6ο ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ ΕΝΩΣΗΣ ΕΛΕΥΘΕΡΟΕΠΑΓΓΕΛΜΑΤΙΩΝ ΚΑΡΔΙΟΛΟΓΩΝ ΕΛΛΑΔΟΣ

Ο ρόλος της φλεκαϊνίδης στην αντιμετώπιση της κολπικής μαρμαρυγής και των υποτροπών της

ΔΗΜΗΤΡΙΟΣ ΛΥΣΙΤΣΑΣ, MD, PhD, MRCP
Επεμβατικός Ηλεκτροφυσιολόγος,
Κλινική 'Αγιος Λουκάς'
Θεσσαλονίκη

Η ΚΟΛΠΙΚΗ ΜΑΡΜΑΡΥΓΗ ΕΙΝΑΙ ΣΟΒΑΡΗ ΥΠΟΘΕΣΗ

Θνητότητα **χ 2** (Framingham)

Άντρες χ 2

Γυναίκες χ 3

Αιφνίδιος καρδιακός θάνατος

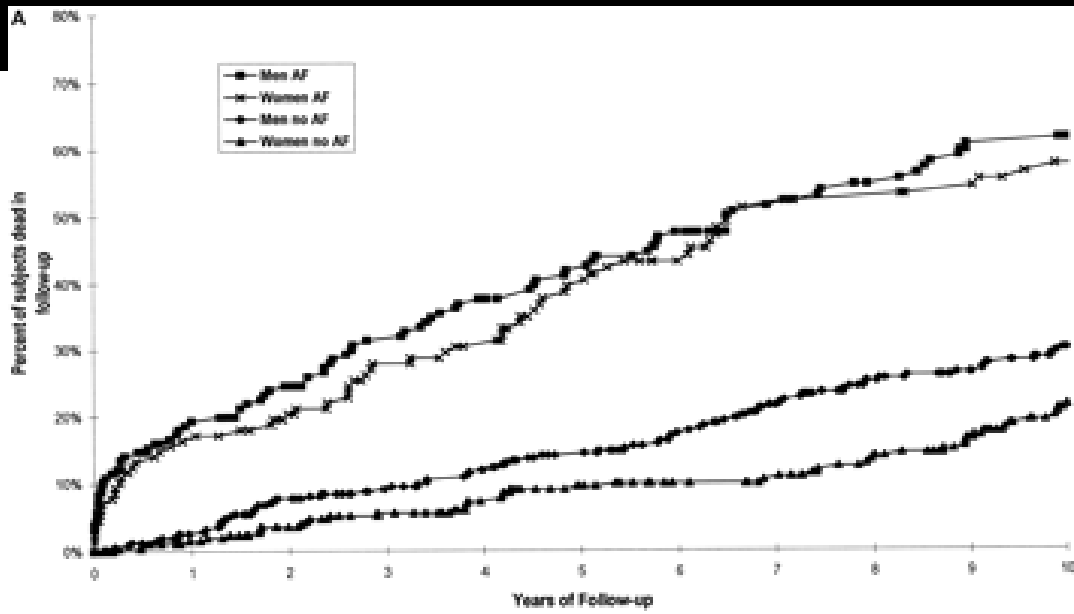
χ 2 (Lin, JAMA 2013)

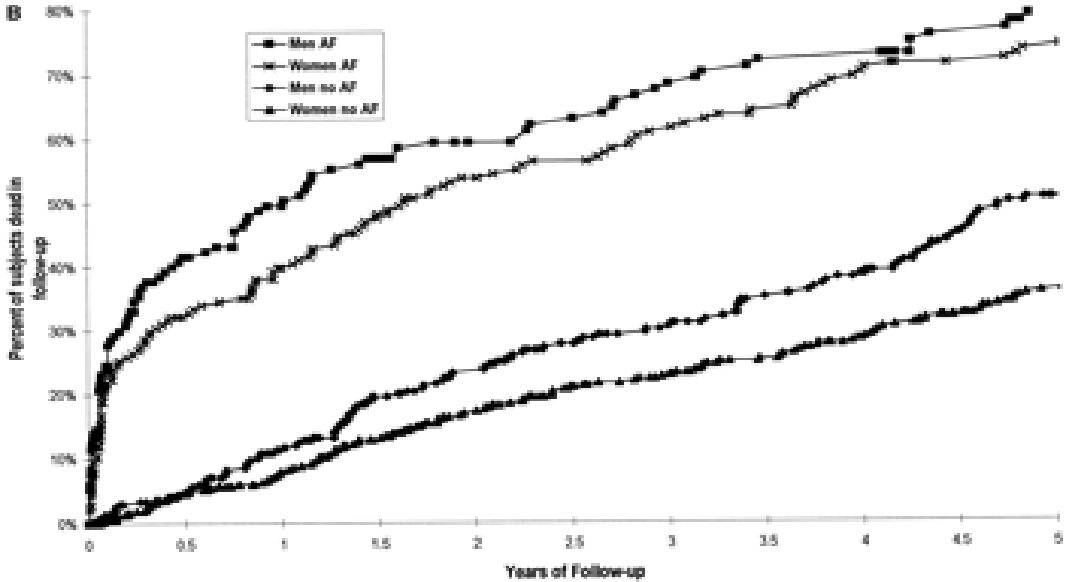
ΑΑΕ **χ 5** (Framingham)

Καρδιακή ανεπάρκεια (SOLVD)

Μόνιμη αναπηρία μετα από ΑΑΕ

Πιθανότητα νέου ΑΑΕ



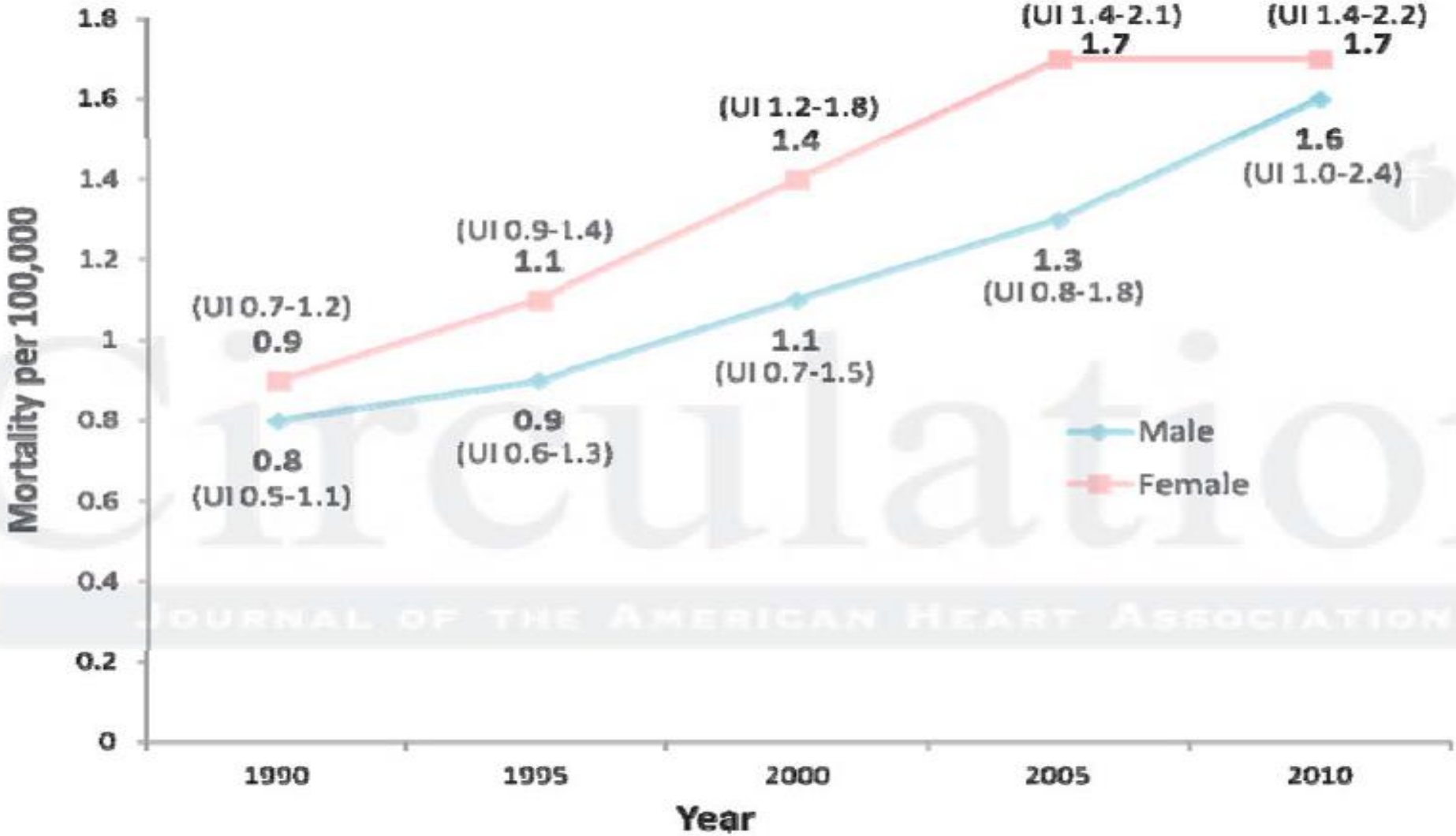


Circulation
JOURNAL OF THE AMERICAN HEART ASSOCIATION

American Heart Association

Worldwide Epidemiology of Atrial Fibrillation: A Global Burden of Disease 2010 Study

Sumeet S. Chugh, Rasmus Havmoeller, Kumar Narayanan, David Singh, Michiel Rienstra, Emelia J. Benjamin, Richard F. Gillum, Young-Hoon Kim, John H. McAnulty, Jr., Zhi-Jie Zheng, Mohammad H. Forouzanfar, Mohsen Naghavi, George A. Mensah, Majid Ezzati and Christopher J. L. Murray



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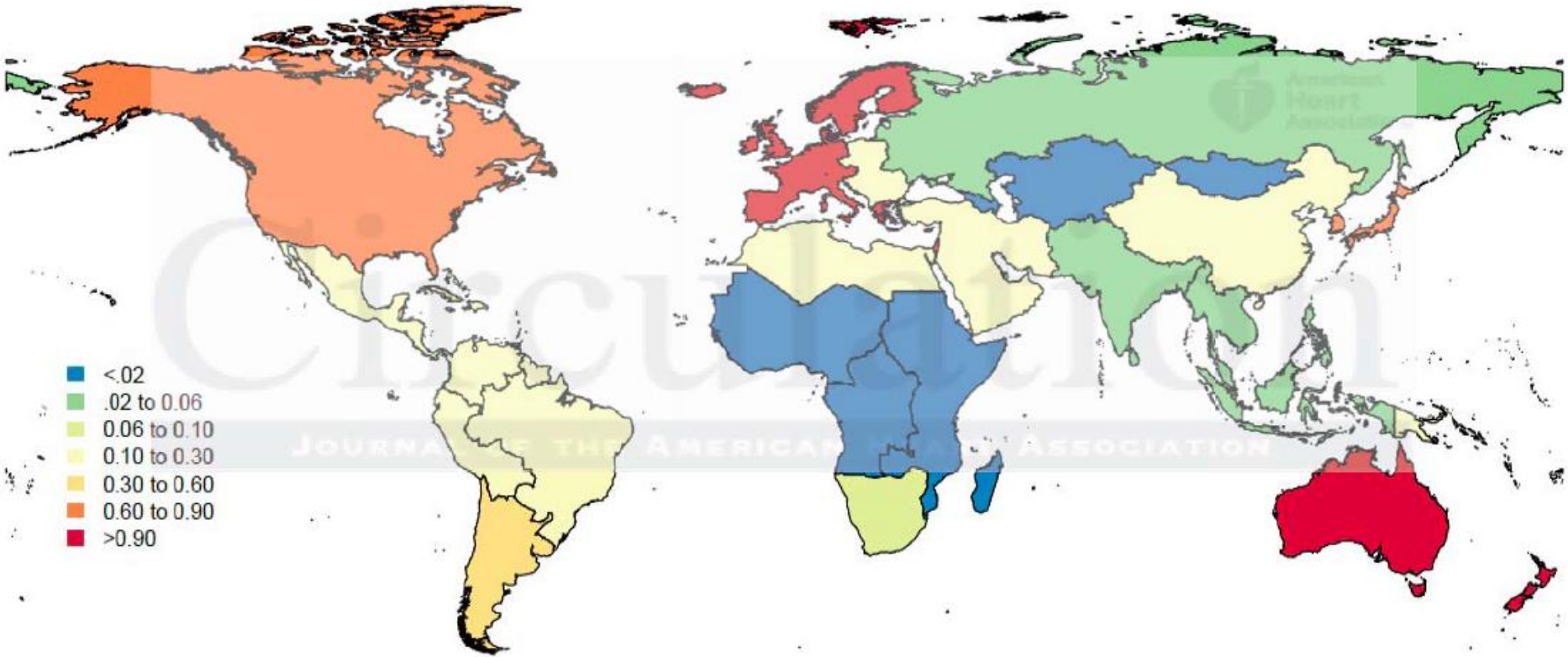
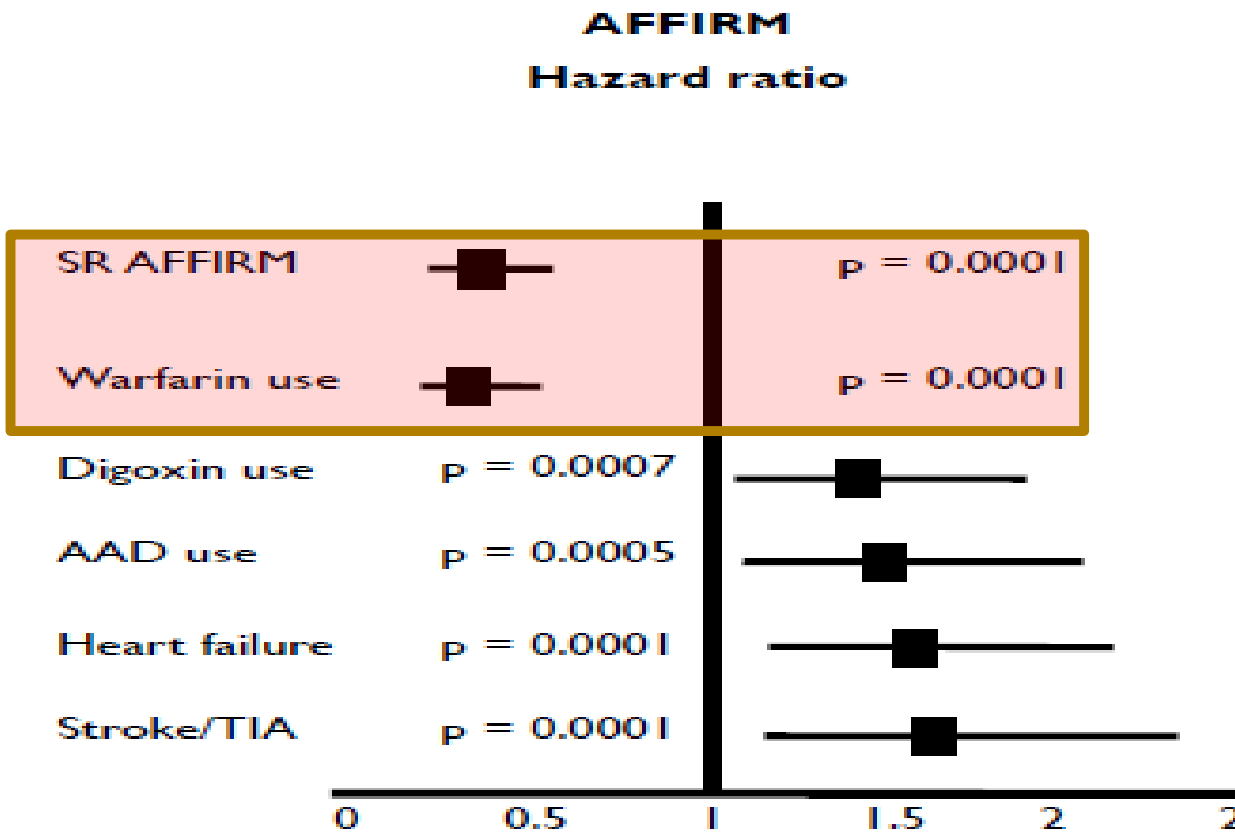
Percent deaths attributable to atrial fibrillation and flutter by region, 2010



Rhythm vs rate

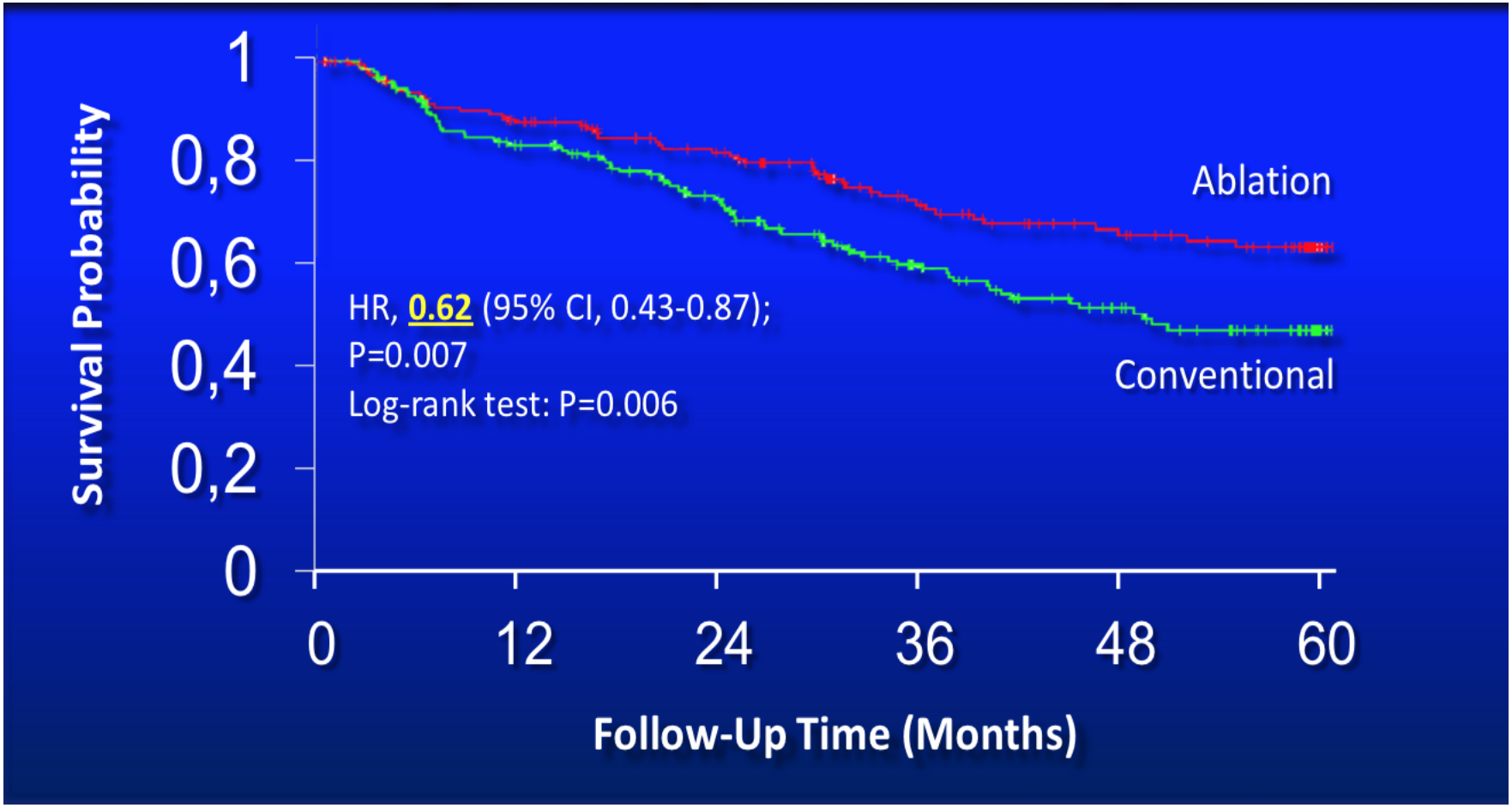


Occurrence and Characteristics of Stroke Events in the Atrial Fibrillation Follow-up Investigation of Sinus Rhythm Management (AFFIRM) Study

