# EHRA Registries & EP Network: room for improvement?

Carina Blomström Lundqvist



### **EHRA Research / EP Network**

EHRA Research / EP Network of centres established by previous Scientific Initiatives Committee
 SIC to facilitate European centres collaborative
 research activities and the production of EP wires.

### **E.P Wire Surveys**

- Objectives: to have a global vision of daily EP practice in various European countries through on-line surveys with regards to their adaptation to guidelines, use & access to diagnostic tools, devices or ablation procedures, their management of pats with arrhythmias.
- Short surveys with 12 to 15 questions sent on a monthly basis to centers part of the Research Network.





# 12 EP Wire survey results published in 2012 in Europace J in a section called "EP Wire".

out	cript dead	New Dead line to Europa	Public month	EP wire No	EP wire Topics			Euro pace (2012) 14, 1930-1944 doi:10.1093/europace/eur007		EP WIRE
					Manuscriptwriter (M), Reviewers - surv constructors (R)	ery		Surgical and hybrid atrial fibrillation ablation procedures		
na	Dec 6th		Jan. 2012	1	Ventricular tachycardia ablation in ICD recipient	5/		abtation procedures		
na	Jan 5th		Febr. 2012	2	Out-patient Evaluation and Management of	<b>(3)</b>		_		emer⁴,
1a	Jan 20th		March 2012	3	Practice of CIED follow up in Europe			2012) 14, 1195—1198 EF	WIRE	he
na	March 1st		April. 2012	4	Monitoring in the Management of AF	EUROPEAN SOCIETY OF CARDIOLOGY®	GDE 10.1075	run open urusada		
Febr 1st	March 27th		May. 2012	5	Periprocedural anticoagulation therapy	Cur	ront	practice in out-of-hospital cardiac a	wost	
March 1st	Apr. 25th		June 2012	6	Lead extraction (extended survey).			ment: a european heart rhythm	rest	
April 1st	May 22nd		July. 2012	7	Surgical and hybrid AF ablation procedures	asso	ciat <del>'</del>	Europace (2012) 14, 1666–1669		EF
April 23st	June 26th		Aug. 2012	8	Management of survival of out of hosp cardiac arrest	Alessan Jesper I Scientif	Hastr	doi:10.1093/europace/eus350		
May 14th	July 23rd		Sept 2012.	9	CRT (AF, RBBB, guidelines, nonrespo			How European centres diagnose, t	reat	and
June 7th	Aug 24th		Oct. 2012	10	Atrial fibrillation ablation techniques an strategies	d		prevent CIED infections: Results o	f an l	Europ
July 1st	Sept 25th		Nov. 2012	11	Device infections		<u> </u>	Heart Rhythm Association survey		
July 21st	Oct 18th		Dec. 2012	12	MRI in device patients		BILLE CONTROL OF CARRIES CONTROL	Europace (2013) 15, 141–143 doi:10.1093/europace/eus413	EP	WIRE :6,
Aug. 21st	Nov 14th		Jan. 2013	13	Use of atrial appendage occluder for stroke prevention		Let	t atrial appendage occlusion for strok	0	
Sept 21st	Dec 19th		Febr. 2013	14	Management of patient with Sustained Ventricular Tachycardia		pre	evention in atrial fibrillation in Europe	: resu	ults
Oct 21st	Jan 18, 2013		March 2013	15	X ray exposure for implanting and abla physicians	ting		the European Heart Rhythm Associat	ion	
Nov 21st	Febr	Febr	April.2013	16	Prophylactic Antiarrhythmic		Sur	vey		
	27th	25th			Pharmacological Rx for atrial fibrillation			ory Y.H. Lip <sup>1+†</sup> , Nikolaos Dagres <sup>2†</sup> , Alessandro Proclemer <sup>3</sup> ,		
Jan 9th	March 21st	March 18th	May 2013	17	Managemant Preexcitation syndromes		cond	r Hastrup Svendsen <sup>4</sup> , Laurent Pison <sup>5</sup> , and Carina Blomstrom-Li ucted by the Scientific Initiative Committee, European Heart Ri ciation		(
Jan 28st	April 24rd	April 22th	June. 2013	18	Cardioversion of AF		M3501		JROPEA	N FI

