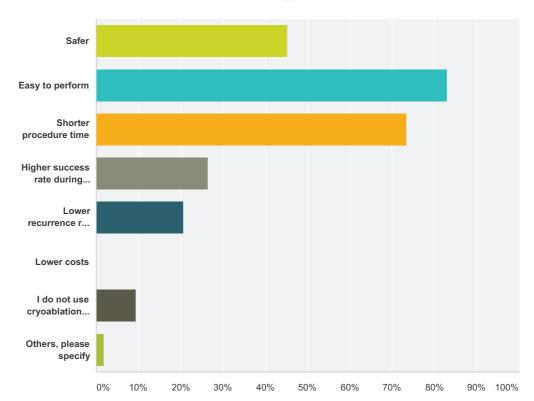
	Higher	Lower	Similar	I have no data	I do not perform cryoablation for SVT	Total	Weighted Average
Acute success	1.89%	26.42%	39.62%	5.66%	26.42%		
	1	14	21	3	14	53	3.28
Procedure-related complication	0.00%	26.42%	37.74%	9.43%	26.42%		
rate	0	14	20	5	14	53	3.36
Long-term recurrence rate	43.40%	11.32%	9.43%	9.43%	26.42%		
	23	6	5	5	14	53	2.64

### Q11 How often do you use cryoablation for treatment of AF?



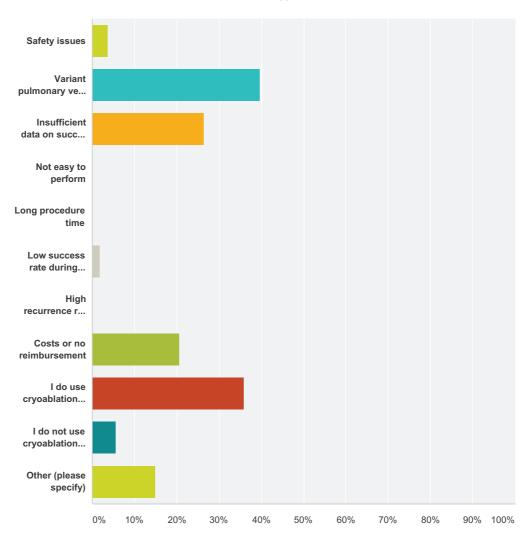
Answer Choices	Responses	
Routinely (>80%)	26.42%	14
In majority of cases (50-80%)	13.21%	7
In minority of cases (20-50%)	30.19%	16
In selected patients (<20%)	20.75%	11
I never use cryoablation for AF treatment	9.43%	5
Total		53

## Q12 What are the reasons choosing cryoablation technique for treatment of AF (rather than other energy sources)? (choose all apply)



Answer Choices	Responses	
Safer	45.28%	24
Easy to perform	83.02%	44
Shorter procedure time	73.58%	39
Higher success rate during procedure	26.42%	14
Lower recurrence rate during long-term follow-up	20.75%	11
Lower costs	0.00%	0
I do not use cryoablation for AF treatment	9.43%	5
Others, please specify	1.89%	1
Total Respondents: 53		

### Q13 What are the reasons that discourage you from using cryoablation technique for AF treatment? (choose all that apply)

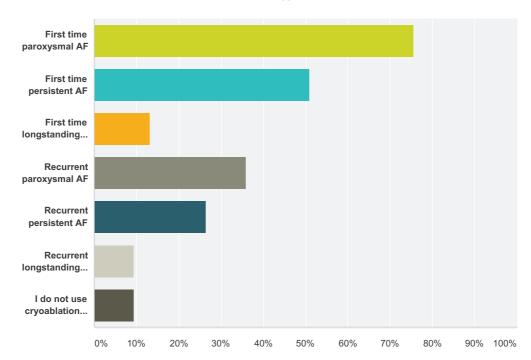


Answer Choices		
Safety issues	3.77%	2
Variant pulmonary vein anatomy	39.62%	21
Insufficient data on success rate in all types of AF	26.42%	14
Not easy to perform	0.00%	0
Long procedure time	0.00%	0
Low success rate during procedure	1.89%	1
High recurrence rate during long-term follow-up	0.00%	0
Costs or no reimbursement	20.75%	11