Variable	Total	Rate Control Group	Sinus Rhythm Control Group	*P* Value†
Patients Who Had Ischemic Strokes				
Warfarin sodium use/INR at time of stroke	**152**	75	77	.79
Not receiving warfarin therapy	**69** (45.4)	25 (33.3)	44 (57.1)	.01
Receiving warfarin therapy				
INR <2.0	**44** (28.9)	27 (36.0)	17 (22.1)	
INR ≥2.0	**39** (25.7)	23 (30.7)	16 (20.8)	
Rhythm at time of stroke	**128**	61	67	<.001
AF	**67** (52.3)	42 (68.9)	25 (37.3)	
Sinus rhythm	**61** (47.7)	19 (31.1)	42 (62.7)	
Patients Who Had Cardioembolic or Suspected Cardioembolic Strokes				
Warfarin use/INR at time of stroke	**85**	41	44	
Not receiving warfarin therapy	**42** (49.4)	16 (39.0)	26 (59.1)	.16
Receiving warfarin therapy				
INR<2.0	**27** (31.8)	15 (36.6)	12 (27.3)	
INR≥2.0	**16** (18.8)	10 (24.4)	6 (13.6)	
Rhythm at time of stroke	**71**	32	39	.001
AF	**43** (60.6)	26 (81.3)	17 (43.6)	
Sinus rhythm	**28** (39.4)	6 (18.8)	22 (56.4)	

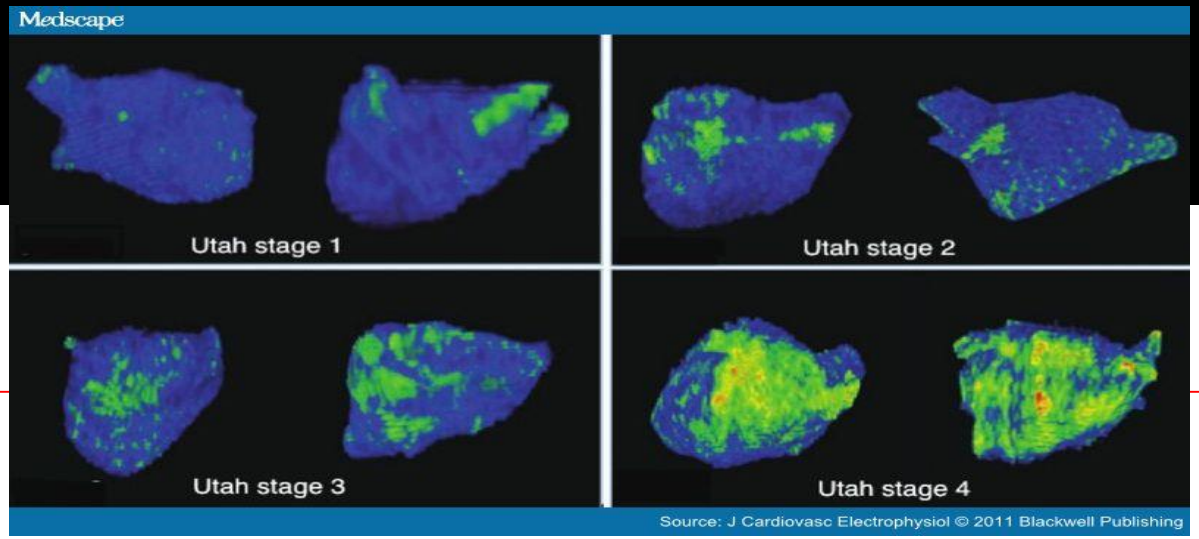
Results-CASTLE AF

Primary Composite Endpoint



Marrouche et al, NEJM 2018

Η ΚΜ είναι αποτέλεσμα της σταδιακής αναδιαμόρφωσης των κόλπων



1. Το 1ο επεισόδιο ίσως είναι η όψιμη εμφάνιση της νόσου

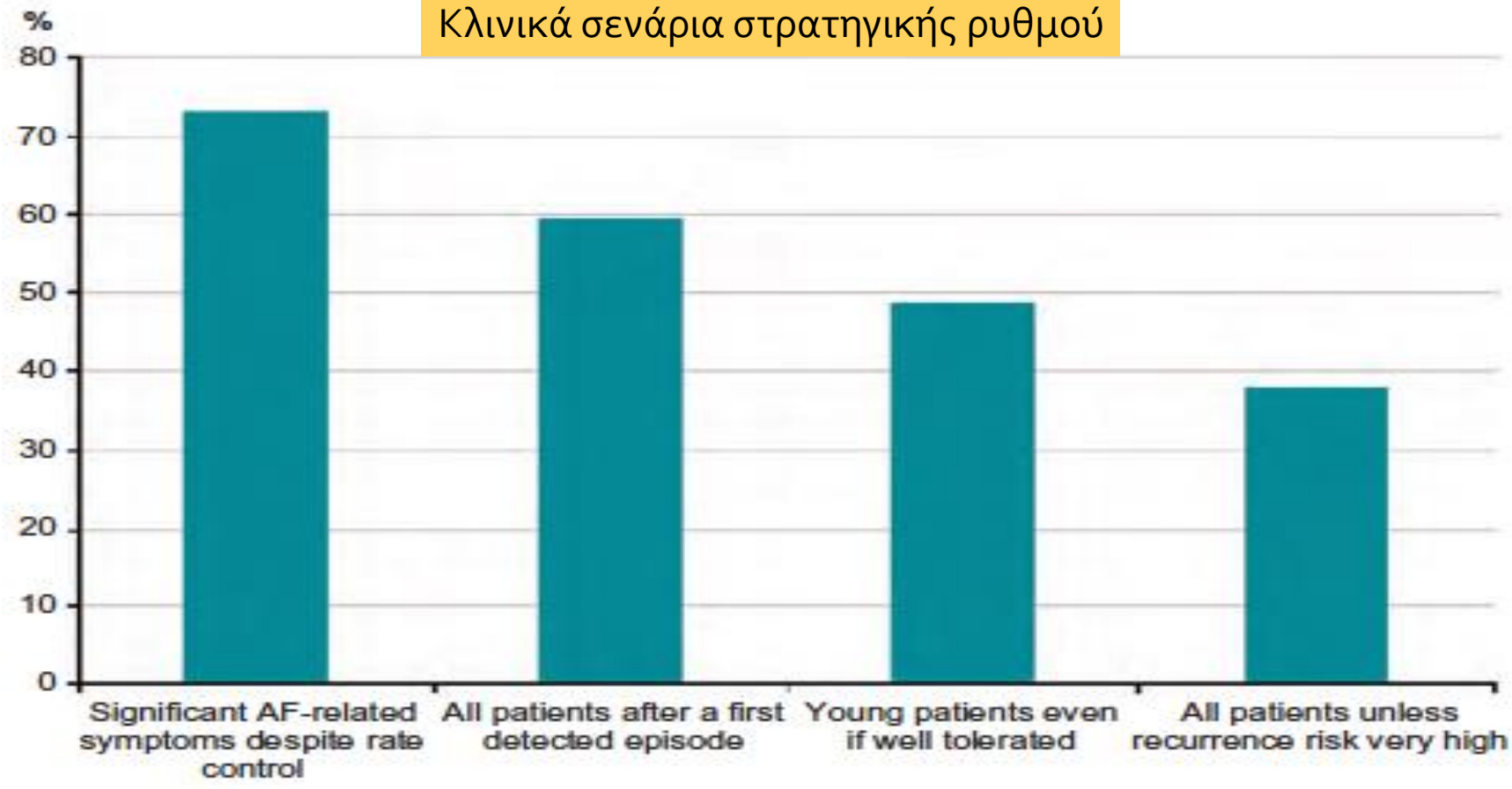
1. Το 1ο επεισόδιο .....ίσως δεν είναι το 1ο

Πρέπει να προλάβουμε την νόσο στην αρχή της

EUROPEAN SOCIETY OF CARDIOLOGY®
Europace (2013) **15**, 478–481
doi:10.1093/europace/eut063

Current practice of antiarrhythmic drug therapy for prevention of atrial fibrillation in Europe: The European Heart Rhythm Association survey

Κλινικά σενάρια στρατηγικής ρυθμού



EUROPEAN SOCIETY OF CARDIOLOGY®
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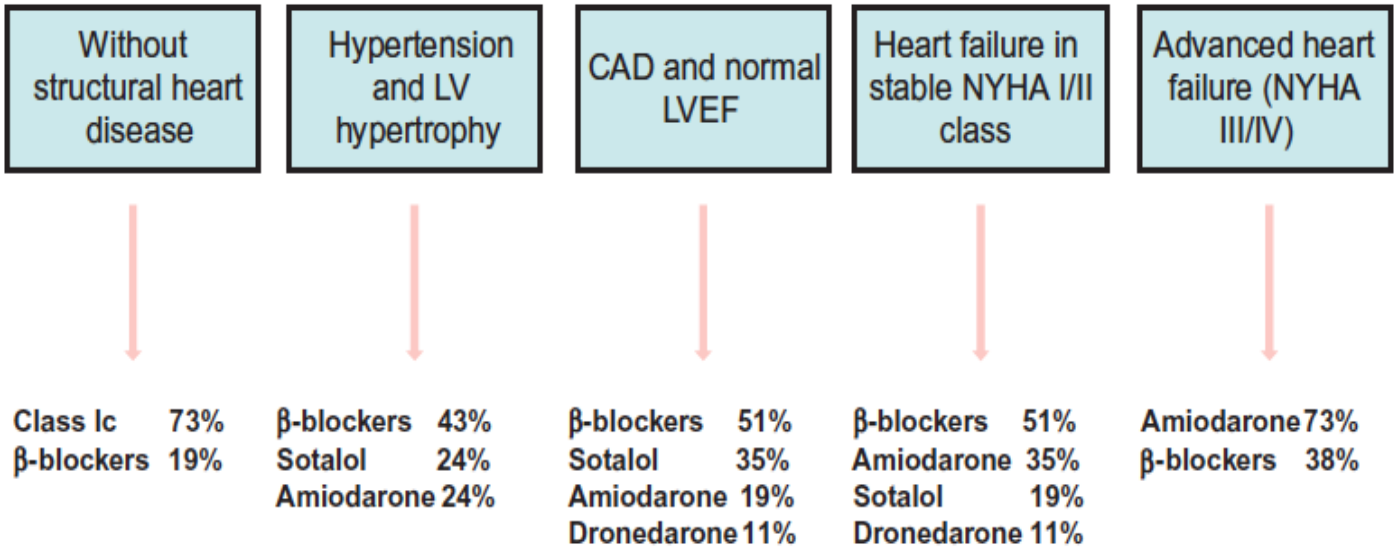


ous testing. The most widely applied regimen for this purpose was oral flecainide (43%) with a initial dose of 100–200 mg followed by an additional dose of 100 mg after 1–2 h if the first one was not

Europace
doi:10.1093/europace/eut373

A prospective survey in European Society of Cardiology member countries of atrial fibrillation management: baseline results of EuroObservational Research Programme Atrial Fibrillation (EORP-AF) Pilot General Registry

	Whole cohort	First detected	Paroxysmal	Persistent AF	Long-standing persistent	Permanent	*P* value*
Antiarrhythmic treatment (%)							
Antiarrhythmic, yes	36.0	32.2	49.6	50.2	34.0	5.1	<0.001
Amiodarone	21.5	21.2	23.4	32.2	27.8	4.0	<0.001
Dronedarone	0.3	0.0	0.7	0.3	0.7	0.0	0.014
Propafenone	5.3	4.7	9.9	5.7	0.7	0.2	<0.001
Disopyramide	0.0	0.0	0.1	0.0	0.0	0.0	0.695
Flecainide	5.0	2.6	8.4	8.0	3.5	0.4	<0.001
Quinidine	0.0	0.0	0.0	0.0	0.0	0.0	–
Sotalol	4.4	4.1	7.6	4.8	1.4	0.4	<0.001
None	64.0	67.8	50.4	49.8	66.0	94.9	<0.001

EUROPEAN SOCIETY OF CARDIOLOGY®

Europace (2011) **13**, 329–345
doi:10.1093/europace/euq450

Mixed treatment comparison of dronedarone, amiodarone, sotalol, flecainide, and propafenone, for the management of atrial fibrillation

Aims

Mixed treatment comparisons (MTC) were performed to assess the relative efficacy and tolerability of the main anti-arrhythmic drugs used for the treatment of atrial fibrillation (AF)/flutter.

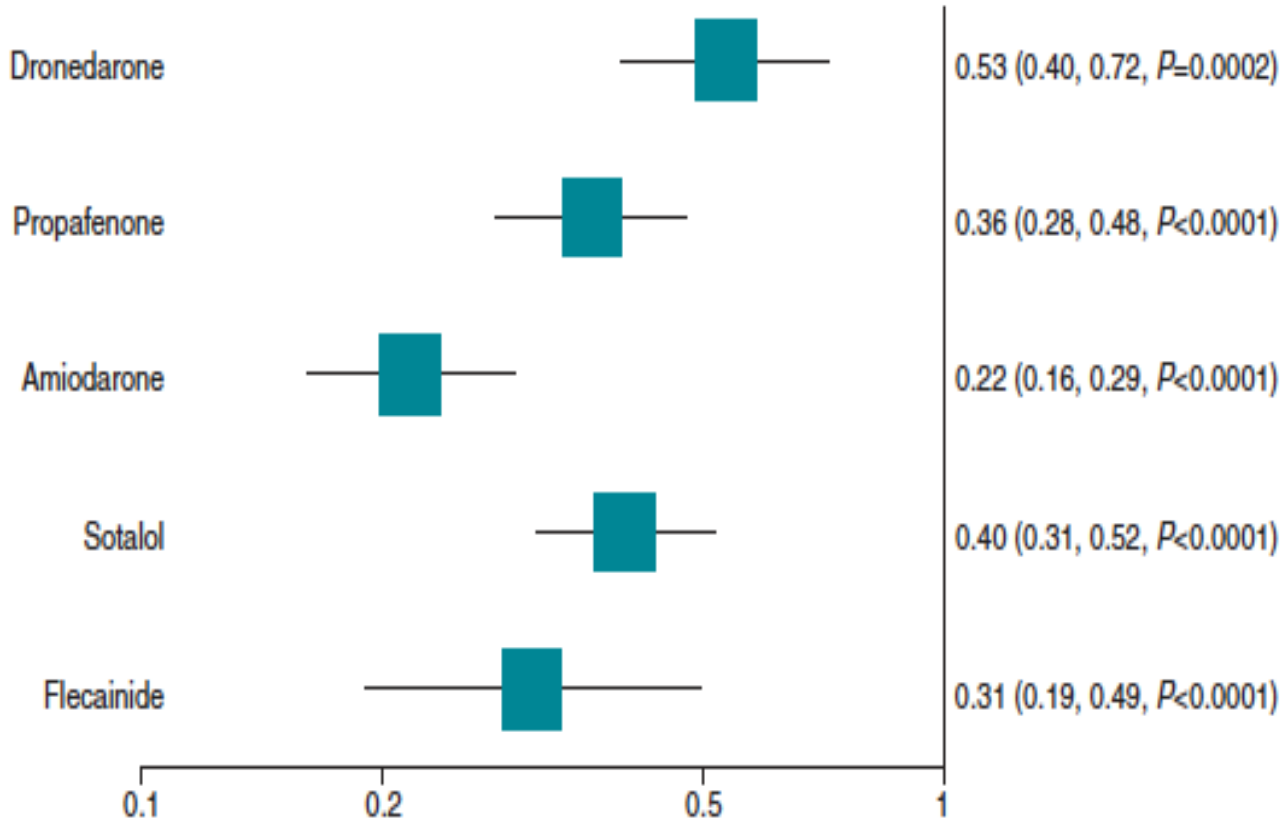
Methods and results

Electronic databases were systematically searched to identify randomized controlled trials (RCTs) examining amiodarone, dronedarone, flecainide, propafenone, sotalol, or placebo for the treatment of AF. Thirty-nine RCTs met inclusion criteria and were combined using MTC models to provide direct and indirect comparisons in a single analysis. Results are presented vs. placebo. Amiodarone had the largest effect in reducing AF recurrence (OR 0.22, 95% CI 0.16–0.29). Amiodarone was associated with the highest rate of patients experiencing at least one serious adverse event (OR 2.41, 95% CI 0.96–6.06) and treatment withdrawals due to adverse events (OR 2.91, 95% CI 1.66–5.11). Dronedarone was associated with the lowest rate of proarrhythmic events including bradycardia (OR 1.45, 95% CI 1.02–2.08). Dronedarone significantly reduced the risk of stroke (OR 0.69, 95% CI 0.57–0.84). Trends towards increased mortality for sotalol (OR 3.44, 95% CI 1.02–11.59) and amiodarone (OR 2.17, 95% CI 0.63–7.51) were found, which were stronger when small studies randomizing <100 subjects per group were excluded.

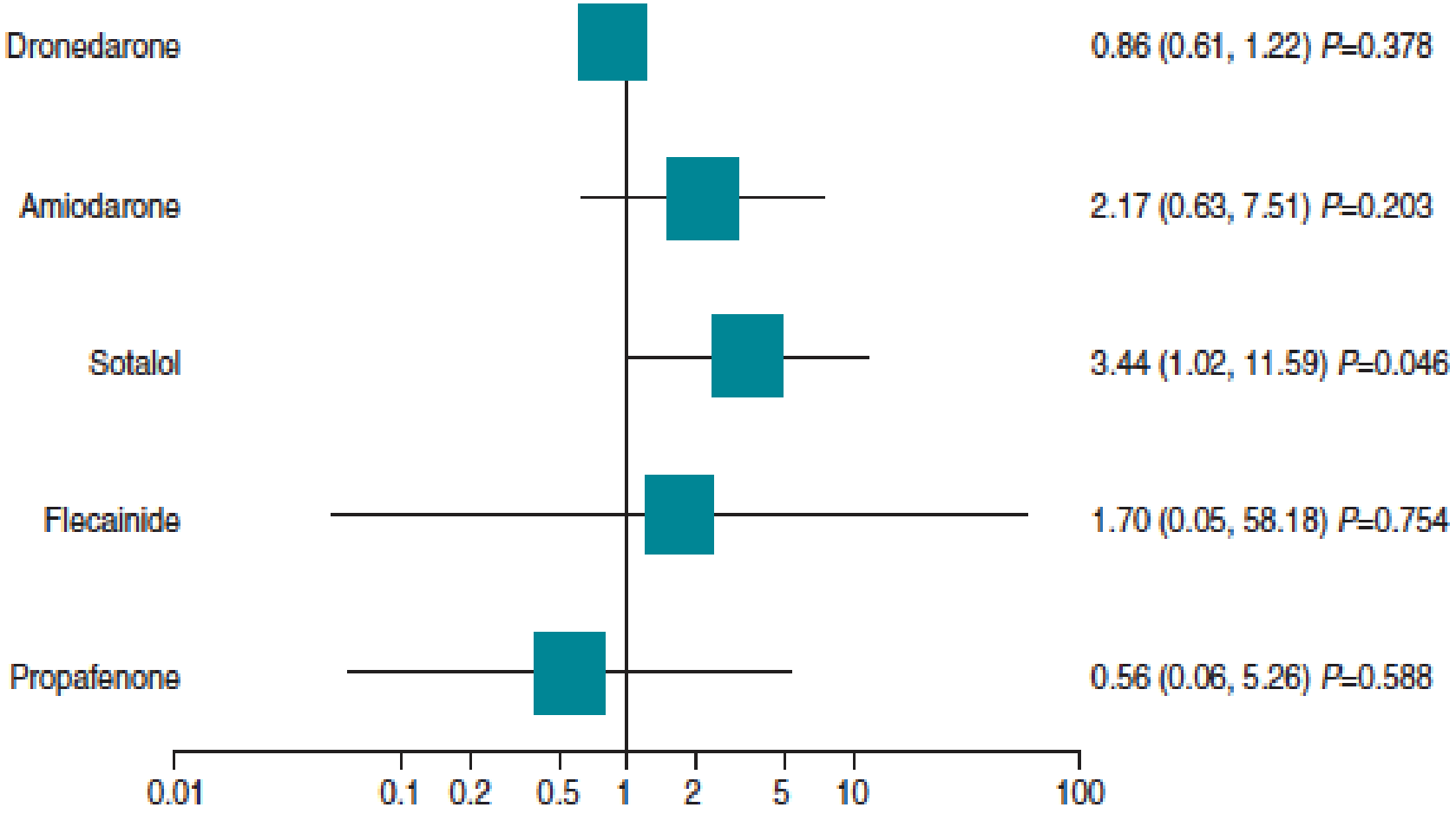
Conclusions

Amiodarone has been demonstrated to be the most effective drug in maintaining sinus rhythm. Differences in outcomes between the anti-antiarrhythmic drugs were reported, with sotalol and possibly amiodarone increasing mortality and dronedarone possibly decreasing the incidence of serious adverse events and proarrhythmia.