## **Europace Publication extracts**

## Periprocedural anticoagulation therapy for devices and atrial fibrillation ablation



Europace (2012) 14, 741-744 doi:10.1093/europace/eus105 EP WIRE

#### Periprocedural anticoagulation therapy for devices and atrial fibrillation ablation

Gregory Y.H. Lip 14, Alessandro Proclemer<sup>2</sup>, Nikolaus Dagres<sup>3</sup>, Maria Grazia Bongiorni<sup>4</sup>, Thorsten Lewalter<sup>5</sup>, and Carina Blomstrom-Lundqvist<sup>6</sup>. Conducted by the Scientific Initiative Committee, European Heart Rhythm Association

\*University of Bernington Curror for Cardiovanular Sciences, Chy Mospital Bernington, Englind, UK, \*Department of Cardiobursus Science, University Hospital, S. Mats della Misercodi, Udiris, Udiris, Udiris, "Science Cardiology Department, Autoria University Hospital, University of Afters, Advan, Clowac, "Ind Cardiology Department, University Hospital, University of Afters, Advan, Clowac, "Ind Cardiology Department, University Hospital, University Advances," Cardiology Department, University Hospital, University Sciences, Cardiology Department, University Hospital, Cardiology Department, Cardiology Department, University Hospital, C

This EP Wire surveyed clinical practice with regard to the use of antitriombotic therapy in relation to device implantation (patemblers, ICT, resynchronization therapy) and small fibriliation ablation in 71 centres—members of the European Heart Rhythm Association research network. The results of this survey show variation in clinical practice, but researchings some consistency with guidelines and consensus recommendations on the management of periprocedure (device, substoon) antitriombotic therapy.

Keyword

Abiation . Anticoagulation . Atral fibrillation . Devices . Pacemakers

#### Introduction

Perprocedural use of antithrombotic therapy during electrophysiciogical procedures was addressed in a position document, from the European Heart Rhythm Association in 2006, <sup>1</sup> which addressed practice recommendations for pendevice management (e.g. during pacemaker (PPM) implantation] and abation procedure. Since then, additional developments have included the increasing use of implantable cardiovertex-delibriliator.

#### Devices

The median number of devices implanted in 2011 at the centres surveyed was 445 (range 50–1500), with pacertakers, ICO, and CRT being 263 (42–1000), 100 (0–600), and 70 (0–300), respectively. Of the overall number, a median of 25% (0–70) were on a sitamin K antagonist (VKA), with only a minority (mean 1.6%) on a new oral anticoagulant (OAC) in 2011. A median of 42% (8–90) were on artiplatelet therapy, whereas 30% (2–80) were on artiplatelet therapy.

## Current practice of ventricular tachycardia ablation in patients with implantable cardioverter-defibrillators



EP WIRE

#### Current practice of ventricular tachycardia ablation in patients with implantable cardioverter-defibrillators

Nikolaos Dagres<sup>14</sup>, Francesco Cantù<sup>2</sup>, Peter Geelen<sup>3</sup>, Thorsten Lewalter<sup>4</sup>, Alessandro Proclemer<sup>5</sup>, and Carina Blomström-Lundqvist<sup>6</sup>

Second Coulding Department, Asian University Height Libershy of Alexa Servin 1:1840 Halles Albers (200m) Team placeing, Conformable Department, Operated Area, Reports India (1994) Annie Albershy (19

The survey was conducted by the Scientific Initiatives Committee of the European Heart Rhythm Association.