I do use cryoablation routinely for AF treatment without any problem	35.85%	19
I do not use cryoablation for AF treatment	5.66%	3
Other (please specify)	15.09%	8
Total Respondents: 53		

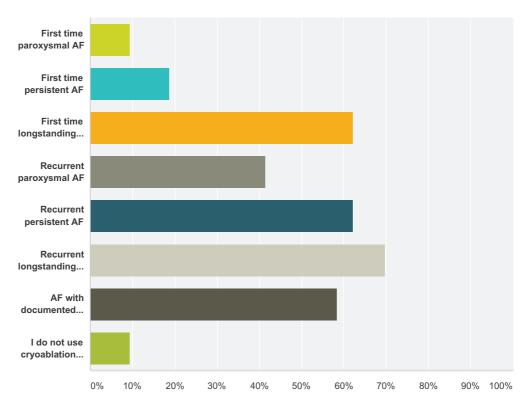
#	Other (please specify)	Date
1	same answer	11/14/2016 7:00 PM
2	High radiation dose	11/10/2016 7:31 PM
3	Concomitant flutter	11/7/2016 10:58 PM
4	Xray exposure	11/7/2016 6:22 PM
5	we do not use cryo for re-ablation	10/28/2016 8:05 PM
6	planned additional Ablation (cavotrikuspid Isthmus, atrial tachycardia)	10/25/2016 8:56 AM
7	Radiation time, concomitant cavotricuspid isthmus ablation	10/25/2016 1:00 AM
8	High fluoroscopy dosage	10/24/2016 6:18 PM

## Q14 In which type(s) of AF do you choose cryoablation technique? (choose all that apply)



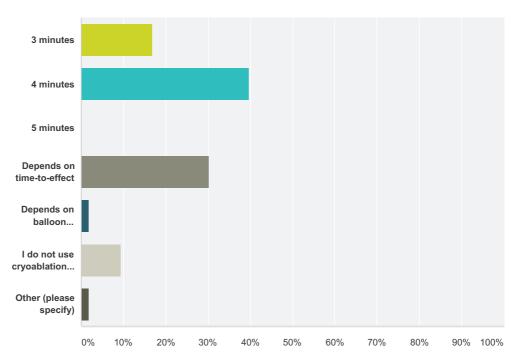
11000011000	Responses	
75.47%	4	
50.94%	2	
13.21%		
35.85%	1	
26.42%	,	
9.43%		
9.43%		
	50.94% 13.21% 35.85% 26.42% 9.43%	

## Q15 In which type(s) of AF do you NOT choose cryoablation technique? (choose all that apply)



answer Choices	Responses	
First time paroxysmal AF	9.43%	Ę
First time persistent AF	18.87%	10
First time longstanding persistent AF	62.26%	33
Recurrent paroxysmal AF	41.51%	2
Recurrent persistent AF	62.26%	3
Recurrent longstanding persistent AF	69.81%	3
AF with documented atrial flutter	58.49%	3
I do not use cryoablation for treatment of AF	9.43%	;
otal Respondents: 53		