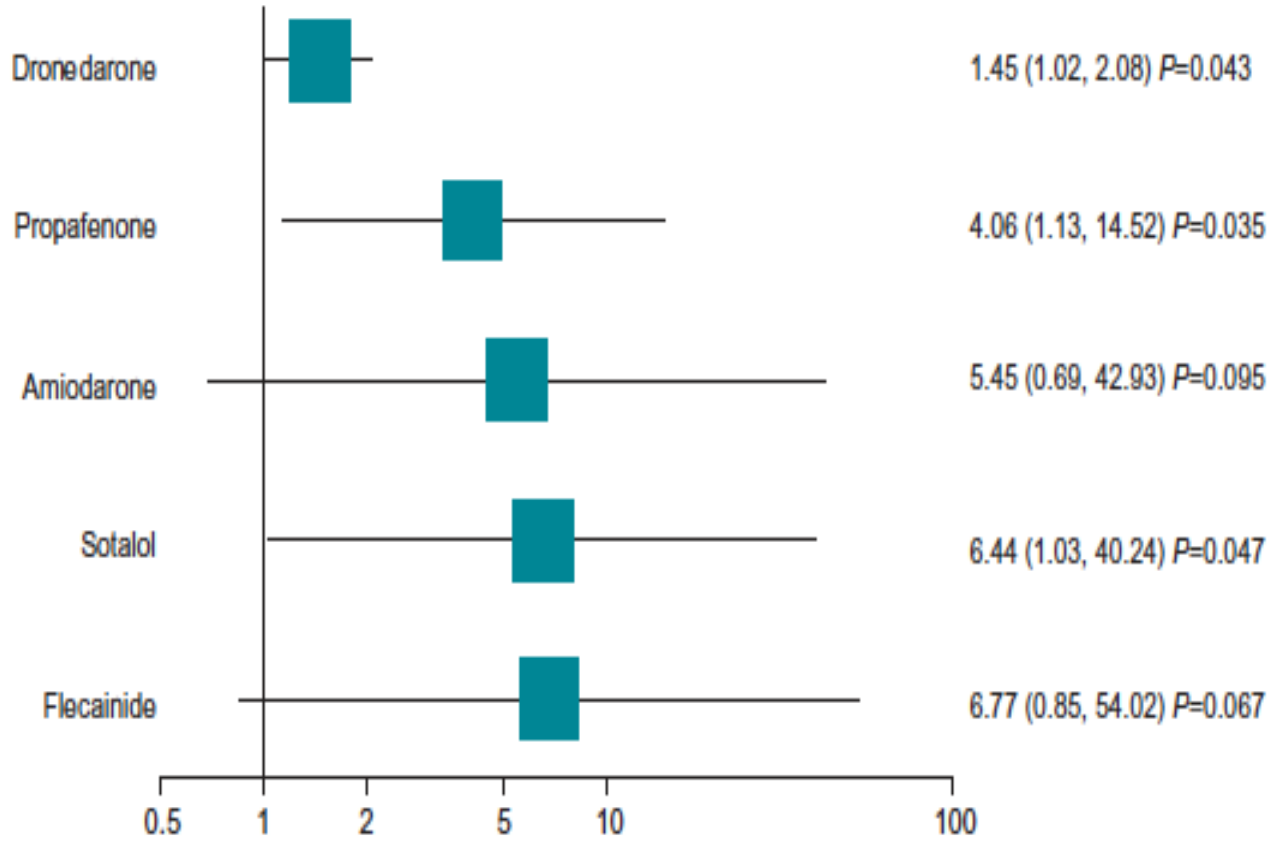
Επίδραση στην κολπική μαρμαρυγή



Ολική θνητότητα

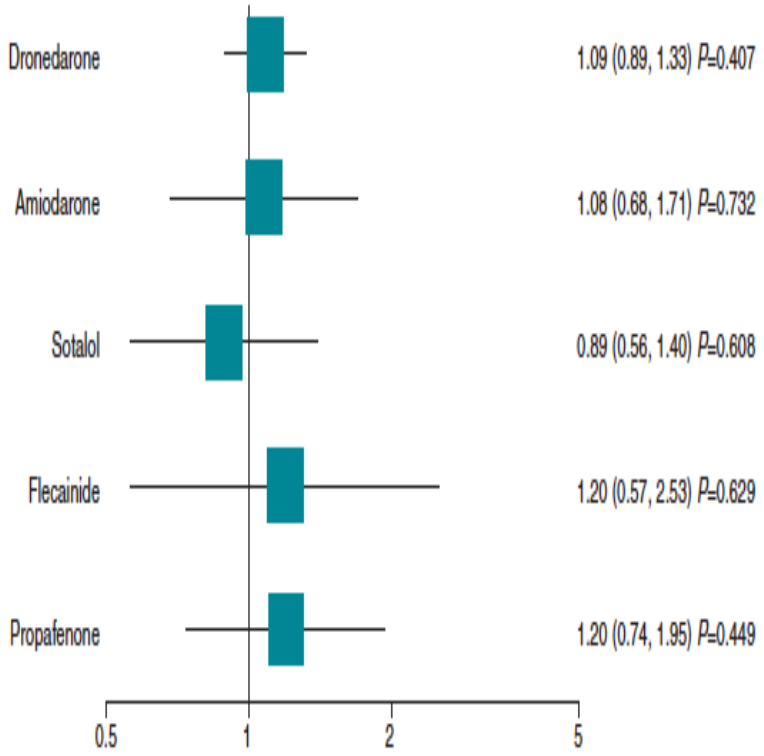


Προαρρυθμίες

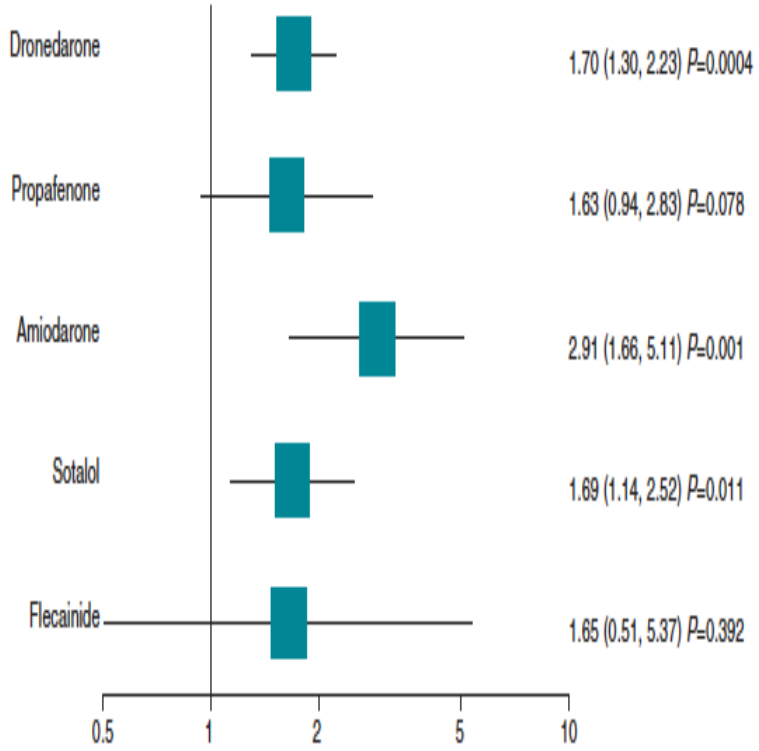


Ανοχή του φαρμάκου από τους ασθενείς

Διακοπή θεραπείας



Παρενέργειες φαρμάκου

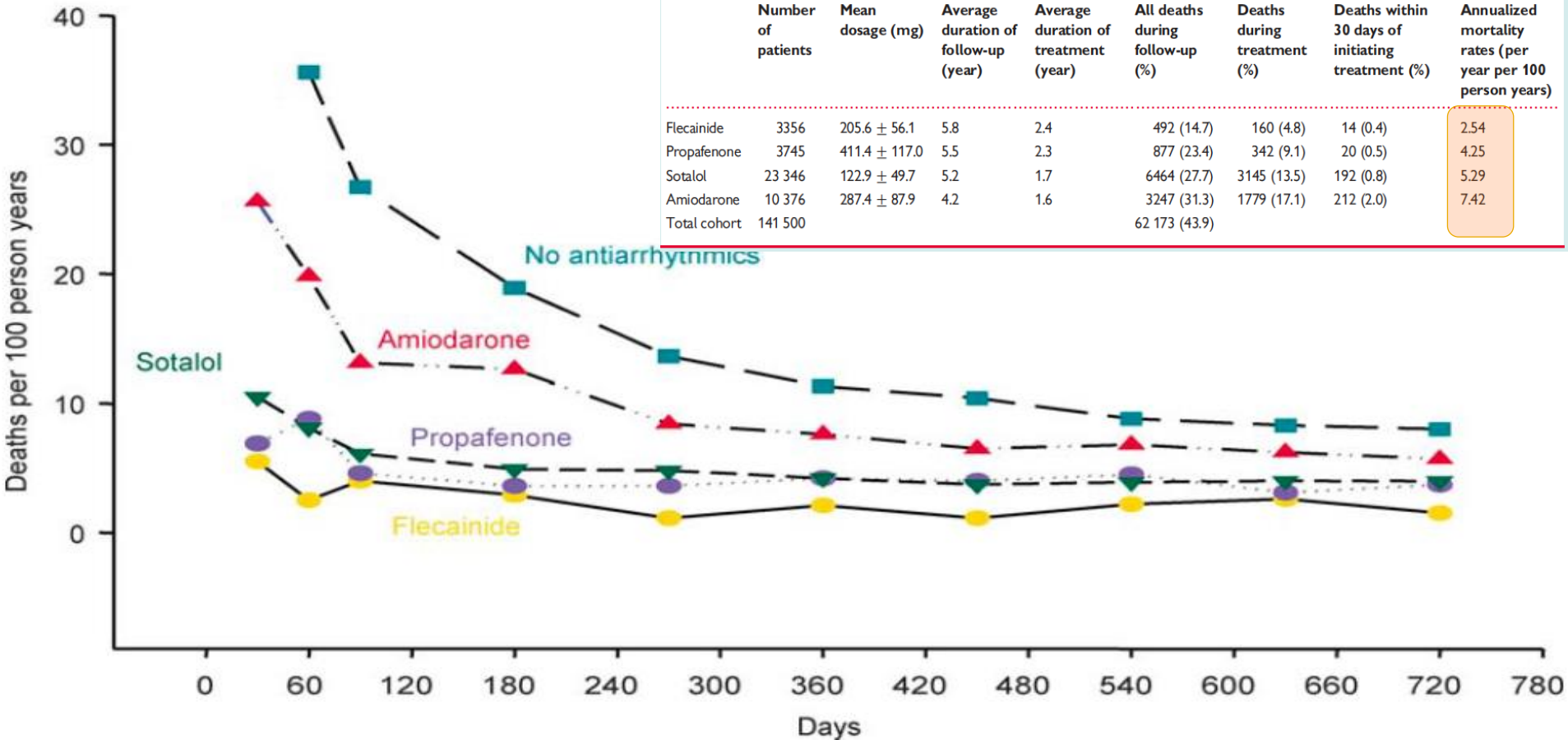


EUROPEAN SOCIETY OF CARDIOLOGY®

Europace (2009) **11**, 886–891
doi:10.1093/europace/eup119

Antiarrhythmic therapy and risk of death in patients with atrial fibrillation: a nationwide study

	Number of patients	Mean dosage (mg)	Average duration of follow-up (year)	Average duration of treatment (year)	All deaths during follow-up (%)	Deaths during treatment (%)	Deaths within 30 days of initiating treatment (%)	Annualized mortality rates (per year per 100 person years)
Flecainide	3356	205.6 ± 56.1	5.8	2.4	492 (14.7)	160 (4.8)	14 (0.4)	2.54
Propafenone	3745	411.4 ± 117.0	5.5	2.3	877 (23.4)	342 (9.1)	20 (0.5)	4.25
Sotalol	23 346	122.9 ± 49.7	5.2	1.7	6464 (27.7)	3145 (13.5)	192 (0.8)	5.29
Amiodarone	10 376	287.4 ± 87.9	4.2	1.6	3247 (31.3)	1779 (17.1)	212 (2.0)	7.42
Total cohort	141 500				62 173 (43.9)			



Τι έχουμε στην φαρέτρα μας

- Αμιοδαρόνη
  - Πνευμονική ίνωση
  - 4.2% σε 1 χρόνο
  - 7.8% σε 3 χρόνια
  - 10.6% σε 5 χρόνια

  μέση δοσολογία 141mg/d
  - **Θνητότητα- εώς και 15% ετησίως**

- Σοταλόλη
  - Πιθανόν αυξημένη θνητότητα
  - Μέτρια αποτελεσματικότητα

Flecardia vs Propafenone

+

- Μεγαλύτερη αποτελεσματικότητα
- Δεν αντενδείκνυται σε άσθμα, ΧΑΠ
- CR μορφή (1 δόση vs. 2 ή 3 δόσεις)
- Δεν επηρεάζεται από την πρόσληψη τροφής (**προπαφαινόνη** μόνο μετά φαγητό)
- Η **προπαφαινόνη** δεσμεύεται από τις πρωτεΐνες του πλάσματος σε ποσοστό 95% (Sintrom, Digoxin), ενώ η φλεκαινίδη σε ποσοστό 40%
- Βιοδιαθεσιμότητα 90% από την πρώτη δόση. **Προπαφαινόνη** 50% και 100% στις 4 μέρες

-

- Λιγότερο ικανοποιητικό rate control

Flecardia vs sotalol

+

- Πιο αποτελεσματική (NNT 4 vs 8)
- Δεν προκαλεί βραδυκαρδία
- Δεν αντενδείκνυται σε άσθμα, ΧΑΠ, περιφερική αγγειοπάθεια.
- Η **σοταλόλη** παρατείνει σημαντικά το QT και έχει αυξημένο κίνδυνο torsade de pointes

-

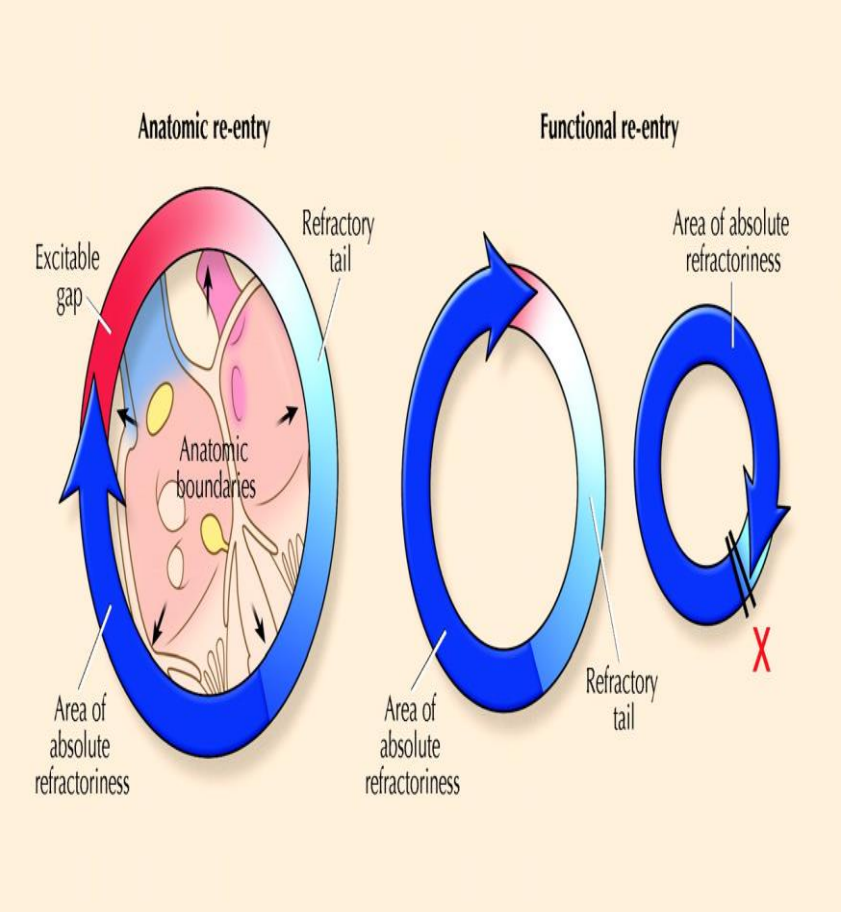
- Λιγότερο ικανοποιητικό rate control
- Αντενδείκνυται επί στεφανιαίας νόσου