We performed a survey on current practice of verticular tackyourds (VT) abilition in patients with implantable conditionation from the procedure of the production Research Network. The main indication for the procuration fact is the occurrence of multiple shocks or electrical approach is seldent used and mostly only after failthan of endought abilition. The main abilition results are preformed. The epicantial approach is seldent used and mostly only fare failthan of endought abilition. The main abilition results are targeting the client VT only by statuteme registry and abilition, and by targeting fractionated potentials with stillation of modern electrostatemical mapping systems. Still, a considerable number of contract frequency performs the procedure under conventional registry gratefact only.

Keyword

Ventricular tachycardia . Catheter ablation . Implantable cardioverser-defibrillator

#### Introduction

The use of impartable cardioverte-definitions (CDE) has than instally improve the management of passins with strate heart does and life-threating ventricular arrhythmia product with nativequent device activation have an impact not only on the quality but also compatent in animal. Catherina expressed with nativequent device activation have an impact not only on the quality but also compatent in animal. Catherina exclusive activated epicodes and in recommended for ICD patients with recurrent or increasint. Vior VT acms, "Abbough meent developments and as electronisationistic mapping and impact abliction includes and as electronisationistic mapping and impact abliction harbodings have improved the meast of VII abstant," the technique remains demanding. The aim of this survey was to give

gagraphic distribution with responses from 17 countries (6 current from Germany, 5 cach from Bigurn and Spain, 4 chill from Diemark and the United Kingdom, 3 from France, 2 cach from Austrias and the Netheriants, and 1 centre from 9 other countries). The majority of centres had a high degree of expertise. 70% of them prefrom 200 and 21% perform 100—250 database, per year. Despite these high numbers of procedure, VT distionin 100 reciprosity. VT distinction 100 reciprosity of 4 for country perform > 30 such interventions per year, whereas 56% perform 10–30 and 30% perform 0–10 and historyearing year form 10–30 and 10% perform 0–10 and historyearing year.

The main indication for the procedure is multiple (KD shocks (73%) or electrical atoms (83%) (see figure 1). Prophylactic ablaction after (KD implantation aiming at reduction of flower device throughes is rarely performed 85% of the responsing centres never follow the strategy, in addition, 35% never perform ablation date a first appropriate shock for VT.





# Standardise producton of EP wires: "Manual" for EP wires

#### **EP Wire Manual**

How to create an EP Wire Survey

under the responsibility of the EHRA Scientific Initiatives Committee

#### **Table of Contents**

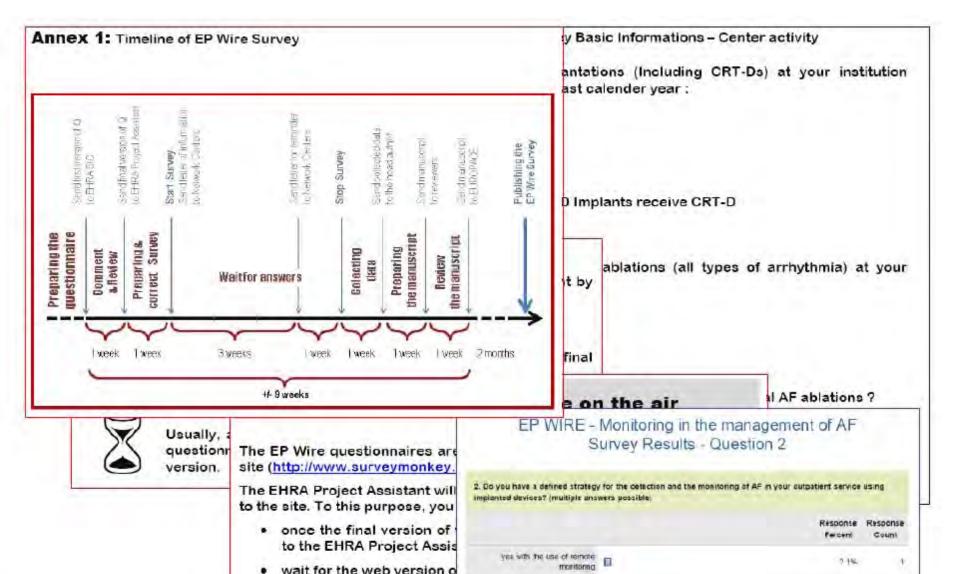
- 1. Aims and outcome
- 2. How to prepare the questionnaire
- 3. How to put the questionnaire on the air
- 4. How to collect the answers
- 5. How to prepare the manuscript
- 6. How to send the manuscript to Europace
- 7. Annexes