### Q16 What is your setting of each freezing during cryoablation for pulmonary vein isolation?

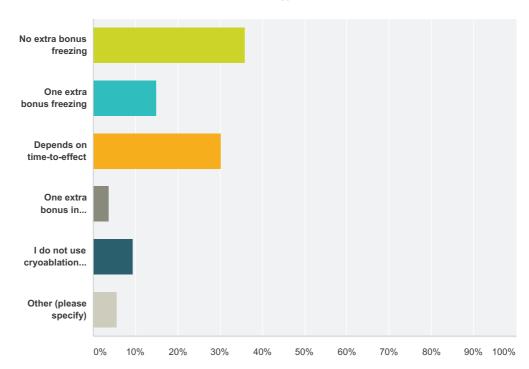


swer Choices	Responses	
3 minutes	16.98%	9
4 minutes	39.62%	21
5 minutes	0.00%	0
Depends on time-to-effect	30.19%	16
Depends on balloon generation (I, II, III generation)	1.89%	1
I do not use cryoablation for treatment of AF	9.43%	5
Other (please specify)	1.89%	1
al		53

#	Other (please specify)	Date
1	3 min	10/24/2016 6:59 PM

## Q17 What is your strategy of extra bonus freezing if the pulmonary vein is isolated after the first energy application?

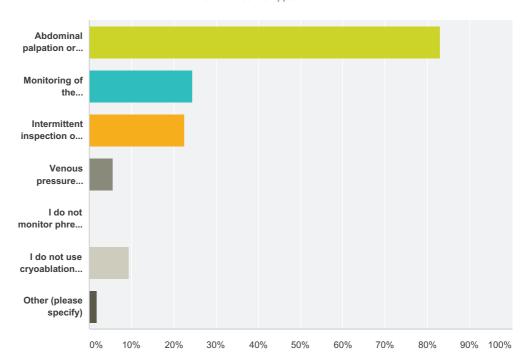
Answered: 53 Skipped: 2



Answer Choices	Responses	
No extra bonus freezing	35.85%	19
One extra bonus freezing	15.09%	8
Depends on time-to-effect	30.19%	16
One extra bonus in selected veins	3.77%	2
I do not use cryoablation for treatment of AF	9.43%	5
Other (please specify)	5.66%	3
Total		53

#	Other (please specify)	Date
1	If Isolation is reached within 60 secs and if -40°C is reached within 60 secs we do not perform a bonus freeze	11/15/2016 12:46 PM
2	2 freezing in every vein, no bonus	10/24/2016 9:15 PM
3	1 extra freeze	10/24/2016 6:59 PM

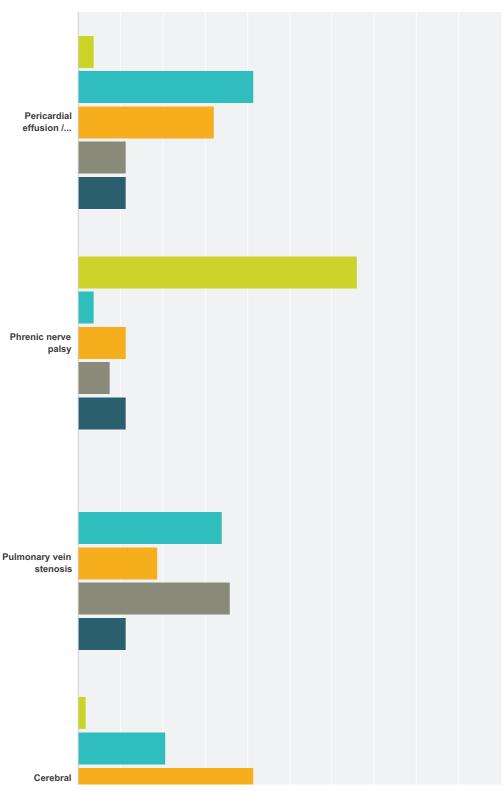
### Q18 How do you monitor the function of phrenic nerve? (chose all that apply)