Focus on Flecainide

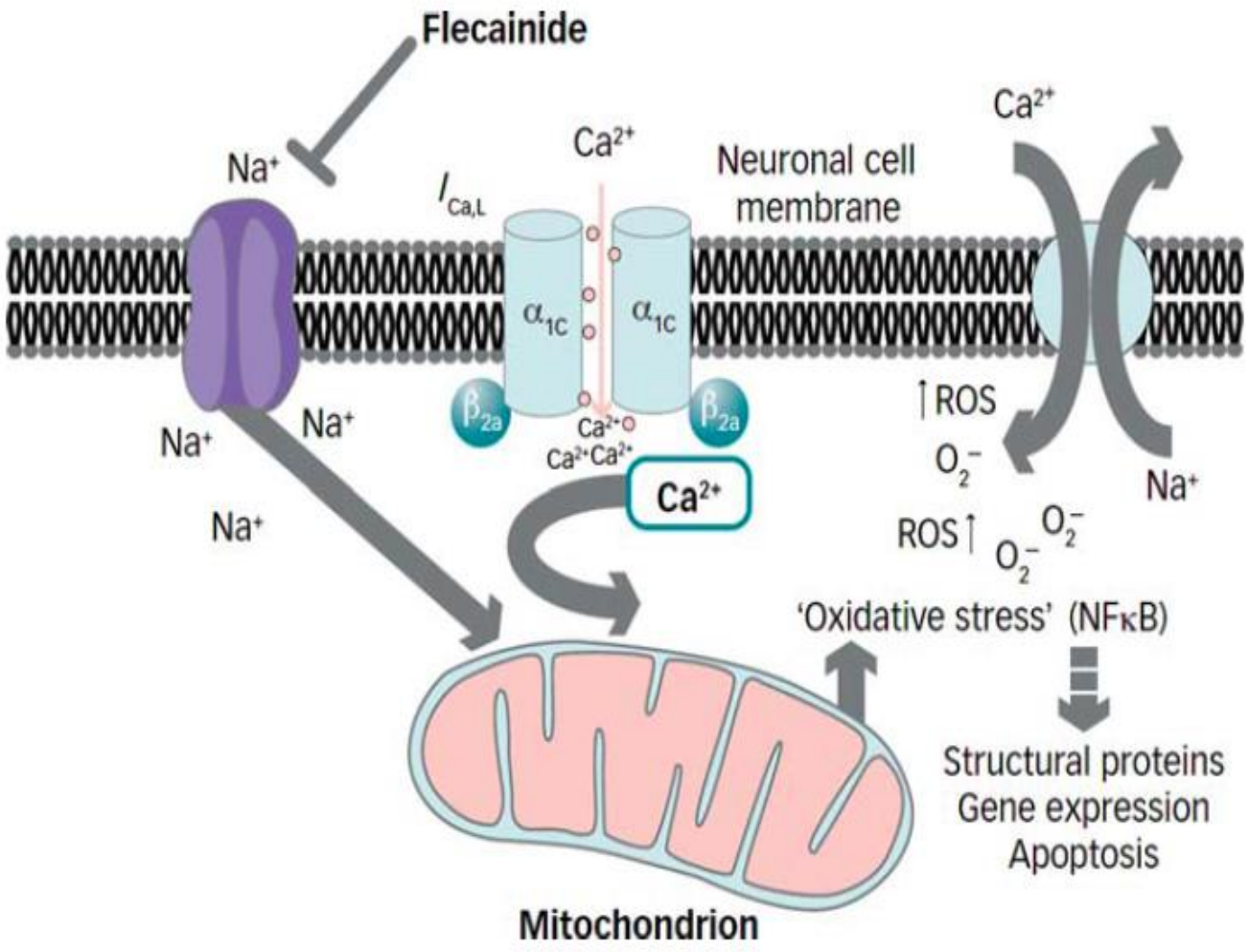
.Ομάδα Ic- αναστολέας καναλιών Να

.↓ ταχύτατα αγωγής- επιμύκηνση PR, QRS

.↑ ERP κόλπου, κοιλίας και..... δεματίων



Ηλεκτροφυσιολογία



Φαρμακοκινητική

.Βιοδιαθεσιμότητα: 90-95%

.Peak plasm concetration -1-3 ώρες

.T1/2: 13-20 ώρες

.Ηπατικός μεταβολισμός

.Νεφρική αποβολή (80-85%)- προσαρμογή δόσης σε GFR<30 ml/min

΄Έναρξη pos θεραπείας με Φλεκαϊνίδη

50 mg x 2

Έλεγχος QRS (<150% της αρχικής διάρκειας)

Αύξηση σε 5-7 ημέρες

Μέγιστη δόση 300 mg / ημέρα

Risk factors

Wide QRS (>120 ms), Brugada ECG sign

Low LVEF, CHF

Structural heart disease, CAD

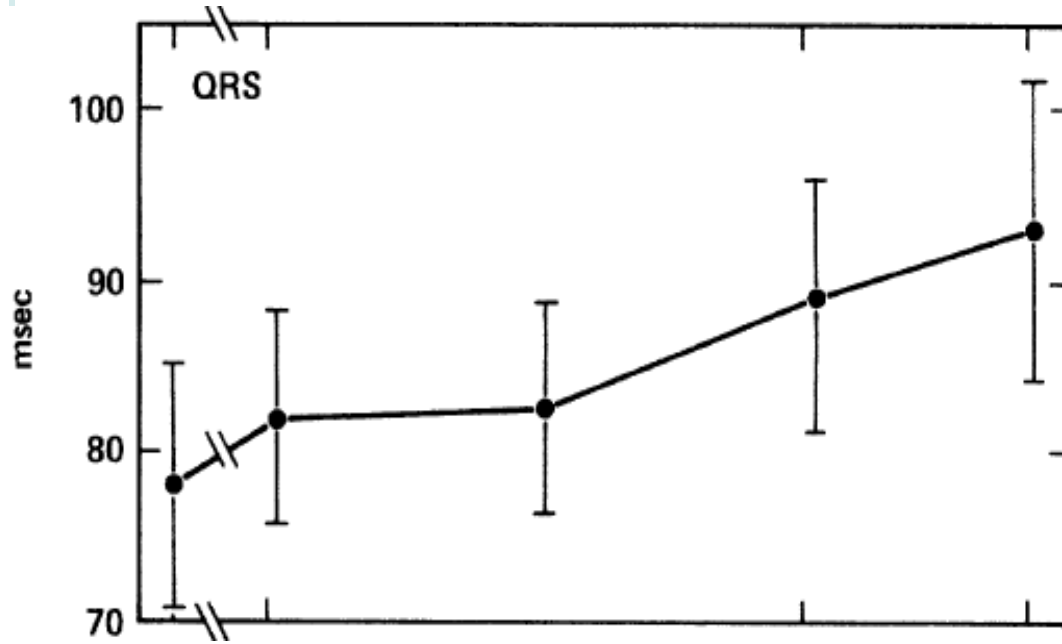
High rate (use-dependent effect)

High dose

Hypokalaemia

Severe renal failure (creatinine clearance ≤ 35 mL/min/1.73 m^2)

Excessive QRS increase (>150% from baseline)



Αλλαγές στο ΗΚΓ λόγω Φλεκαινίδης

- Interventricular conduction delay – QRS > 100 ms in lead II
- Right axis deviation of the terminal QRS:
  - Terminal R wave > 3 mm in aVR
  - R/S ratio > 0.7 in aVR

Ανάταξη ΚΜ

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Outpatient Treatment of Recent-Onset Atrial Fibrillation with the "Pill-in-the-Pocket" Approach

Characteristic	Value*
Age — yr	59±11
Male sex — no. (%)	122 (58)
Mild heart disease — no. (%)	92 (44)
History of atrial fibrillation — yr	
Mean	4±5
Median	3
Symptomatic episodes of atrial fibrillation in previous year — no./patient†	3.3±2.6
Emergency room contacts in previous year — no./patient†	2.7±2.3
Hospitalizations in previous year — no./patient†	0.9±1.1
Duration of target episode before in-hospital treatment — min	
Mean	280±368
Median	120
Previous prophylactic treatment — no. of patients (%)	72 (34)
Left ventricular ejection fraction — %	59±5
Left atrial diameter — mm	39±5

A total of 268 consecutive patients with atrial fibrillation of recent onset received an in-hospital oral

dian, 10). The drug was effective (i.e., palpitations were interrupted within six hours) in 534 of 569 arrhythmic episodes (94 percent; corrected efficacy,

95). The mean time to the resolution of symptoms after the ingestion of the drug was 113±84 minutes

Δοσολογία στα επείγοντα

- Ενδοφλέβια- 1-2 mg/kg σε 10 λεπτά (max 150 mg)

- Pos- 300 mg εφάπαξ
  - 55-65% <3 ώρες
  - 75-80% σε 6-8 ώρες

Παρακολούθηση ΗΚΓ-QRS

Flecainide is highly effective in the acute cardioversion of AF

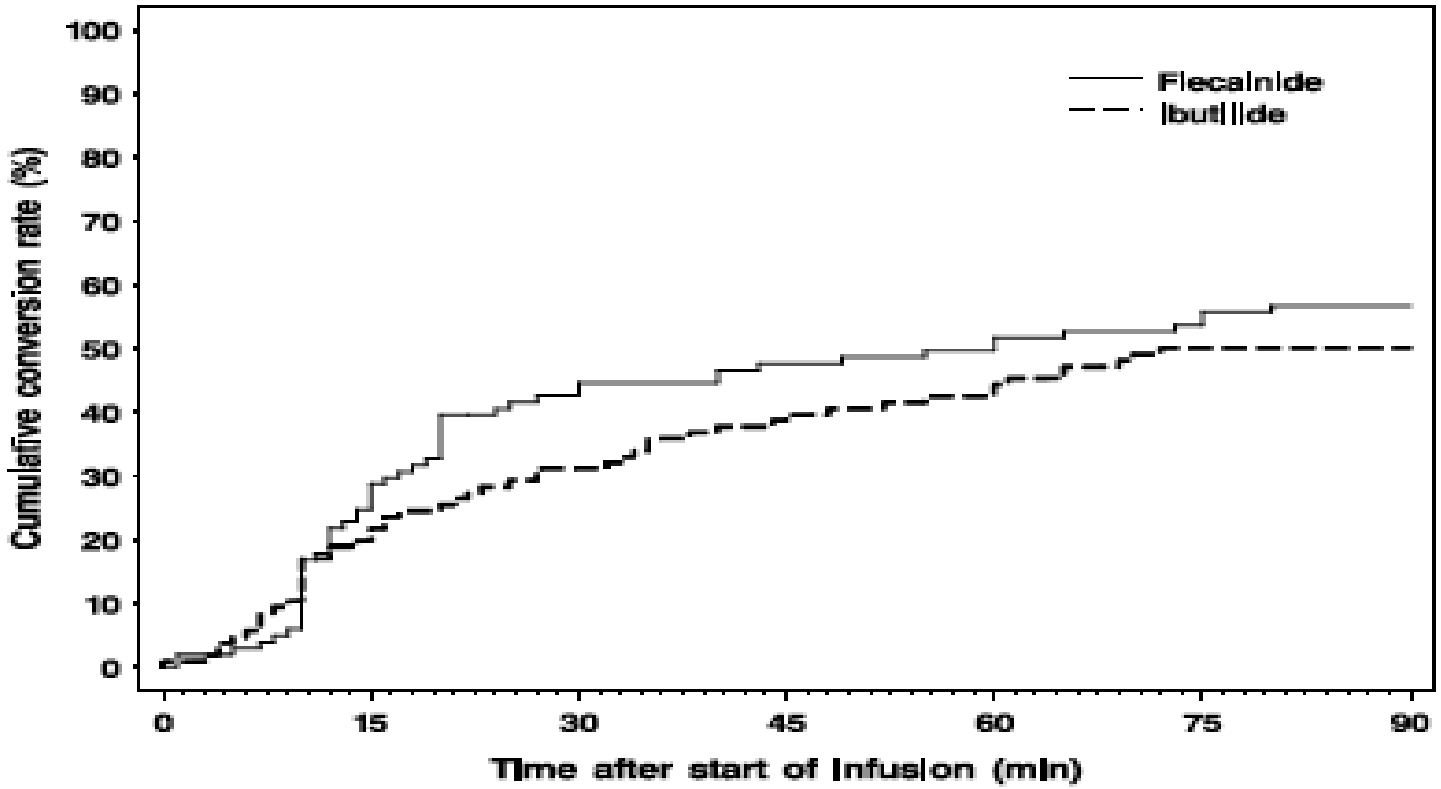
Meta-analysis of acute conversion of AF studies

	Conversion rate	No. of studies
Quinidine	11-86%	(n=6)
Procainamide	63%	(n=1)
Disopyramide	23%	(n=1)
Flecainide	**52-95%**	**(n=8)**
Propafenone	6-91%	(n=15)
Amiodarone	25-92%	(n=6)
Sotalol	8-52%	(n=3)
Ibutilide	10-49%	(n=3)
Control treatment	0-76%	(n=25)

McNamara et al., 2001

Clinical research

Flecainide versus ibutilide for immediate cardioversion of atrial fibrillation of recent onset

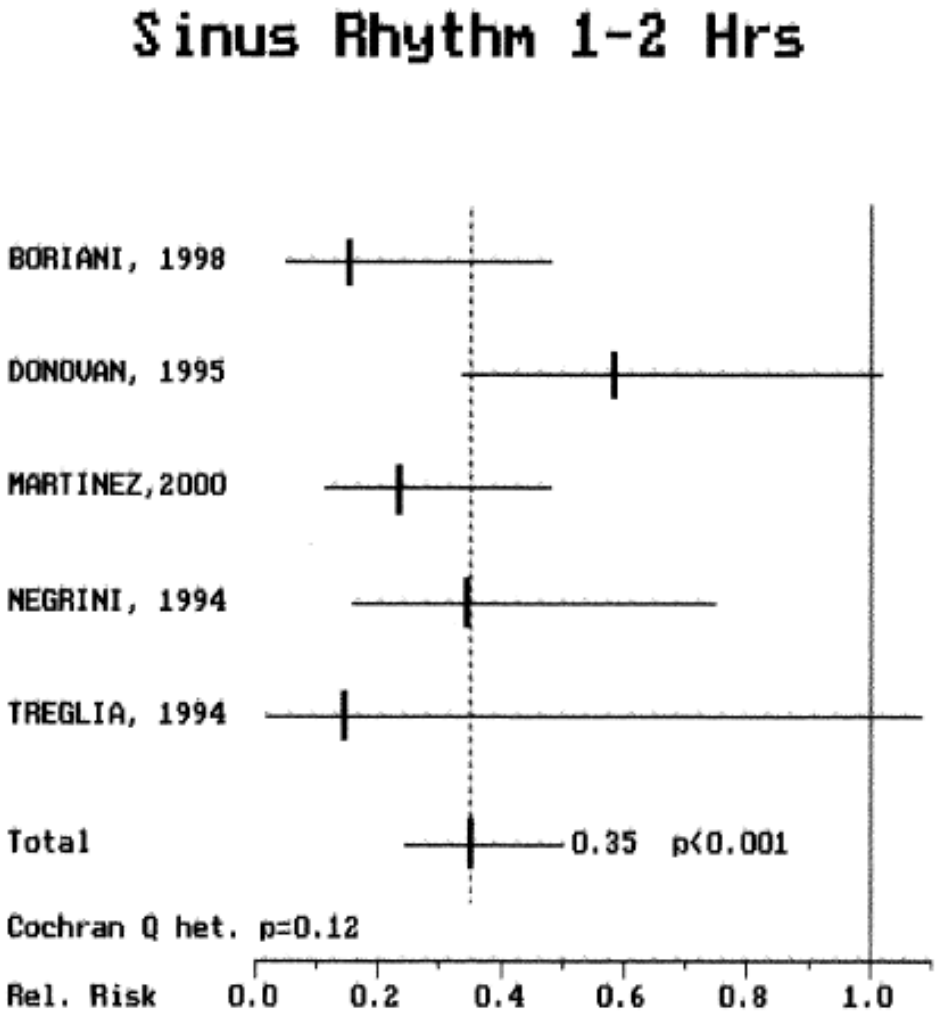


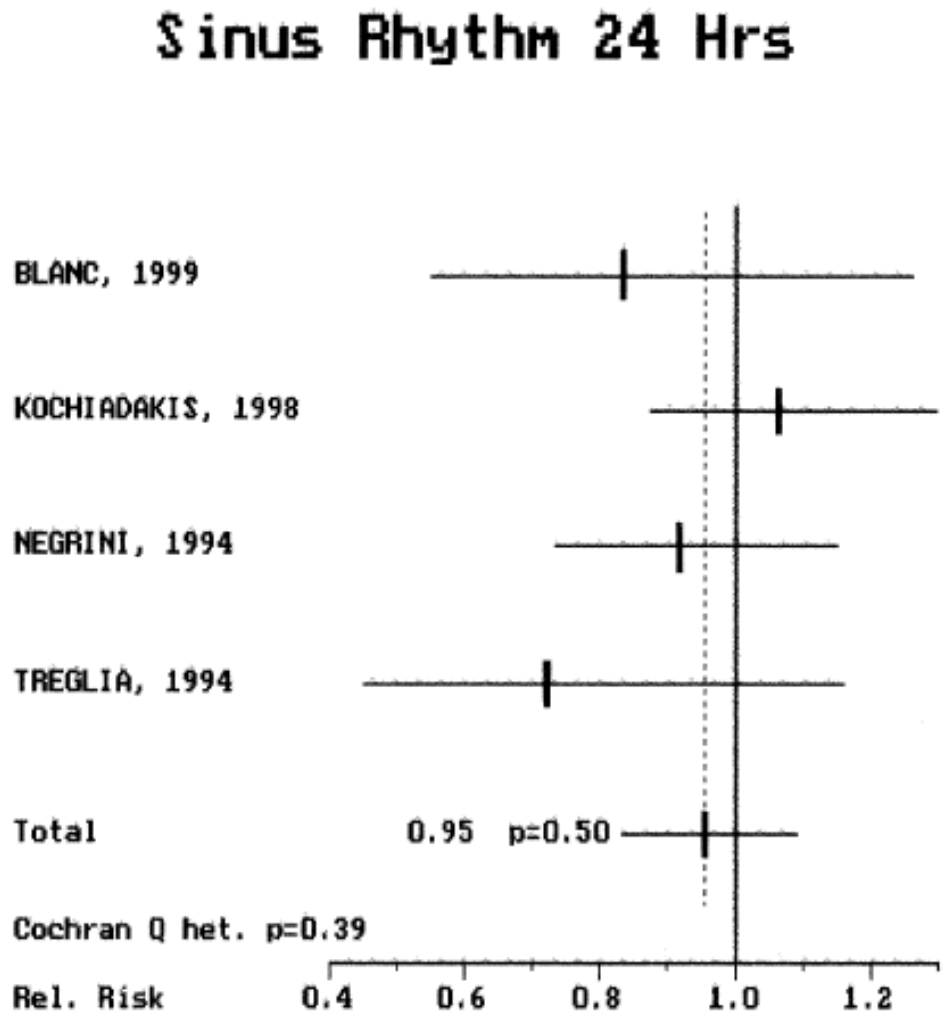
EHJ 2004

Amiodarone Versus Placebo and Class Ic Drugs for Cardioversion of Recent-Onset Atrial Fibrillation: A Meta-Analysis

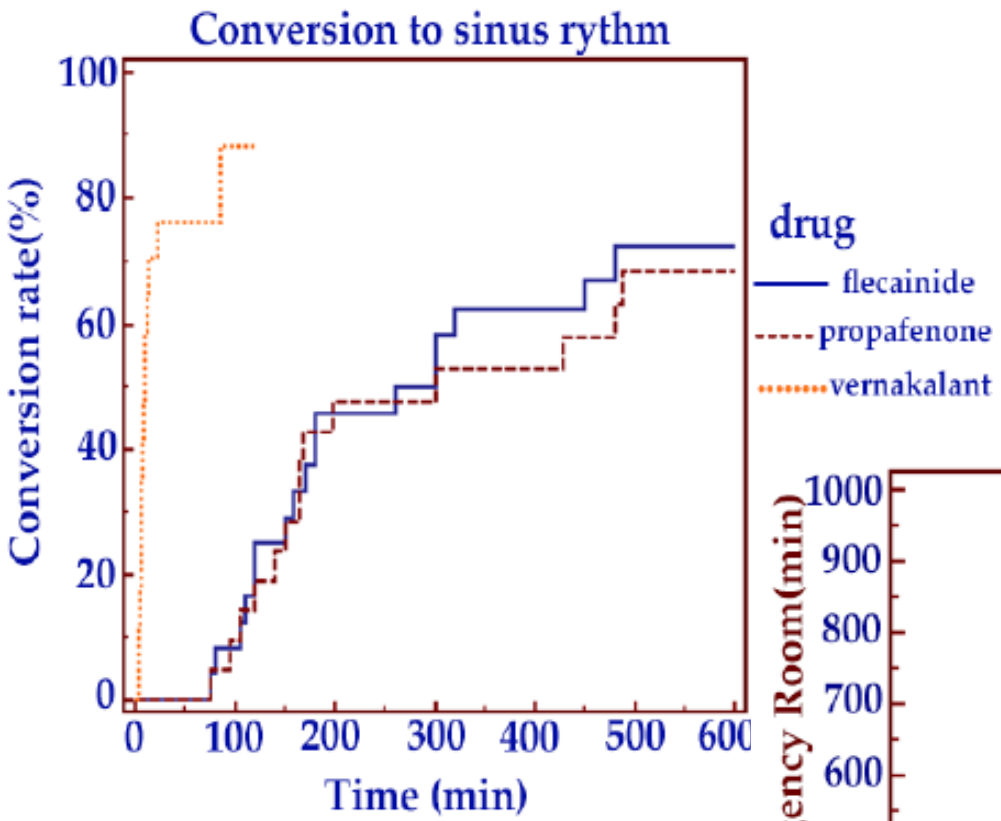
Philippe Chevalier, MD, PhD,* Alexis Durand-Dubief, MD,* Haran Burri, MD,* Michel Cucherat, MD,† Gilbert Kirkorian, MD,* Paul Touboul, MD*