www.escardio.org/EHRA



EUROPEAN SOCIETY OF CARDIOLOGY



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37.5%

33.3%

answered question

skipped question

10

16

13

48

when the web version

Assistant will send the

Scientific Initiatives Comr

once the survey is upload questions have been corr

www.escardio.org/EHRA

#### EHRA Electrophysiology (EP) Wire

EP WIRE: A picture of daily Electrophysiology (EP) practice in Europe through online surveys



The EP WIRE Surveys are conducted by the Scientific Initiatives Committee: Carina Blomstrom-Lundqvist (Chair).

Maria-Grazia Bongiorni, Thorsten Lewalter, Jesper Hastrup Svendsen, Dan Dobreanu, Germanas Marinskis, Laurent Pison, Nikolaos Dagres, Alessandro Proclemer, Gregory YH Lip, Philippe Mabo (picture missing), Antonio Madrid (Picture missing)



Prof T Lawsiter Prof J U Svendoen Prof D Gobresou Prof S Meritakis

#### Highlight On



Weekly emails covering important cardiology topics

#### Surveys

#### Title

Current practice on Transvenous Lead extractions

Periprocedural Anticoagulation Therapy

Surgical and Hybrid AF Ablation procedures

Management of Survival of Out of Hospital Cardiac Arrest



Become a 2013 EHRA member



Discover the ESC





#### Periprocedural Anticoagulation Therapy

Below are the results of the survey as well as the publication on the topic.



This EPWire surveyed clinical practice with regard to the use of antithrombotic therapy in relation to device implantation (pacemakers, ICT, resynchronization therapy) and atrial fibrillation ablation in 71 centres—members of the European Heart Rhythm Association research network.

The results of this survey show variation in clinical practice, but reassuringly some consistency with guidelines and consensus recommendations on the management of periprocedure (devices, ablation) antithrombotic therapy.

The results of the survey are here

The published article is here









#### Research Network Partners List

Network of centres collaborating in the performance of registry initiatives and research studies





#### Would your centre like to join the network?



As part of the Research Network Partners list, your centre is entitled to participate in the EP WIRE SURVEYS.

The results of each survey are published in a special section of the EP-Europace Journal in a section called "EP Wire"

All centres listed below have an active programme of clinical and research activities.

Country	Director	Hospital	Training Fellowship
Germany	Dr Simon Helge	Klinikum Coburg	Yes
Germany	Prof. Dietrich Andresen	Vivantes Klinikum Am Urban Krankenhaus Urban	
Germany	Prof.Dr. Gunter Breithardt	University Hospital Münster	Yes
Germany	Prof. Dr. Burghard Schumacher	Herz- und Gefäßklinik GmbH	Yes
Germany	Prof Christian Wolpert	University Hospital Mannheim	Yes
Germany	Prof. Gerhard Hindricks	University of Leipzig, Heart Centre	Yes
France	Dr. Franck Halimi	CMC Party 2	Yes

#### Highlight On



Become a 2013 EHRA member



Discover the ESC eLearning platform in heart rhythm



ESC Journals @ OUP: iPad-iPhone App now available













#### Scientific Research Registry Reply Form

A 2 1			A	
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0 100	Om om	TOTAL	$\sim$	paraco