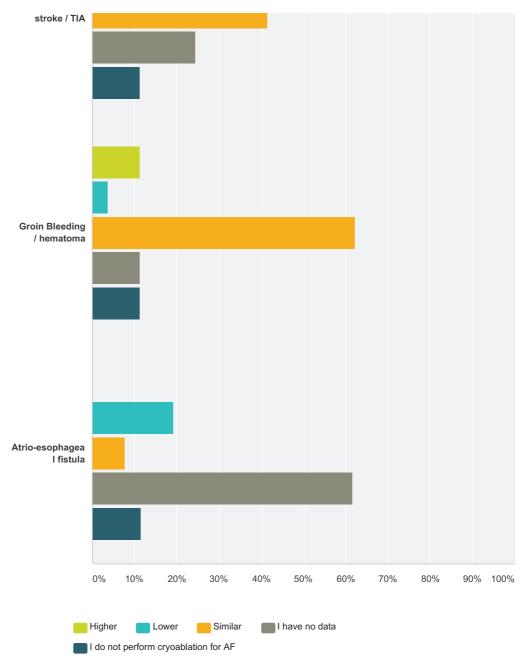
Answer Choices			
Abdominal palpation or visual inspection of diaphragmatic contraction during phrenic nerve pacing	83.02%	44	
Monitoring of the diaphragmatic compound motor action potential (CMAP)	24.53%	13	
Intermittent inspection of fluoroscopy to assess diaphragm movement during phrenic nerve pacing	22.64%	12	
Venous pressure measurement from large vein in subdiaphragmatic region (e.g. femoral vein, inferior caval vein)	5.66%	3	
I do not monitor phrenic nerve function during cryoapplication	0.00%	0	
I do not use cryoablation for treatment of AF	9.43%	5	
Other (please specify)	1.89%	1	
tal Respondents: 53			

#	Other (please specify)	Date
1	Intermittent Inspektion of fluoroscopy during spontaneous breathing	10/24/2016 6:19 PM

## Q19 What is your experience with complication rates during and after AF treatment with cryoablation compared to radiofrequency ablation?



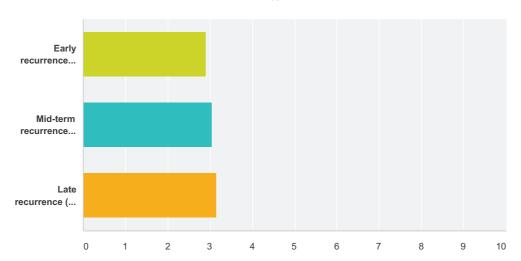
EP Wire Survey on Cryoablation of arrhythmias : a European Survey lead by the European Heart Rhythm Association



	Higher	Lower	Similar	I have no data	I do not perform cryoablation for AF	Total
Pericardial effusion / tamponade	3.77%	41.51%	32.08%	11.32%	11.32%	
	2	22	17	6	6	53
Phrenic nerve palsy	66.04%	3.77%	11.32%	7.55%	11.32%	
	35	2	6	4	6	5
Pulmonary vein stenosis	0.00%	33.96%	18.87%	35.85%	11.32%	
	0	18	10	19	6	5
Cerebral stroke / TIA	1.89%	20.75%	41.51%	24.53%	11.32%	
	1	11	22	13	6	5
Groin Bleeding / hematoma	11.32%	3.77%	62.26%	11.32%	11.32%	
	6	2	33	6	6	5

Atrio-esophageal fistula	0.00%	19.23%	7.69%	61.54%	11.54%	
	0	10	4	32	6	52

## Q20 What is your experience with recurrence rates after a first-time cryoablation procedure for paroxysmal AF compared to radio frequency ablation?



	Higher	Lower	Similar	I have no data	I do not perform cryoablation for AF	Total	Weighted Average
Early recurrence within 3 month	3.77%	30.19%	47.17%	9.43%	9.43%		
	2	16	25	5	5	53	2.91
Mid-term recurrence (3-12	1.89%	22.64%	54.72%	11.32%	9.43%		
months)	1	12	29	6	5	53	3.04
Late recurrence (>12 months)	0.00%	20.75%	52.83%	16.98%	9.43%		
	0	11	28	9	5	53	3.15