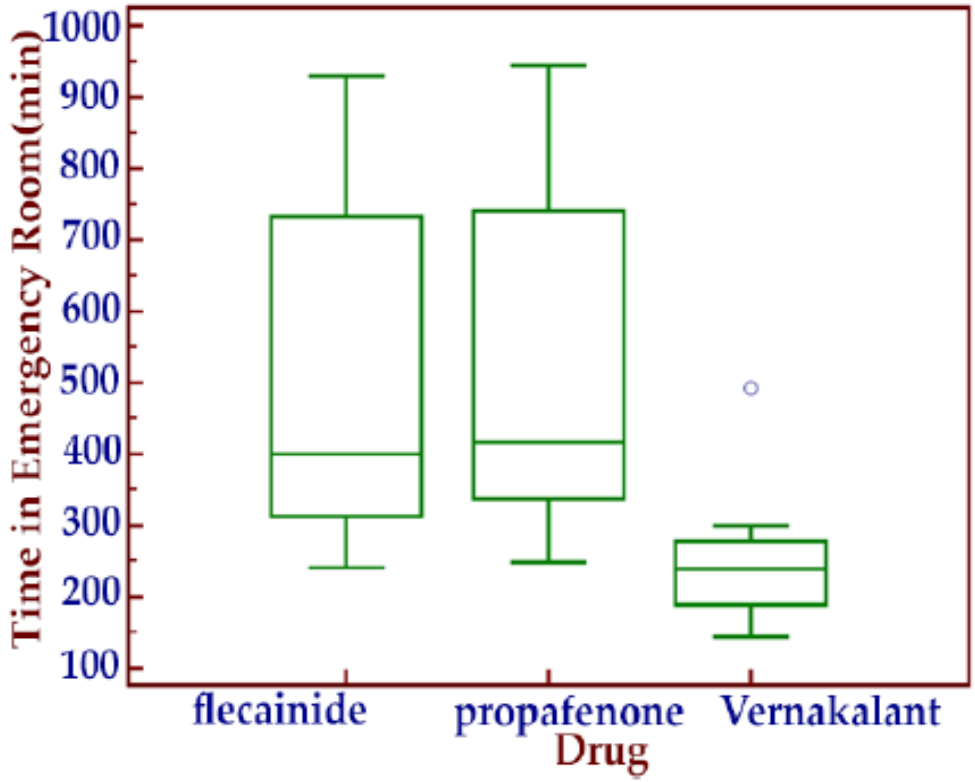
Lyon, France





Φαρμακευτική ανάταξη

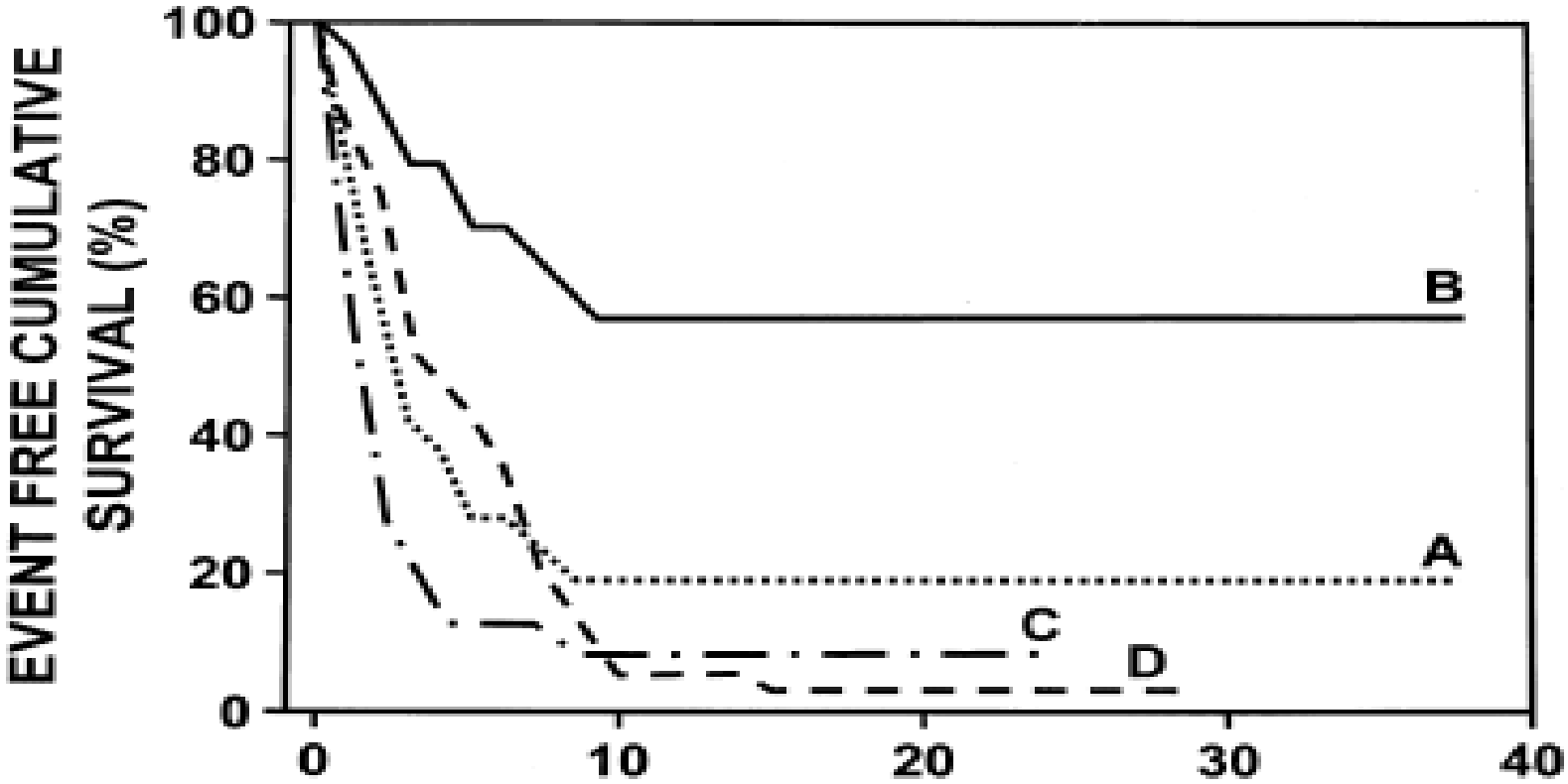




Response to Flecainide Infusion Predicts Long-Term Success of Hybrid Pharmacologic and Ablation Therapy in Patients With Atrial Fibrillation

Giuseppe Stabile, MD,* Antonio De Simone, MD,* Pietro Turco, MD,* Vincenzo La Rocca, MD,* Pasquale Nocerino, MD,* Costantino Astarita, MD,† Francesco Maresca, MD,† Carmine De Matteis, MD,‡ Tommaso Di Napoli, MD,§ Eugenio Stabile, MD,‖ Dino Franco Vitale, MD¶

Maddaloni, Sorrento, Arienzo, Polla, Napoli and Telese, Italy



Guidelines for the management of atrial fibrillation

Table 12 Drugs and doses for pharmacological conversion of (recent-onset) AF

Drug	Dose	Follow-up dose	Risks
Amiodarone	5 mg/kg i.v. over 1 h	50 mg/h	Phlebitis, hypotension. Will slow the ventricular rate. Delayed AF conversion to sinus rhythm.
Flecainide	2 mg/kg i.v. over 10 min, or 200–300 mg p.o.	N/A	Not suitable for patients with marked structural heart disease; may prolong QRS duration, and hence the QT interval; and may inadvertently increase the ventricular rate due to conversion to atrial flutter and 1:1 conduction to the ventricles.
Ibutilide	1 mg i.v. over 10 min	1 mg i.v. over 10 min after waiting for 10 min	Can cause prolongation of the QT interval and torsades de pointes; watch for abnormal T-U waves or QT prolongation. Will slow the ventricular rate.
Propafenone	2 mg/kg i.v. over 10 min, or 450–600 mg p.o.		Not suitable for patients with marked structural heart disease; may prolong QRS duration; will slightly slow the ventricular rate, but may inadvertently increase the ventricular rate due to conversion to atrial flutter and 1:1 conduction to the ventricles.
Vernakalant	3 mg/kg i.v. over 10 min	Second infusion of 2 mg/kg i.v. over 10 min after 15 min rest	So far only evaluated in clinical trials; recently approved. [68–70a]

Eur Heart J 2010

Guidelines for the management of atrial fibrillation

ble 16 Suggested doses and main caveats for commonly used antiarrhythmic drugs

Drug	Dose	Main contraindications and precautions	ECG features prompting lower dose or discontinuation	AV nodal slowing
Disopyramide	100–250 mg t.i.d.	Contraindicated in systolic heart failure. Caution when using concomitant therapy with QT-prolonging drugs.	QT interval >500 ms	None
Flecainide	100–200 mg b.i.d.	Contraindicated if creatinine clearance	QRS duration increase >25%	None

Προαρρυθμική δράση

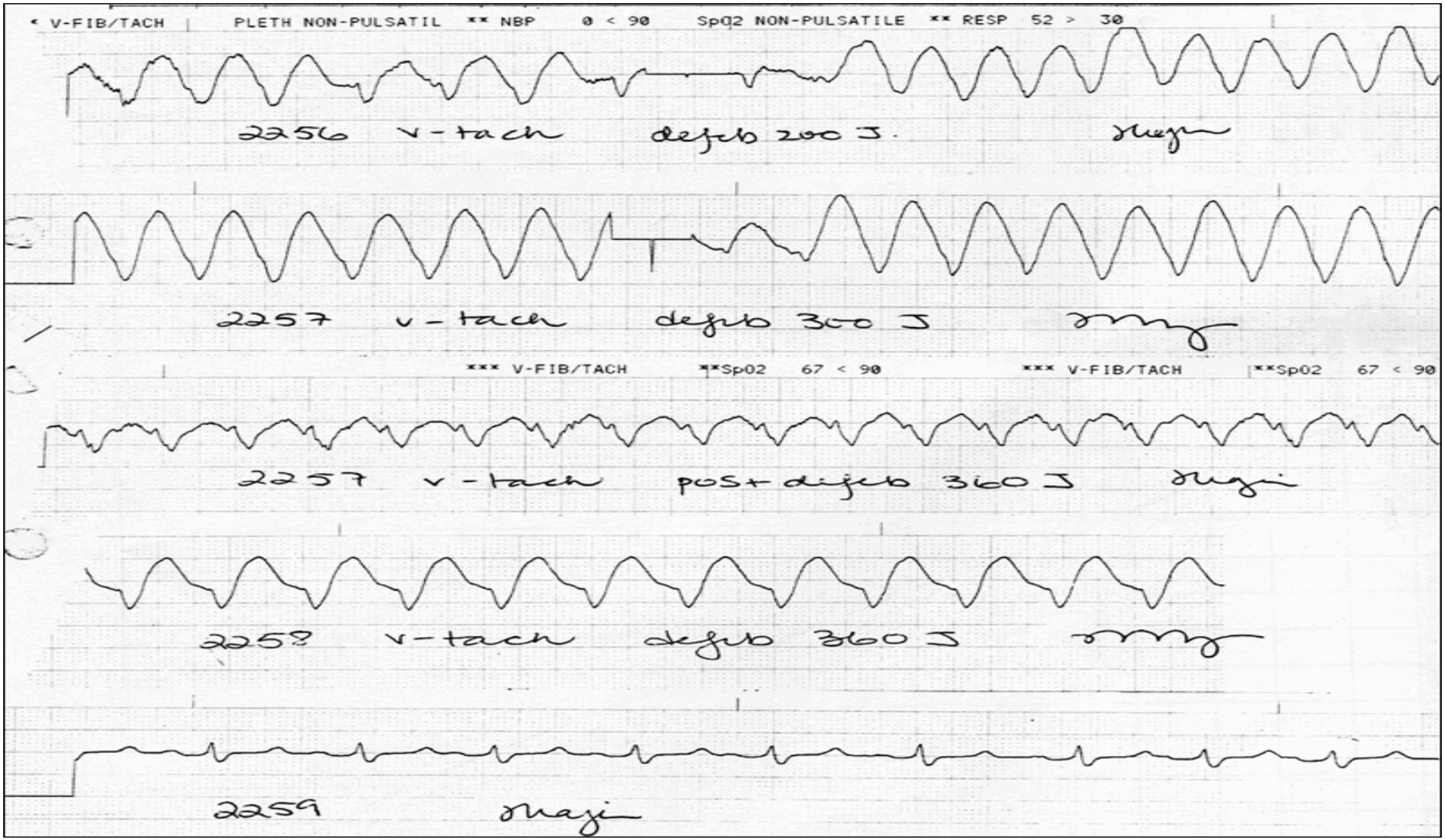
Μετατροπή κολπικής μαρμαρυγής σε 1:1 κολπικό πτερυγισμό/ταχυκαρδία

Κοιλιακές ταχυκαρδίες

- LVSD
- Υπετροφία τοιχώματος
- Ουλές τοιχώματος
- Ισχαιμία

0
1000
2000
I
III
V1
T1516
T1314
T1112
T910
T78
T56
T34
T12
HISp
HISd
CSp
CSd
0
1000
2000
I
III
V1
T1516
T1314
T1112
T910
T78
T56
T34
T12
HISp
HISd
CSp
CSd

Κοιλιακή ταχυκαρδία σε αθενή με προπαφενόνη



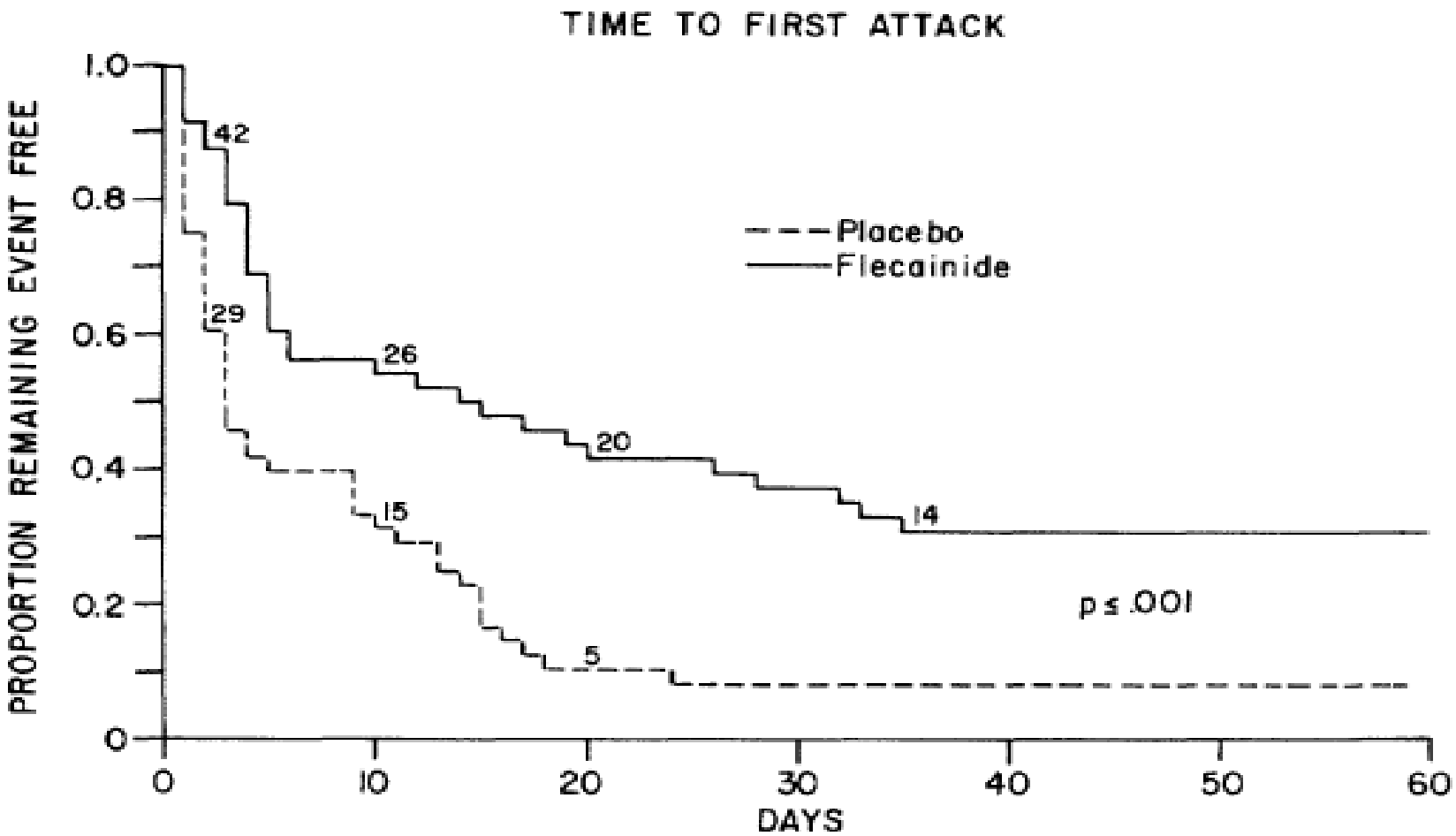
ΔΙΑΤΗΡΗΣΗ ΦΚΡ

Κλινικές μελέτες φλεκαϊνίδης

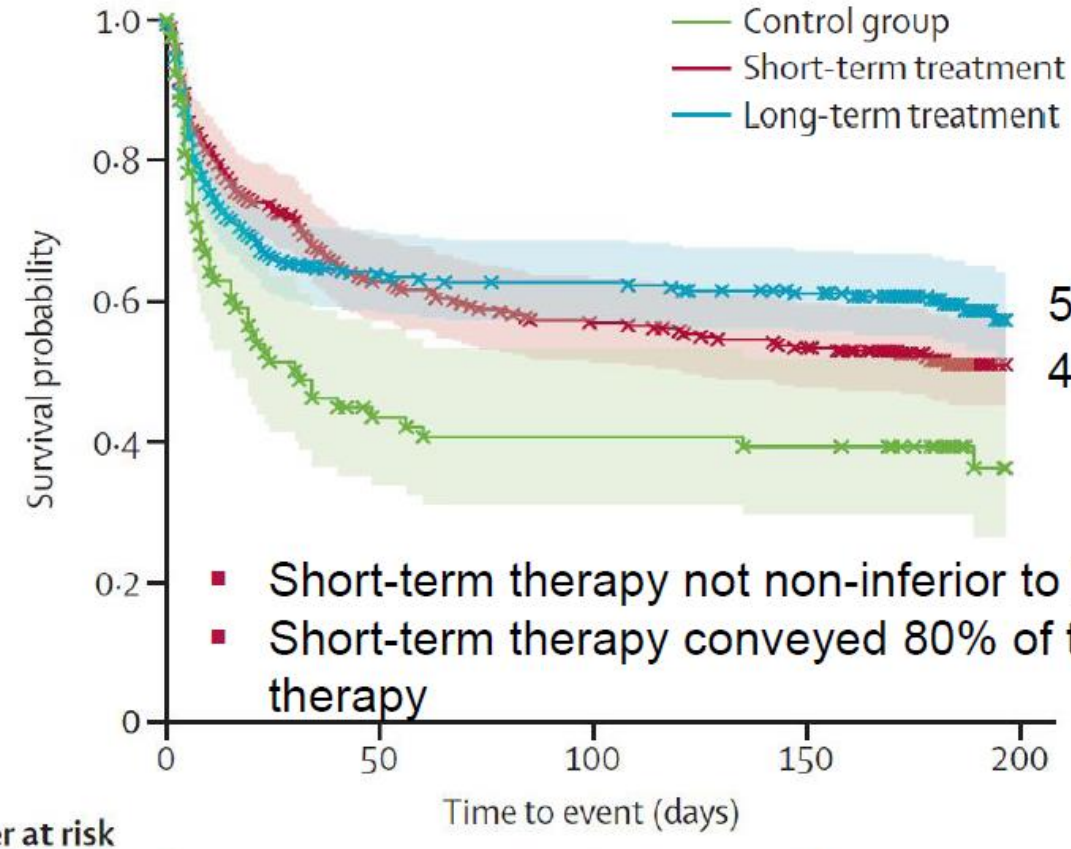
Trial	Treatments	Patients	Trials design and methods
flecainide vs no treatment			
Van Gelder , 1989 n=36/37 follow-up: 12 months	Flecainide 200-300 mg/d versus no treatment	Any persistent AF or AFl	Parallel groups open
flecainide vs placebo			
Carunchio (flecainide vs placebo) , 1995 n=20/28 follow-up: 12 months	Flecainide 200 mg/d versus placebo	patients with recurrent AF with >3 episodes in previous 1 year	Parallel groups open
flecainide vs digoxin			
Steinbeck (flecainide vs digoxin) , 1988 n=15/15 follow-up: 12 months	-	Paroxysmal symptomatic AF of any duration	Parallel groups open
flecainide vs propafenone			
Aliot , 1996 n=48/49 follow-up: 12 months	Flecainide 100-200mg/d versus Propafenone 600 mg/d	patients with paroxysmal AF documented any time before	Parallel groups open
flecainide vs quinidine			
Naccarelli , 1996 n=117/122 follow-up: 12 months	Flecainide 200-300 mg/d versus Quinidine 1-1,5 g/d	Any documented symptomatic AF	Parallel groups double blind