I wish to enroll

OYes ONo

EHRA survey basic informations:

Number of ICD implantations (including CRT-Ds) at your institution (including box changes) last calender year:







### **SOME STATISTICS – 152 active centres**

Month - EP WIRE	Title of the Survey	Answers <b>•</b>
January - EP WIRE 1	Ventricular Tachycardia ablation in ICD Recipients	40
February -EP WIRE 2	Out-Patient Evaluation and management of patients with ventricular premature beats or non- sustained ventricular tachycardia	46
March -EP WIRE 3	Current practice of ventricular tachycardia ablation in patients with implantable cardioverter- defibrillators	40
April - EP WIRE 4	Monitoring in the management of atrial fibrillation	43
May - EP WIRE 5	Periprocedural anticoagulation therapy	73
June - EP WIRE 6	Lead Extraction	155
July - EP WIRE 7	Surgical and hybrid AF Ablation Procedures	33
August - EP WIRE 8	Management of Survival of out of Hospital Cardiac Arrest	53
September - EP WIRE 9	CRT	48
October - EP WIRE 10	Atrial Fibrillation Techniques and strategies	50
November - EP WIRE 11	Device infections	48
December - EP WIRE 12	MRI in Device patients	53

## Promote participation



#### ESHIDFEAN HEAST RIPYTHM ASSOCIATION \*\* Legisles build by Iti:





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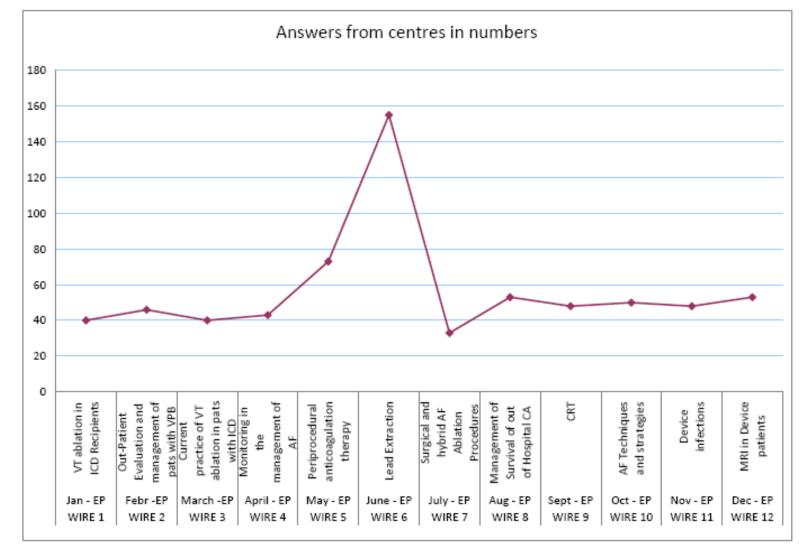
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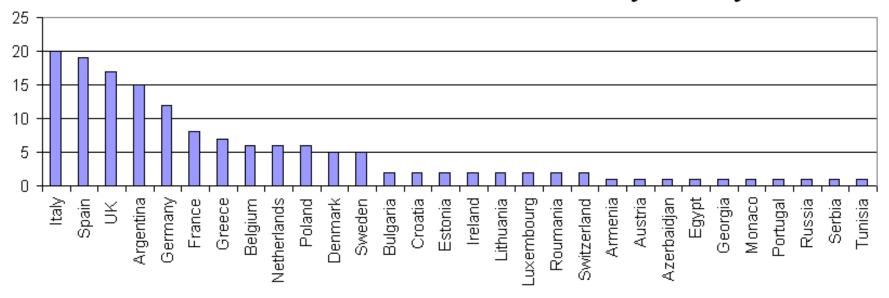


- No of centres replying for each EP wire during 2012 : mean 53 centres per survey.
- No of centres approached for EP wires surveys: 230 centres
- Next EP wires survey will be sent to 250 centres 20 new centres from South America!!



## Total no EP Network centres 152

#### Number of EP Network centres by country







	87
	123
Europace J:	127
Total hits including abstr, HTML, pdf:	180
rotal files including about, i i file, pur.	186
	194
	231
	246
	280
	323
	375
	394
	483



## REGISTRIES

EUR <i>Observational</i> Research Programme	No Centers	No Expected Patients
Atrial Fibrillation Ablation - Pilot Phase - Long-term Phase	72 150	1.410 (Presented at Hot Line ESC 2012) 2.500
Atrial Fibrillation General - Pilot Phase - Long-term Phase	100 250	5.000 12.500
Lead Extraction (ELECTRa)	100	3.000



NEW: AF epicardial ablation registry, Renal denervation registry





### EURObservational Research Programme



**Atrial Fibrillation Ablation** 

**Centre activity & Enrolment status** 

EHRA Summit – April 9<sup>th</sup>, 2013





## Atrial Fibrillation Ablation Long-Term

- Objectives:, to describe clinical epidemiology, management used in pats undergoing AF ablation procedure and real-life results.
- Target: 3000 patients
- 54 ESC member countries invited in 2011
- Methods: consecutive enrolment of minimum 20 pats per centre - maximum 50 pat.
- Enrolment period: During whole year





### **National Coordinators**

Executive Committee Members	Countries	National Coordinators
	CYPRUS	Dr. Panayiotis Avraamides
	EGYPT	Dr. Mostafa Nawar
	FRANCE	Prof. Frederic Anselme
E. Aubala	GREECE	Dr. Michalis Efremidis
E. Arbelo	ITALY	Prof. Fiorenzo Gaita
	LEBANON	Dr. Maurice Khoury
	PORTUGAL	Dr. Pedro Adragao
	SPAIN	Dr. Julian Perez Villacastin
	BULGARIA	Assoc. Prof. Tosho Balabanski
	LATVIA	Assoc. Prof. Oskars Kalejs
E. Pokushalov	LITHUANIA	Assoc. Prof. Aras Puodziukynas
E. POKUSNAIOV	ROMANIA	Dr. Radu Ciudin
	<b>RUSSIAN FEDERATION</b>	Dr. Evgeny Mikhaylov
	UKRAINE	Prof. Oleg Sychov
	AUSTRIA	Clemens Steinwender
	CZECH REPUBLIC	Prof. Josef Kautzner
J. Kautzner	GERMANY	Prof. Thorsten Lewalter
J. Nautziiei	HUNGARY	Dr. Laszlo Geller
	POLAND	Prof. Zbigniew Kalarus
	SLOVENIA	Dr. Matjaz Sinkovec
	BELGIUM	Dr. Georges Mairesse
	FINLAND	Prof. Pekka Raatikainen
C. Blomström Lundqvist	ISRAEL	Prof. Michael Glikson and Dr. Moti Haim
c. biomstrom Lunuqvist	NETHERLANDS	Dr. Serge Trines
	SLOVAKIA	Assoc. Prof. Robert Hatala
	UNITED KINGDOM	Prof. John Morgan



COUNTRY	Cent	res	Enrolled pat	5
COUNTRY	Registered	Active	Up to 4 April 20	013
POLAND	13	12	207	
SPAIN	26	12	116	
RUSSIAN FEDERATION	10	7	115	
NETHERLANDS	6	5	72	
FINLAND	5	2	62	
PORTUGAL	5	4	54	935
CZECH REPUBLIC	4	2	51	enrolled
GREECE	8	3	38	
UNITED KINGDOM	2	2	32	patients
BELGIUM	1	1	27	since
UKRAINE	4	2	27	
ITALY	10	1	26	March
SLOVENIA	1	1	24	2012
AUSTRIA	2	1	20	
GERMANY	10	2	20	
BULGARIA	2	1	17	
EGYPT	5	3	13	
LATVIA	1	1	13	
LITHUANIA	2	1	1	
CYPRUS	1			
FRANCE	3			
HUNGARY	4			
ISRAEL	6			
LEBANON	2			
ROMANIA	2			
SLOVAKIA	2			
Total	137	63	935	<b>X</b>