Prevention of Symptomatic Recurrences of Paroxysmal Atrial Fibrillation in Patients Initially Tolerating Antiarrhythmic Therapy

A Multicenter, Double-Blind, Crossover Study of Flecainide



Flec SL – Primary outcome (ITT)



p=0,2081
for non-inferiority

- Short-term therapy not non-inferior to long-term therapy
- Short-term therapy conveyed 80% of the effect of long-term therapy

Number at risk				
Control group	81	31	29	28
Short-term treatment group	273	161	145	135
Long-term treatment group	281	166	162	152

European Heart Journal (1995) **16**, 1943–1951

Safety of flecainide versus propafenone for the long-term management of symptomatic paroxysmal supraventricular tachyarrhythmias

Report from the Flecainide and Propafenone Italian Study (FAPIS) group

			Day 0	15	30	90	180	270	360	
PAF	Flecainide 100 mg b.i.d.	No. of patients	77	71	70	62	58	53	50	$P<0{\cdot}02$
		Probability		0·93	0·93	0·86	0·84	0·79	0·79	
	Propafenone 150 mg t.i.d.	No. of patients	82	69	63	53	50	48	45	
		Probability		0·84	0·79	0·70	0·69	0·67	0·63	

<u>Προαρρυθμίες</u>

1. Προπαφενόνη 0.6%- 1 ασθενής με κοιλακή ταχυκαρδία-172 σφ/λ-ηλεκτρική ανάταξη

1.Φλεκαινίδη 1.2%- 2 ασθενείς με ταχεία κολπική ταχυκαρδία/πτερυγισμό 1:1

The Value of Class IC Antiarrhythmic Drugs for Acute Conversion of Paroxysmal Atrial Fibrillation or Flutter to Sinus Rhythm

MAARTEN J. SUTTORP, MD, J. HERRE KINGMA, MD, PhD, EMILE R. JESSURUN, MD,
LORAINE LIE-A-HUEN, PharmD, NORBERT M. van HEMEL, MD, PhD,
KONG I. LIE, MD, PhD*

Nieuwegein and Groningen, The Netherlands

Φλεκαινίδη vs Προπαφενόνη

89% 63%

Twenty-five years in the making: flecainide is safe and effective for the management of atrial fibrillation

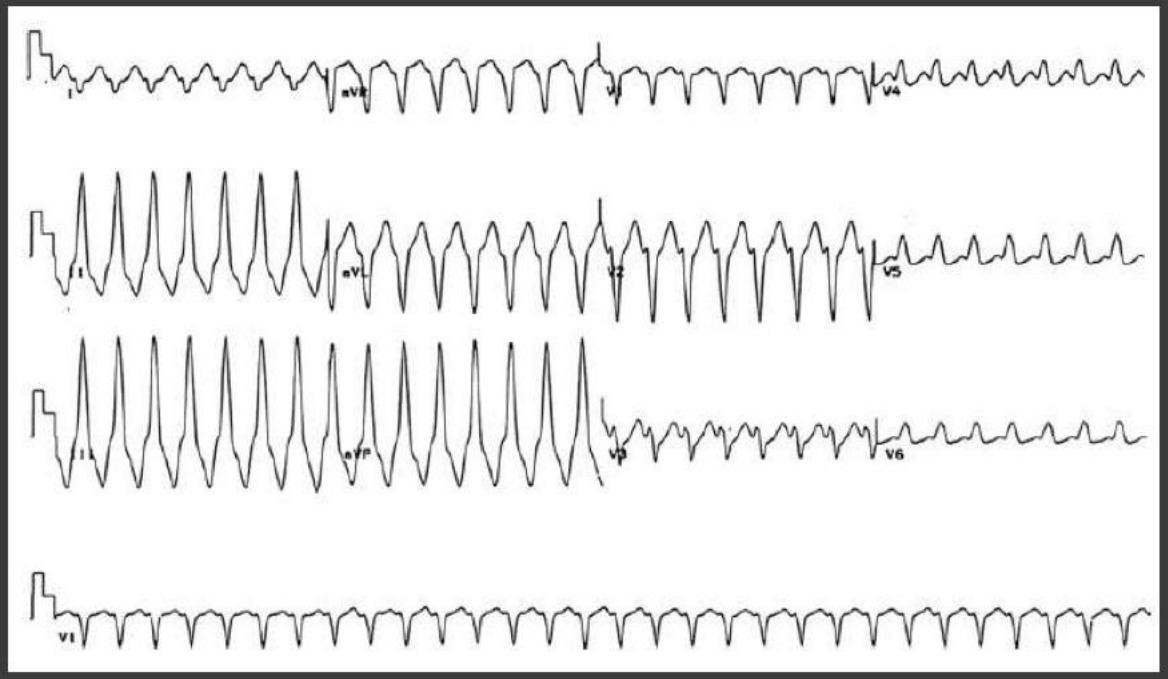
Etienne Aliot[1]*, Alessandro Capucci[2], Harry J. Crijns[3], Andreas Goette[4], and Juan Tamargo[5]

Table 2 Relapse rates for different antiarrhythmic drugs reported in the literature[a]

	Mean relapse rate (range)	Studies (*n*)
No drug	69% (44–85)	10
Quinidine	59% (46–89)	11
Disopyramide	51% (46–56)	3
Propafenone	61% (54–70)	3
Flecainide	38% (19–51)	3
Sotalol	58% (51–63)	3
Amiodarone	47% (17–64)	4

[a]Minimum 6-months follow-up.
Adapted from Levy *et al.*[108]

ΆΛΛΕΣ ΕΝΔΕΙΞΕΙΣ

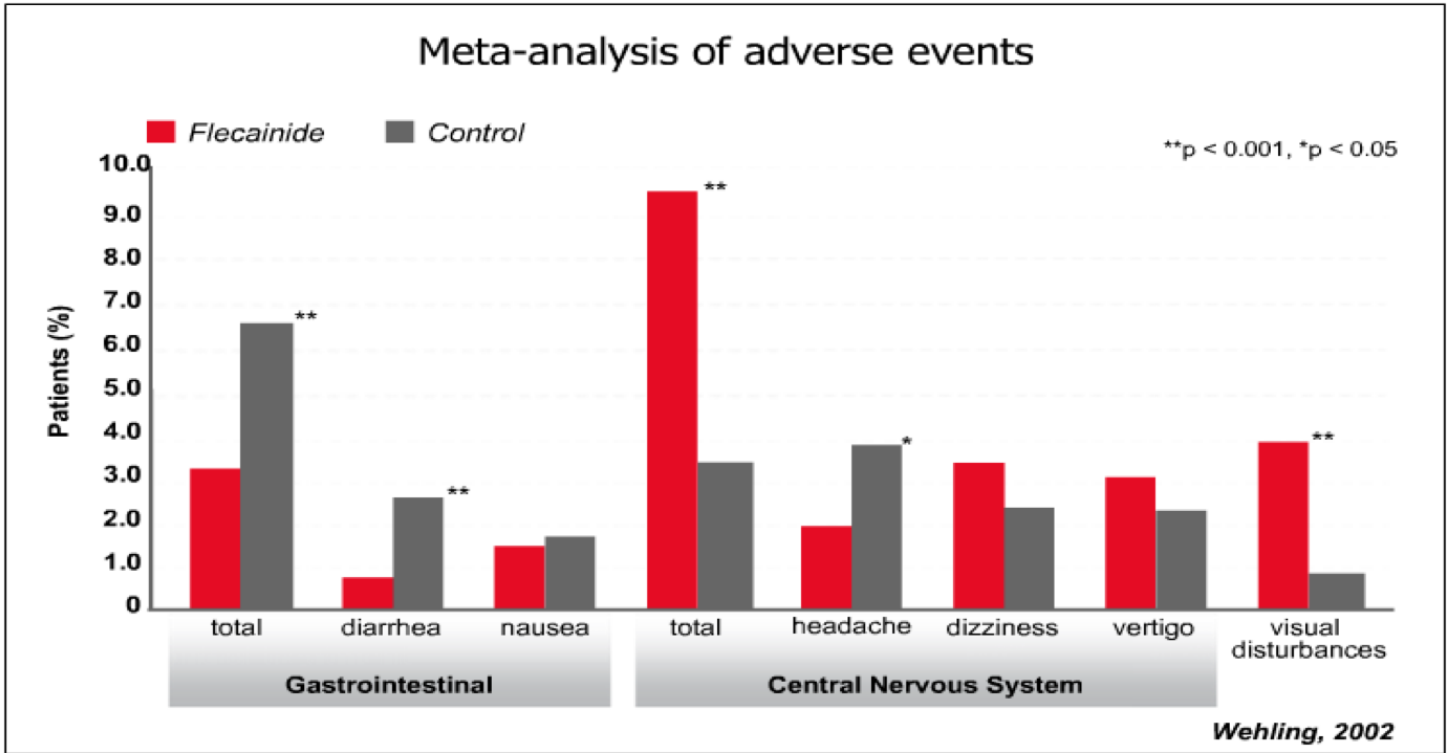


Drug therapy with b-blockers and/or calcium channel blockers (and/or IC agents in RVOT VT) can be useful in patients with structurally normal hearts with symptomatic VT arising from the RV.
(Class IIa - LoE: C)

Prystowski et al. J Am Col Cardiol 2012;59:1733-44
ACC/AHA/ESC 2006 guidelines for management of patients with ventricular arrhythmias and the prevention of sudden cardiac death

ΜΑΚΡΟΠΡΟΘΕΣΜΗ ΑΣΦΑΛΕΙΑ

Flecainide produces a low incidence of extra-cardiac adverse events



The New England
Journal of Medicine

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Volume 324 MARCH 21, 1991 Number 12

MORTALITY AND MORBIDITY IN PATIENTS RECEIVING ENCAINIDE, FLECAINIDE, OR PLACEBO

The Cardiac Arrhythmia Suppression Trial

DEBRA S. ECHT, M.D., PHILIP R. LIEBSON, M.D., L. BRENT MITCHELL, M.D., ROBERT W. PETERS, M.D., DULCE OBIAS-MANNO, R.N., ALLAN H. BARKER, M.D., DANIEL ARENSBERG, M.D., ANDREA BAKER, R.N., LAWRENCE FRIEDMAN, M.D., H. LEON GREENE, M.D., MELISSA L. HUTHER, DAVID W. RICHARDSON, M.D., AND THE CAST INVESTIGATORS*

CAST: Cardiac Arrhythmia Suppression Trial
- TRIAL DESIGN -

Design

Multicenter, multinational; initial phase open; main phase randomized, double-blind, placebo-controlled

Patients

1725 patients with ≥6 ventricular premature depolarizations/h (24h Holter recording) and left ventricular ejection fraction ≤0.55 at ≤90 days after MI or ≤0.40 at >90 days after MI

Follow up and primary end point

Mean 10 months follow up. Primary endpoint death from arrhythmia

Treatment

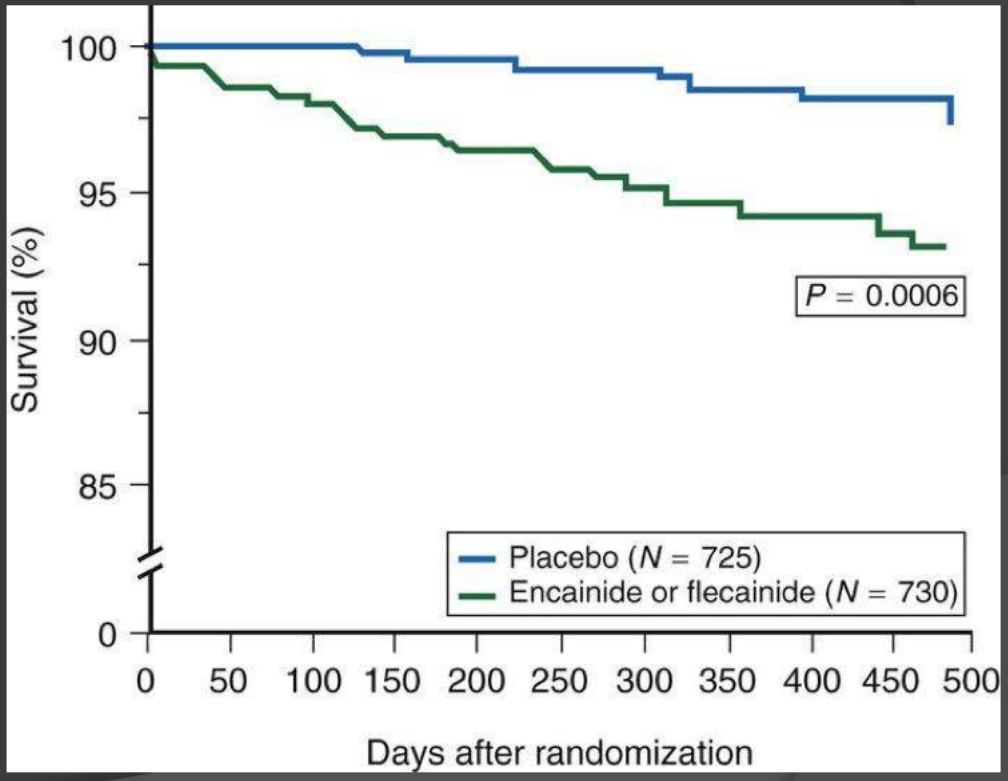
- Open titration phase (mean 15 days) to select patients in whom drug (encainide, flecainide or moricizine) suppressed arrhythmias
- Selected patients then randomized to three-times daily placebo, encainide 35–50 mg, flecainide 100 mg or moricizine 200–250 mg (results for moricizine not reported here)

MORTALITY AND MORBIDITY IN PATIENTS RECEIVING ENCAINIDE, FLECAINIDE, OR PLACEBO

The Cardiac Arrhythmia Suppression Trial

CAST-I:755 pts flecainide or encainde vs 743pts placebo
CAST-II: 502 pts moricizine vs 491 pts placebo
CAST-I discontinued in 1989 and CAST-II in 1991 due to excess mortality

Average 10 months of follow-up
Total mortality relative risk: 2.5; 95%CI:1.6 to 4.5)
Arrhythmic deaths and nonfatal cardiac arrests relative risk: 3.6; 95% CI: 1.7 to 8.5



CAST Investigators. N Engl J Med. 1989;321:406-12

The safety of flecainide treatment of atrial fibrillation: long-term incidence of sudden cardiac death and proarrhythmic events

Subjects. A total of 112 patients with paroxysmal (51%) or persistent (49%) AF (mean age 60 ± 11 years) were included after identifying all patients with AF who

Σε ποιους ασθενείς δεν πρέπει να χορηγείται η φλεκαϊνίδη?

- Δομική καρδιακή νόσο.
- Κολποκοιλιακό αποκλεισμό δευτέρου ή τρίτου βαθμού, απουσία βηματοδότη
- Αριστερός σκελικός αποκλεισμός
- Δεξιός σκελικός αποκλεισμός όταν συνυπάρχει αριστερός ημιαποκλεισμός, απουσία βηματοδότη
- Ασυμπτωματικές πρώιμες κοιλιακές εκτακτοσυστολές και/ή ασυμπτωματική μη εμμένουσα κοιλιακή ταχυκαρδία, με συνοδό δομική δυσλειτουργία.
- Σημαντική ηπατική έκπτωση εκτός αν τα οφέλη είναι μεγαλύτερα από τον κίνδυνο.

Impact of Dosage Frequency on Patient Compliance

Dosage	Compliance (%)	Range (%)	95% CI
Twice daily	83.1 ± 24.9	9–109	74.7–91.5
Three times daily	65.8 ± 30.1	7–102	49.1–82.5

Comparative Efficacy of Two Different β-Blockers on 24-Hour Blood Pressure Control

Pantelis Sarafidis MD, PhD;[1,2] Zvezdana Bogojevic, MD;[1] Emad Basta, MD;[1] Emily Kirstner, PhD;[3] George L. Bakris, MD[3]

JCH 2008

Efficacy and safety of twice- vs once-daily dosing of lisinopril for hypertension

Tiffany Tsai PharmD[1] | Miranda E. Kroehl MS, PhD[2] | Steven M. Smith PharmD, MPH[3] | Angela M. Thompson PharmD[1] | Isabella Y. Dai[1] | Katy E. Trinkley PharmD[1,4]

JCH 2017

Impact of reducing dosing frequency on adherence to oral therapies: a literature review and meta-analysis

Patient Preference and Adherence 2013:7 419–434

Conclusion: Current meta-analyses suggested that across acute and chronic disease states, reducing dosage frequency from multiple dosing to OD dosing may improve adherence to therapies among patients. Improving adherence may result in subsequent decreases in health care costs.

systematic review of the associations between dose regimens and medication compliance. Clin Ther. 2001 Aug;23(8):1296-310.

CONCLUSIONS: A review of studies that measured compliance using electronic monitoring confirmed that *the prescribed number of doses per day is inversely related to compliance*. Simpler, less frequent dosing regimens resulted in better

compliance across a variety of therapeutic classes.

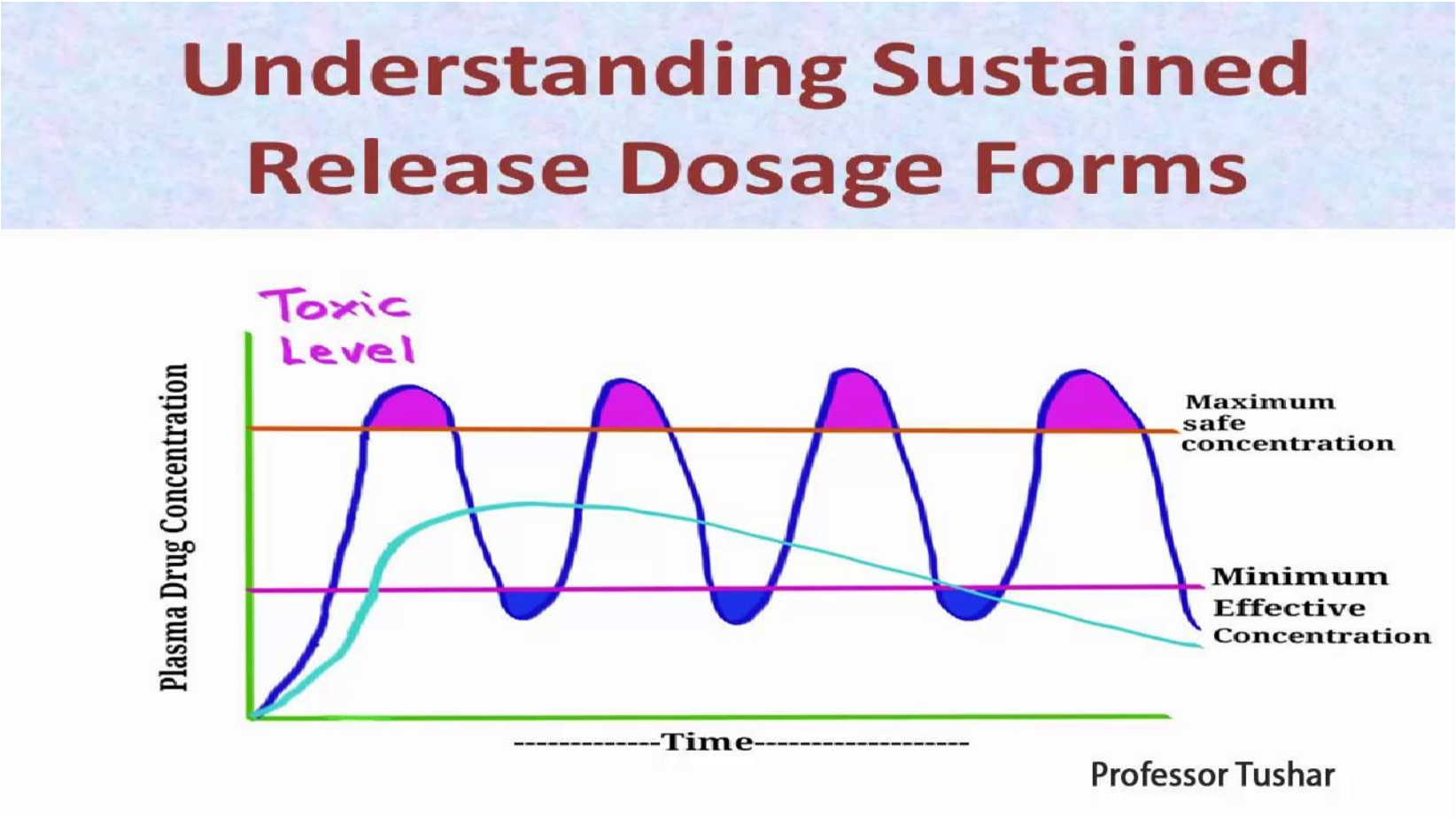
Adherence and dosing frequency of common medications for cardiovascular patients.

Am J Manag Care. 2012 Mar;18(3):139-46.

Analysis consisted of 1,077,474 patients aged >18 years

CONCLUSIONS: In this large analysis*, the OD dosing regimen was related to greater adherence versus a BID regimen.*

ΠΛΕΟΝΕΚΤΗΜΑΤΑ ΒΡΑΔΕΙΑΣ ΑΠΟΔΕΣΜΕΥΣΗΣ



Flecainide OD vs BID.

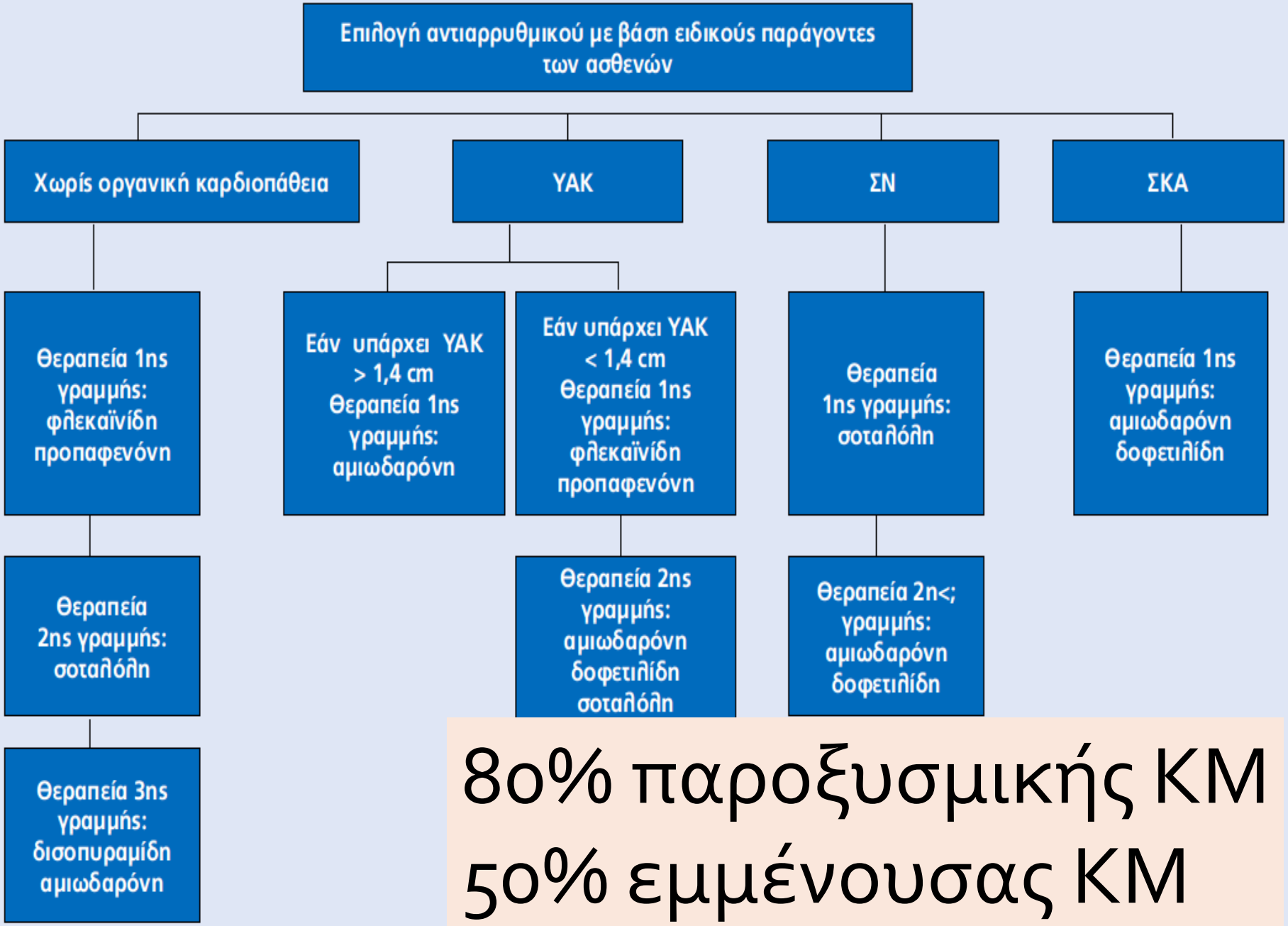
Ποια μορφή να χρησιμοποιήσω για τους ασθενείς μου?

IR/BID

- Ανάταξη
- Pill in the pocket

OD

- Μακροχρόνια διατήρηση Φλ. Ρυθμού.



80% παροξυσμικής ΚΜ

50% εμμένουσας ΚΜ

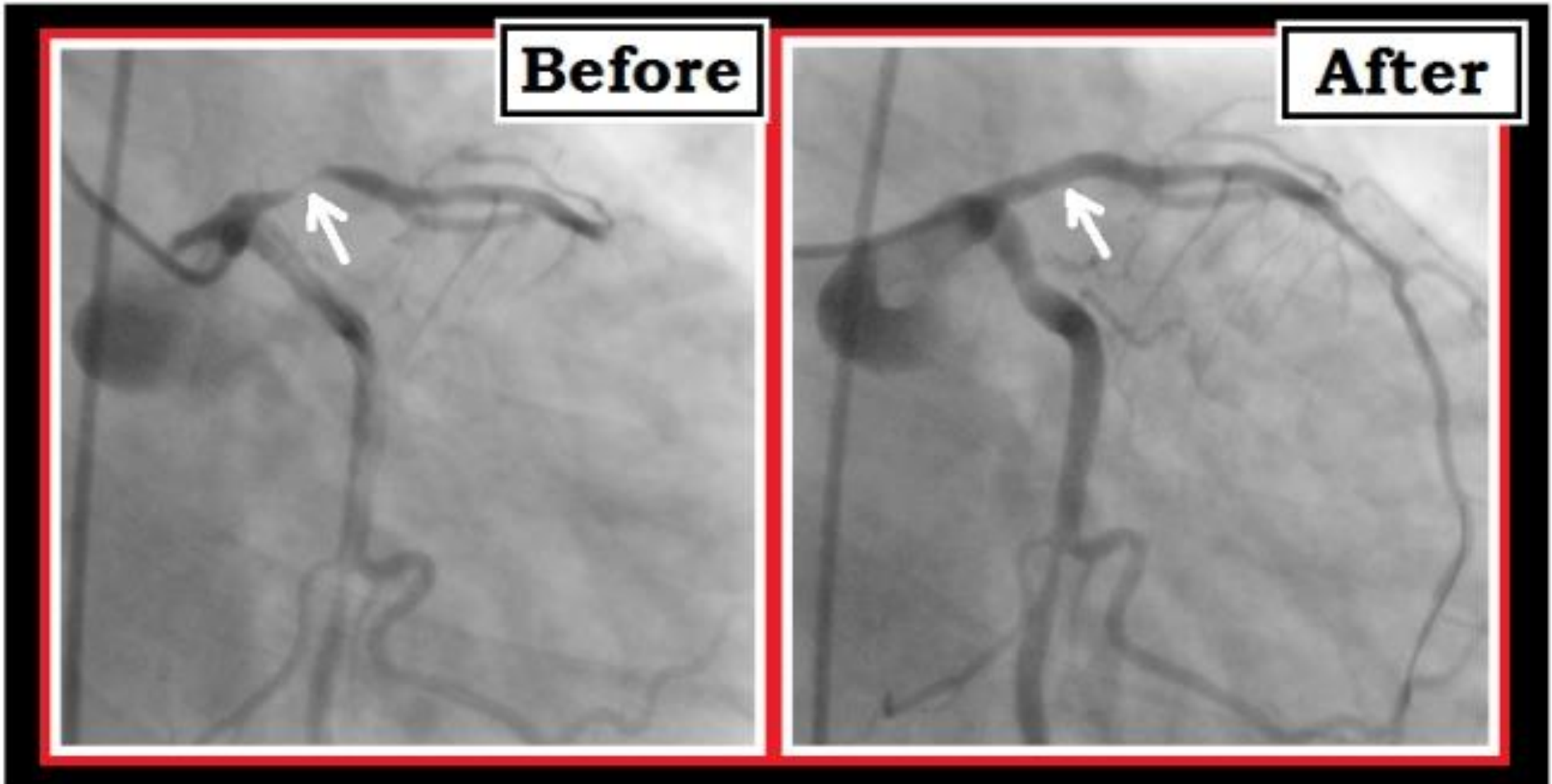
Usual headaches

1. Συνδυασμός με άλλα αντιαρρυθμικά φάρμακα
2. Στεφανιαία νόσος
3. Δόση φόρτισης σε ασθενή που δεν έχει ξαναπάρει

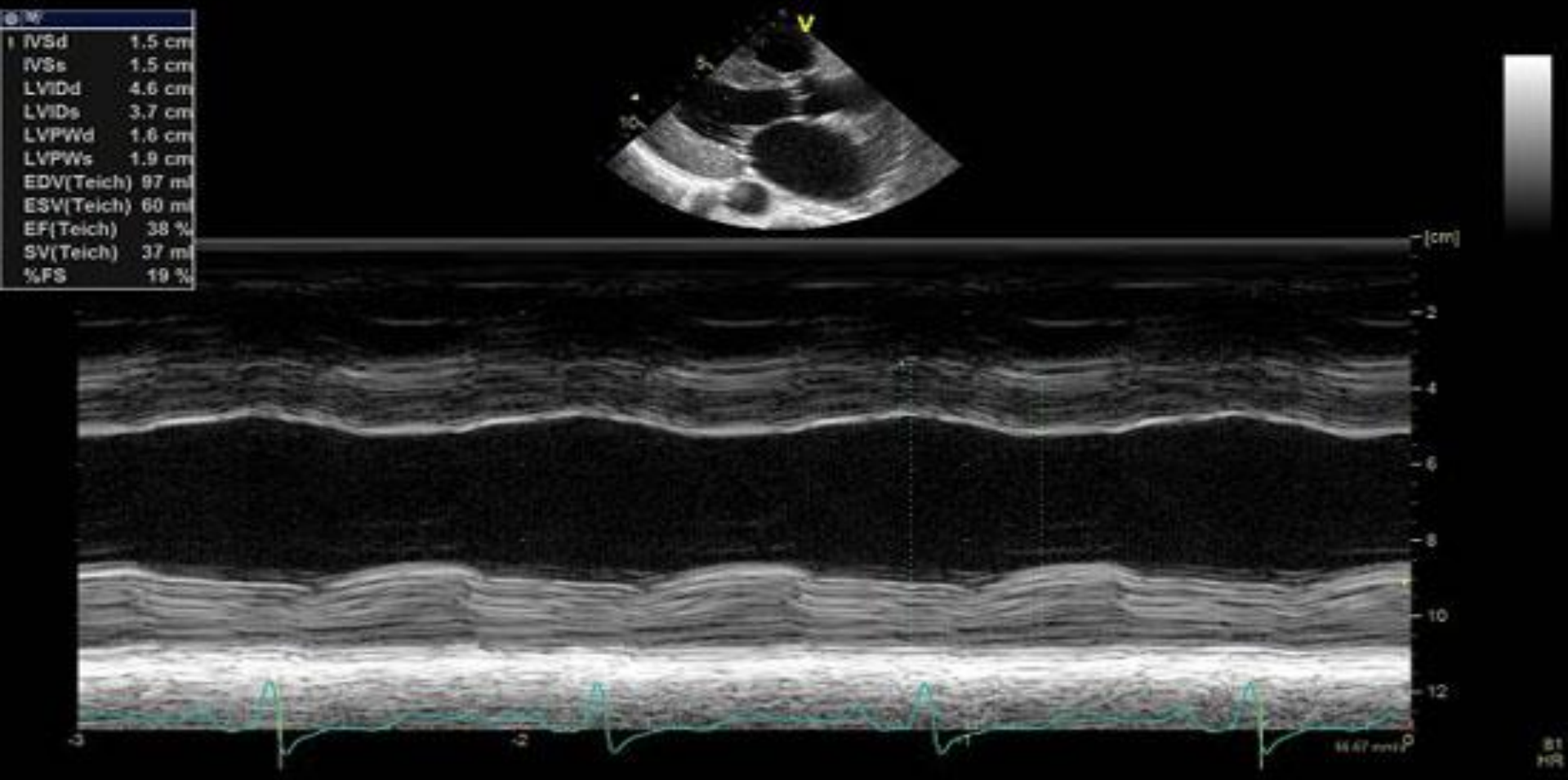
Συμπέρασμα

- Προτεραιότητα μας πρέπει να είναι η διατήρηση του ΦΚΡ
- Οι επιλόγες των αντιαρρυθμικών δεν είναι απεριόριστε
- Θα πρέπει να επιλέγεται το φάρμακο με την καλύτερη ισσοροπία αποτελεσματικότητας-ασφάλειας
- Η βιβλιογραφία και κλινική εμπειρία δείχνει ότι η Φλεκαινιδη έχει αυτά τα χαρακτηριστικά

Ασθενή 55 ετών με ιστορικό PAF σε Φλεκαινίδη, ασυμπτωματικη στένωση LAD 90% και αγγειοπλαστική



Ασθενής 45 ετών με PAF, ιστορικό ΑΥ και οριακή υπερτροφία Αρ κοιλίας- 14 mm



ID: **21-DEC-**

Female Caucasian

Room:
Loc:

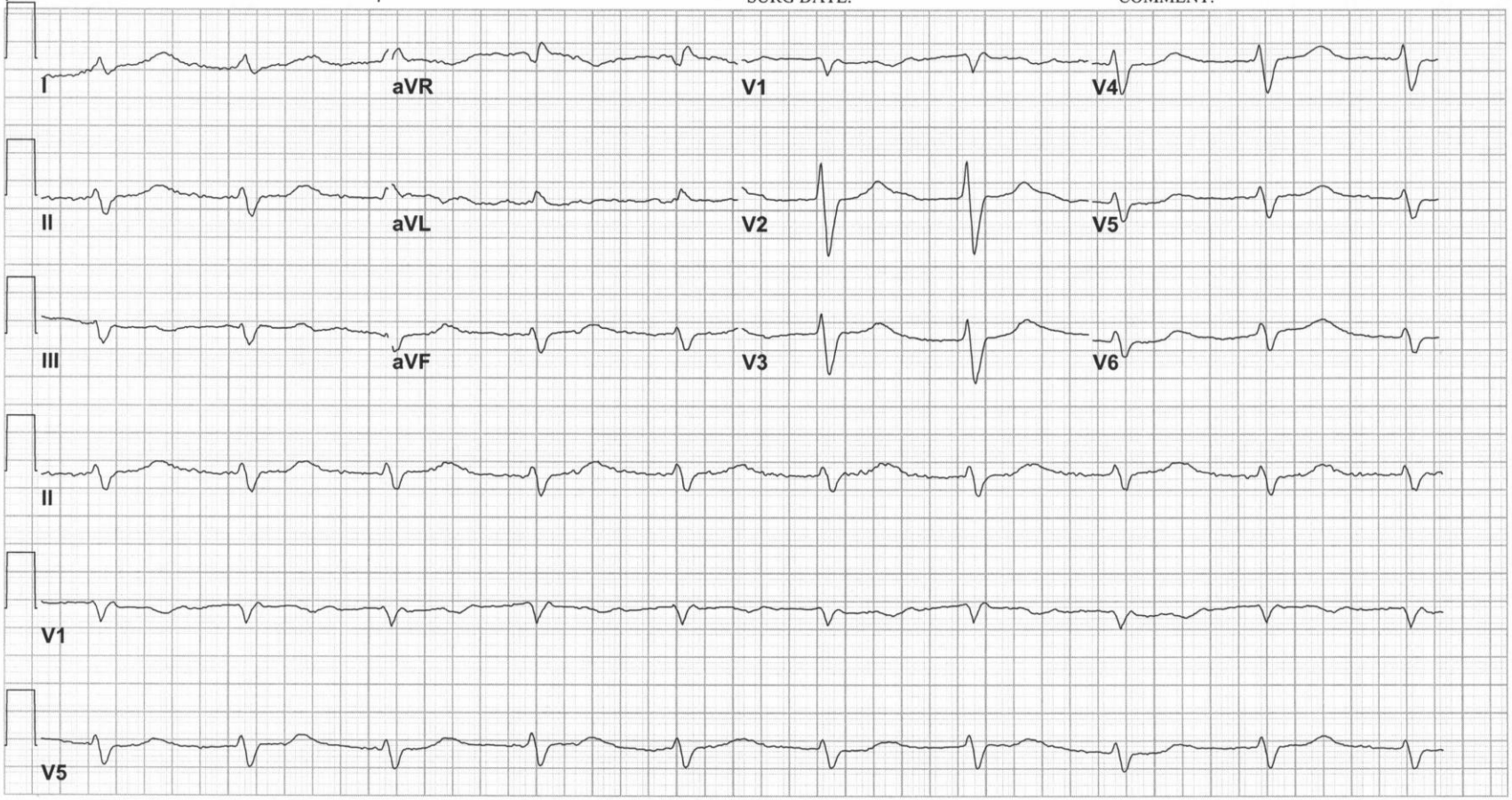
Vent. rate	58	BPM
PR interval	*	ms
QRS duration	178	ms
QT/QTc	642/630	ms
P-R-T axes	* -54	34