## REGISTRIES

- In progress : ELECTRa
   (European Lead Extraction Controlled Registry)
- Yet to come :
- Renal Denervation

- TehAFaR (Thoracoscopic Epicardial AF Ablation Registry)
- WPW Registry





# European Lead Extraction Controlled Registry (ELECTRa)

#### **AIMS:**

Register indications, techniques, success rates, safety and follow-up used in various countries.

Improve healthcare standards by generating data from a

high number of centres across Europe.

Preliminary results disclosed at Europace Congress
June 2013





# European Lead Extraction Controlled Registry (ELECTRa)

- EORP -EUR Observational Research Programme
  - Platform, Data management
  - Research fellow
  - First centre based registry
  - Regional coordinators
  - 3500 consecutive pats; 103 centres; FU 12 mo.
- Nov. 1<sup>st</sup> 2012 inclusion started (9 mo period)





## **Electra Registry**



#### **EURObservational** Research Programme

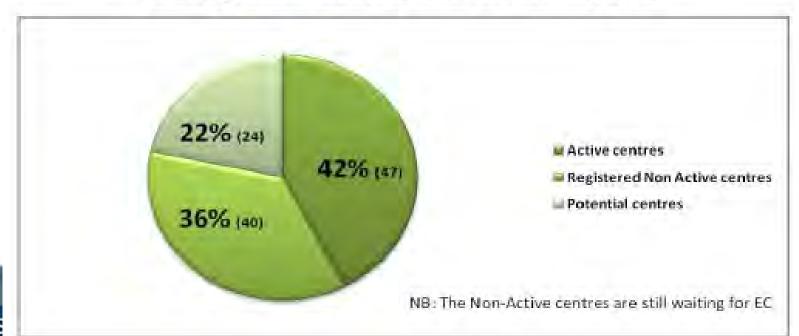
ELECTRa (European Lead Extraction ConTRolled) Registry



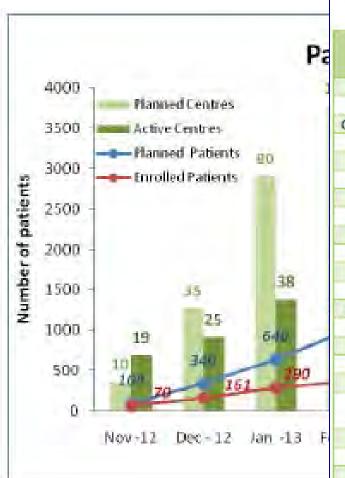
- 3500 consecutive pats; 103 centres; FU 12 mo.
- 1st centre based registry

NEWSLETTER N°3 - March 2013

#### Active/potential centres Status for February 2013



## **Electra Registry**



Status on l	March	13th,	2013
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Country	Centres	Active	Site Questionnaire	Enrolled	Signed off	Locked
AZERBAIJAN	1	0	0	-0	0	0
BELGIUM	4	Z	2	11	9	6
CZECH REPUBLIC	1	0	0	0	0	0
DENMARK	3	3	0	25	12	4
FINLAND	2	0	0	D	0	0
FRANCE	9	9	4	73	47	24
GERMANY	8	2	2	11	3	3
GREECE	4	1	1	1	0	0
HUNGARY	2	1	1.	13	7	6
ISRAEL	1	1	1	1	0	0
ITALY	23	11	g	125	88	81
LITHUANIA	1	1	1	3	2	2
NETHERLANDS	1	0	0	0	0	0
NORWAY	2	0	0	0	0	0
POLAND	6	6	3	110	67	33
PORTUGAL	1	0	0	0	0	0
ROMANIA	1	0	0	0	0	0
RUSSIAN FEDERATION	1	1	i	7	4	4
SLOVENIA	1	0	0	0	0	0
SPAIN	6	4	4	12	8	2
SWEDEN	3	3	3	16	3	1
SWITZERLAND	3	1	1	4	0	0
UKRAINE	1	1	1.	5	5	5
UNITED KINGDOM	1	0	0	0	0	0
TOTAL	86	47	34	417	255	171

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## **Electra Registry**



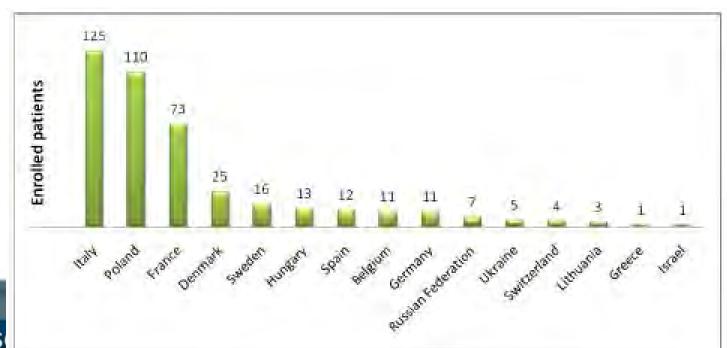
#### **EURObservational** Research Programme

ELECTRa (European Lead Extraction ConTRolled) Registry



- 3500 consecutive pats; 103 centres; FU 12 mo.
- 1st centre based registry

NEWSLETTER N°3 - March 2013







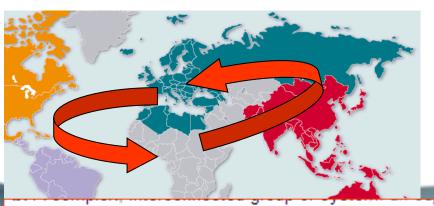
### **EP Network centres**

## - room for improvemens?



- More efforts to acknowledge / promote continued activities interactions
  - EP wires, EHRA registries, research studies.
- Motivation Acknowledgements EP wires
  - On EHRA website.
  - Will be in EP journal
  - Diplomas to 100 top most active centres.
  - T-shirts offered to top 30 centres at Europace in Athens.
  - Breakfast Meeting at Europace in Athens June 24th at 07h30

Research Network Partners List



Country	Director	Hospital	Training Fellowship
Armenia	Dr. Smbat Jamalyan	Arrythmology Cardiology Centre of Armenia	Yes
Austria	Dr. Helmut Puererfellner	Elisabethinen Hospital Linz	Yes
Austria	Prof. Burkert Pieske	Medical University of Graz	
Azerbaijan	Dr. Farid Aliyev	Merkezi Klinika Hospital, Heart Center	Yes
Belgium	Prof Luc De Roy	Cliniques universitaires UCL, Mont-Godinne	Yes
Belgium	Dr. Maximo Rivero-Ayerza	Ziekenhuis Oost Limburg	
Belgium	Dr. Marnix Goethals	Heilig Hartziekenhuis Roeselare-Menen VZW	Yes
,		Ghent	

c. An extended group of people with similar interests or concerns who interact and remain in informal contact for mutual assistance or support. Ghent
Yes
sels
Yes
sberg, University of
Yes

# **EP Network centres** - room for improvemens?



- Electra first EORP admin registry with centre based regional coordinators
  - Direct communication with centres
  - More involvement from EP National Assoc and WG?
- Decentralise admin. of small registries?
  - USE EORP infrastructure/platform but EHRA manpower
- Centralised Ethical committee application process – time delay
- Reimbursement for follow-ups needed (ex UK)





## **EHRA**

(European Heart Rhythm Association)

# Join the Research Network of Centres