WIDE QRS RHYTHM
LEFT AXIS DEVIATION
LEFT BUNDLE BRANCH BLOCK
NON-SPECIFIC INTRA-VENTRICULAR CONDUCTION BLOCK
ABNORMAL ECG
NO PREVIOUS ECGS AVAILABLE

Technician:
Test ind:

Referred by:
SURG DATE:

Confirmed By:
COMMENT:



25mm/s 10mm/mV 40Hz 7.1.1 12SL 237 CID: 1

EID:

Female

Room:
Loc: 1

Vent. rate	101 bpm
PR interval	300 ms
QRS duration	82 ms
QT/QTc	268/347 ms
P-R-T axes	111 79 -72

Sinus tachycardia with 1st degree AV block
Low voltage QRS
Lateral infarct, possibly acute
Marked ST abnormality, possible inferior subendocardial injury
Marked ST abnormality, possible anteroseptal subendocardial injury
** ** ACUTE MI ** **
Abnormal ECG

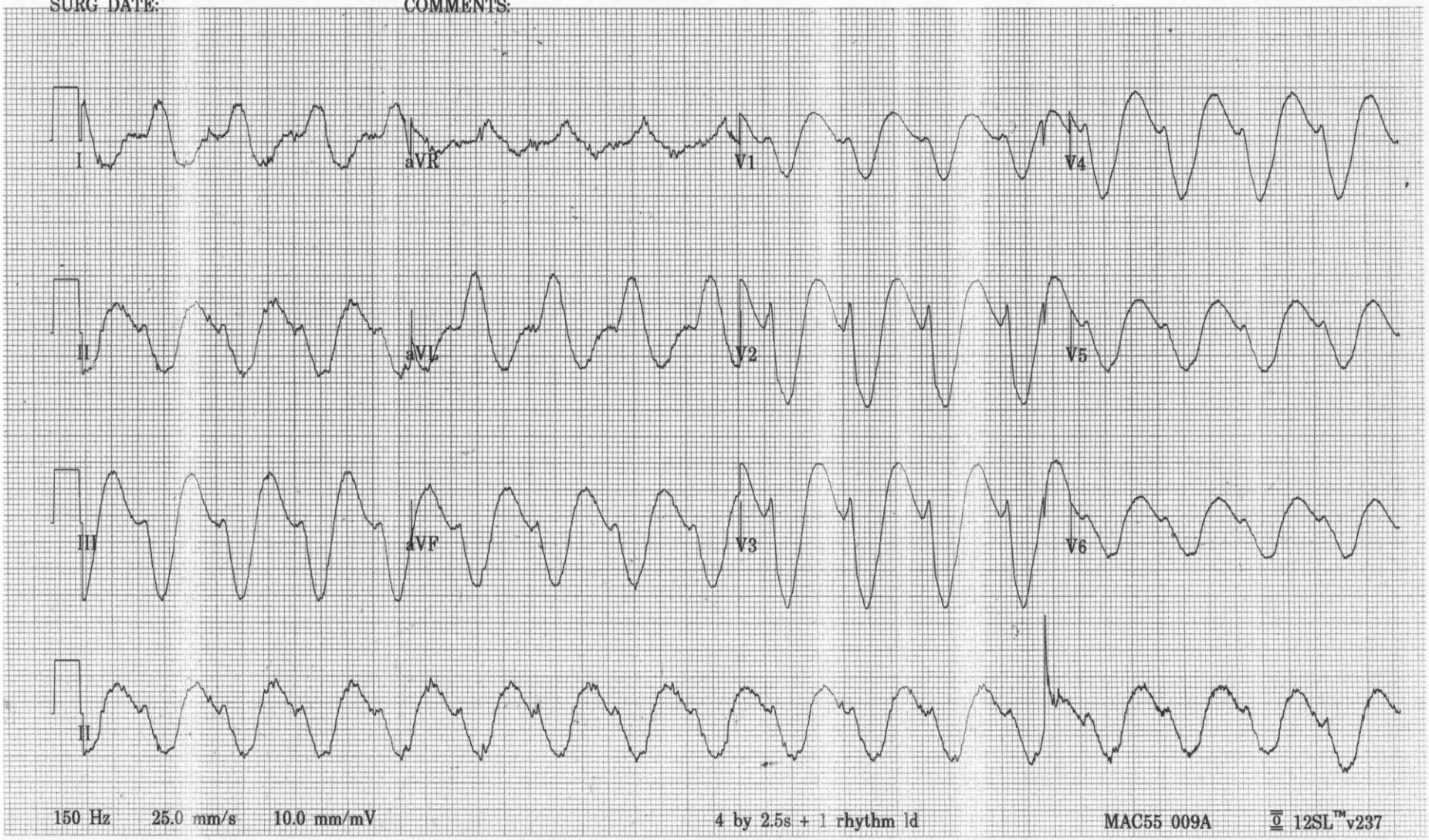
Technician:

Referred by: ER MD

Reviewed by:

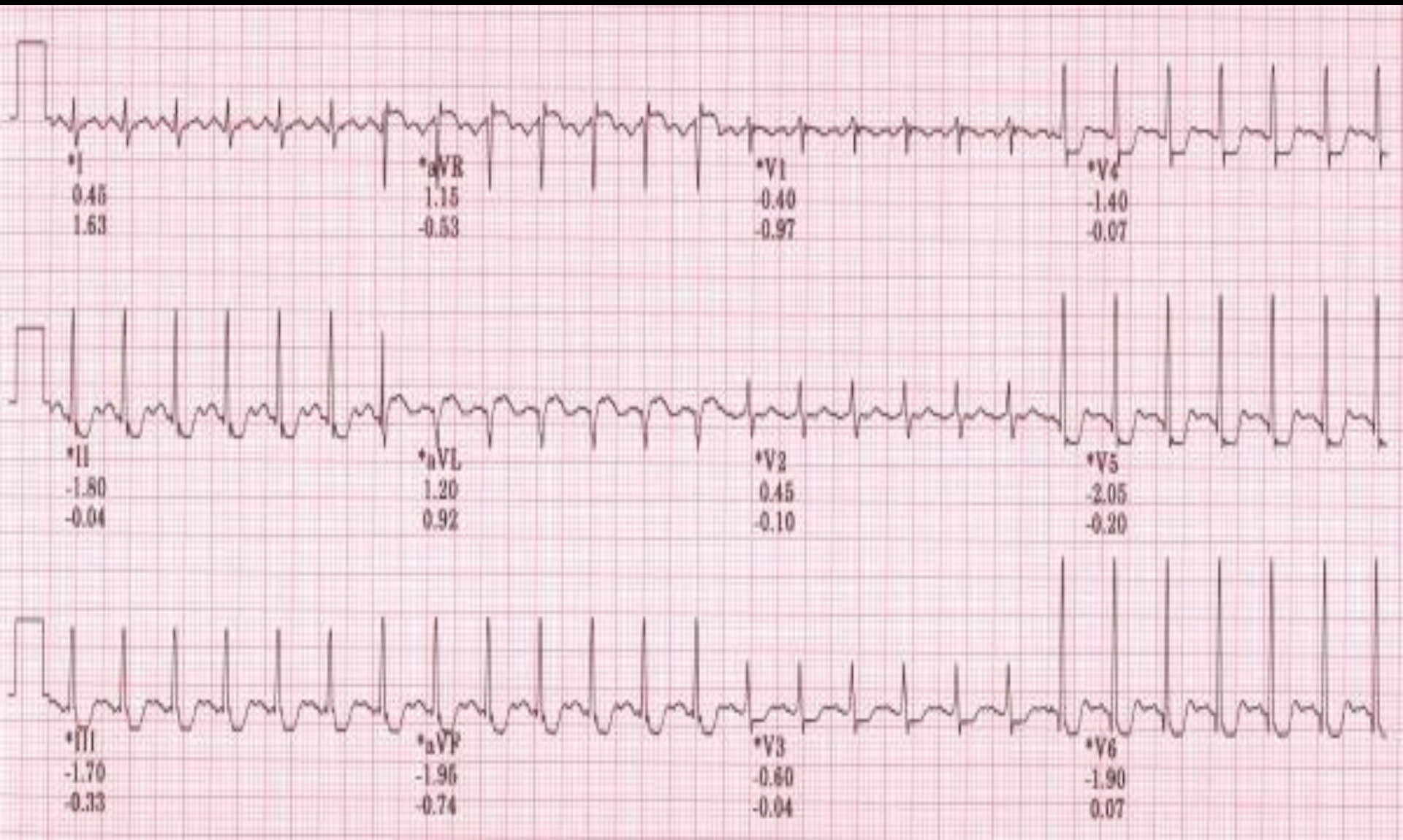
SURG DATE:

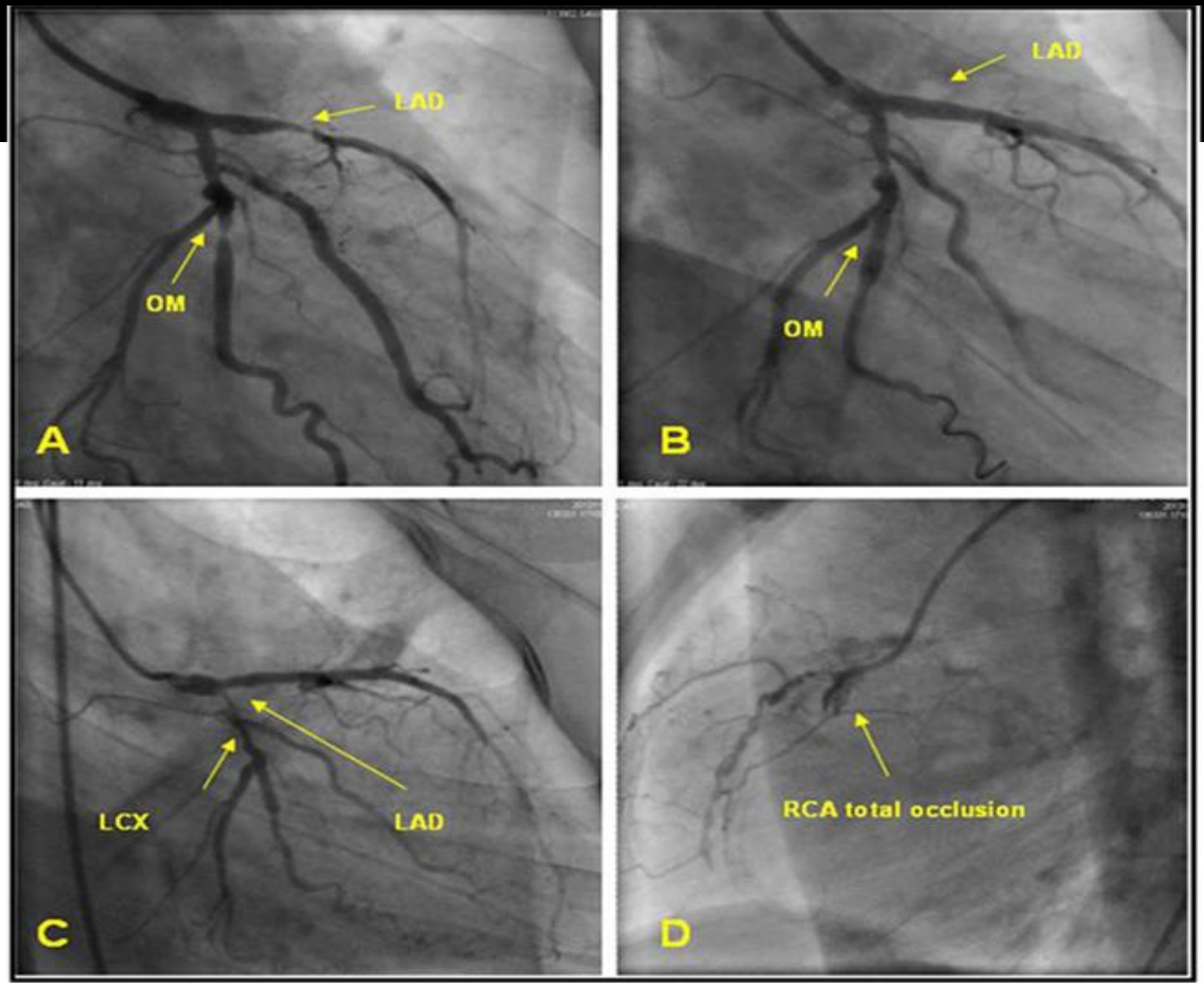
COMMENTS:



150 Hz 25.0 mm/s 10.0 mm/mV 4 by 2.5s + 1 rhythm ld MAC55 009A 12SL™v237

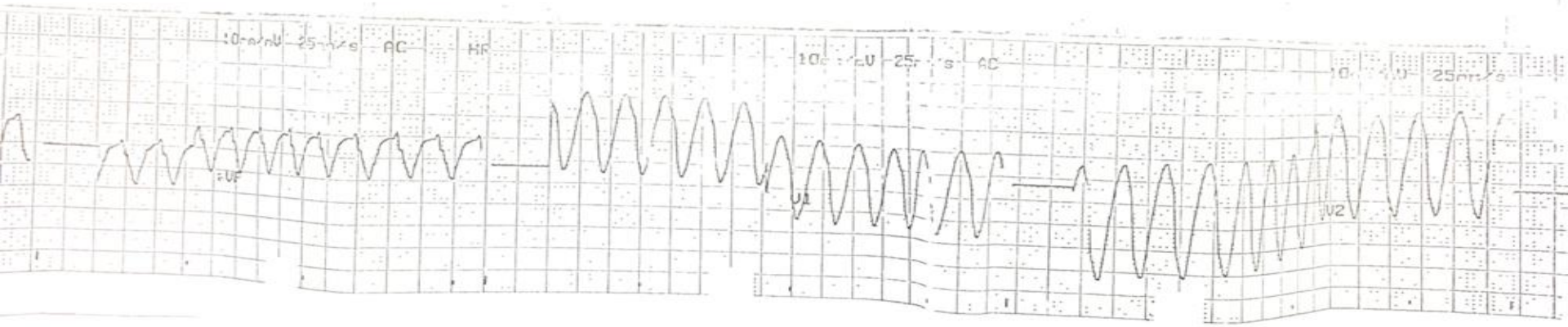
Ασθενής 52 ετών, καπνιστής, ΣΔ, οικογενειακό ιστορικό με PAF

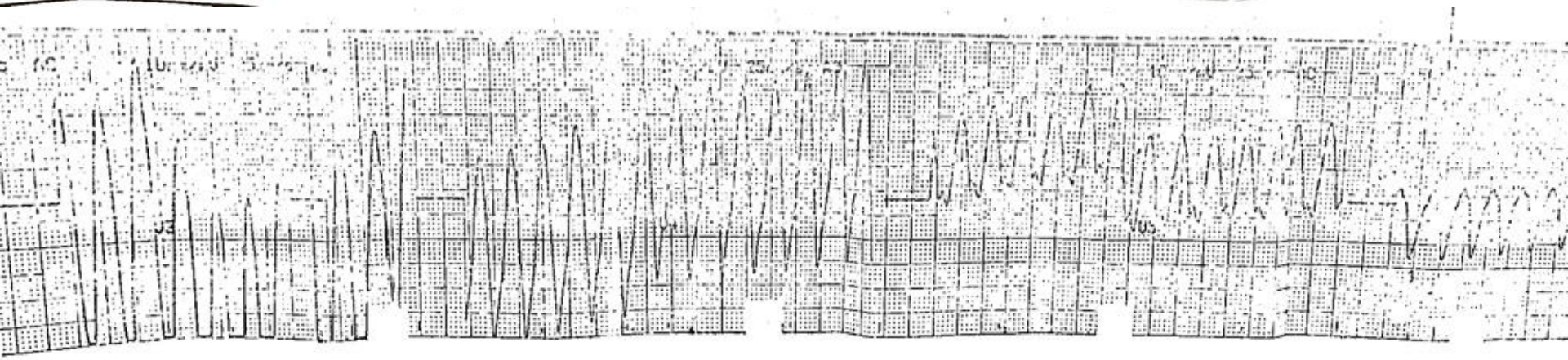


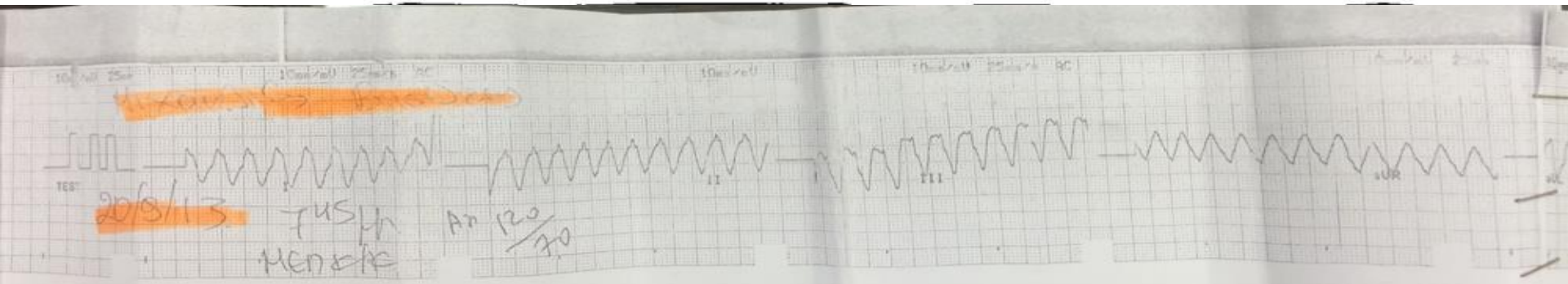

LAD
OM
A
LAD
OM
B
LCX
LAD
C
RCA total occlusion
D

- Παροξυσμική κολπική μαρμαρυγή από 3μήνου
- Συνεχή επεισόδια διάρκειας 2-3 ωρών
- 1 επεισόδιο με ηλεκτρική ανάταξη
- Ρυθμονόρμ 150 1χ2

Επεισόδιο διάρκειας 5 ωρών	Ρυθμονόρμ 150 χ1
Μετά από 2 ώρες	Ρυθμονόρμ 150 χ2
Μετά από 2 ώρες	Ρυθμονόρμ 150 χ1


AC
HR
V1
V2


V3
V4
V5


TEST
II
III
aVR
20/9/13
TUSH
AP 120/70
MENSIE