

Evolution of management of subclinical and not subclinical AF patients: monitoring to prevent

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The Old and the New

- N=121
- 30 min
- surgical creation of pocket
- 3 cases of decubitus
- 7 patients refused to device size



- N=187
- 45 sec
- no surgery
- no decubitus
- no patients refused injection, including young women

Injecting the LinQ



ICCS Experience

- 187 patients injected for:
 - Unexplained syncope 15%
 - Cryptogenic ischemia 18%
 - AF management, including ablation issues 55%
 - Borderline indication to pacing 12%

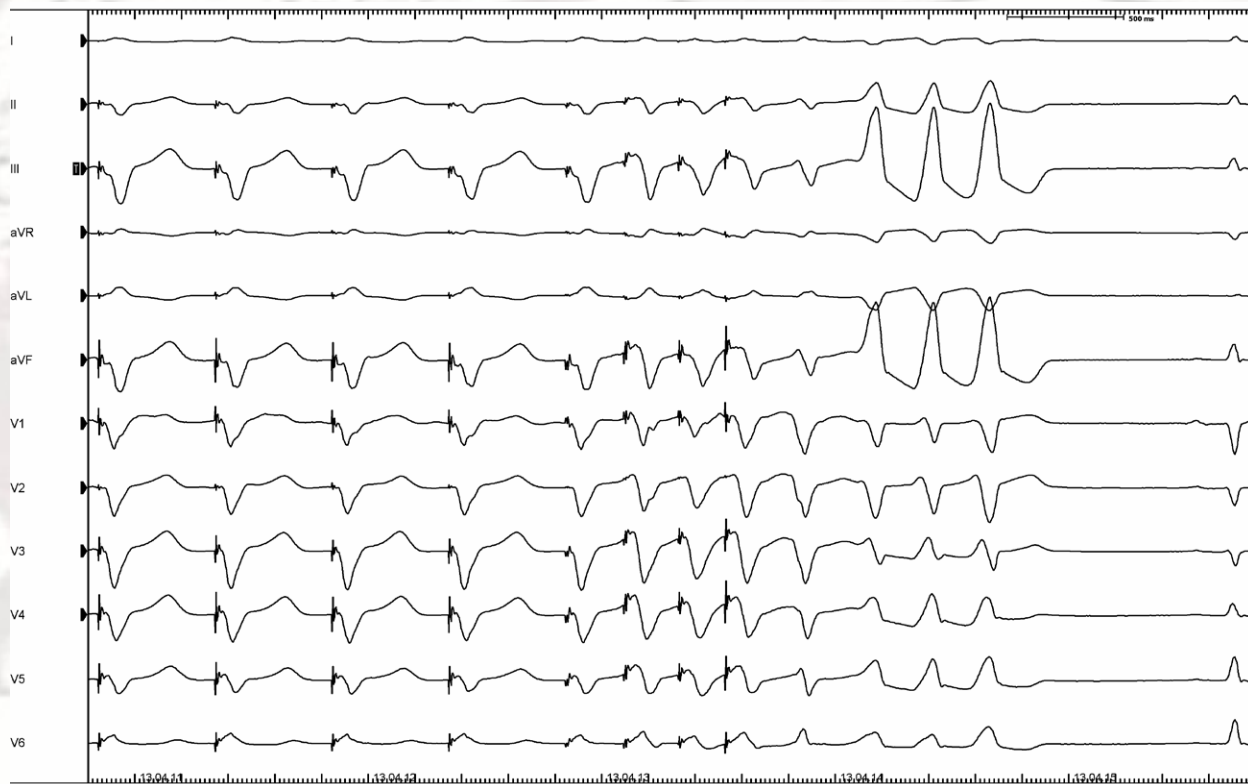
Automatic Follow-up

- Automatic follow-up enable faster diagnosis of still-non-symptomatic arrhythmias

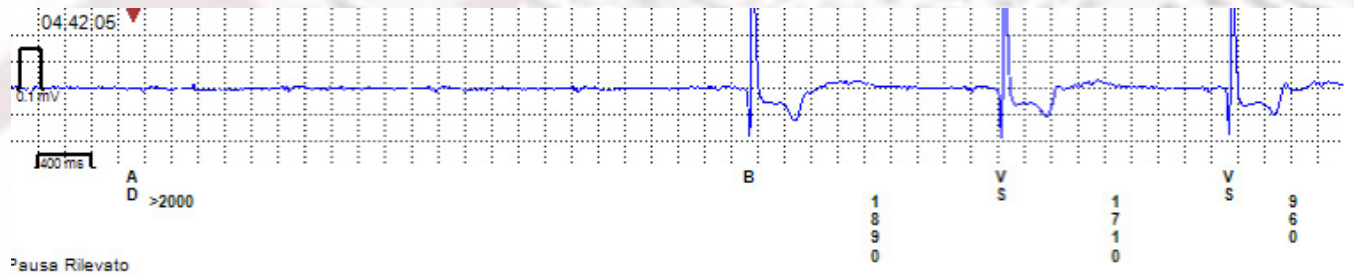
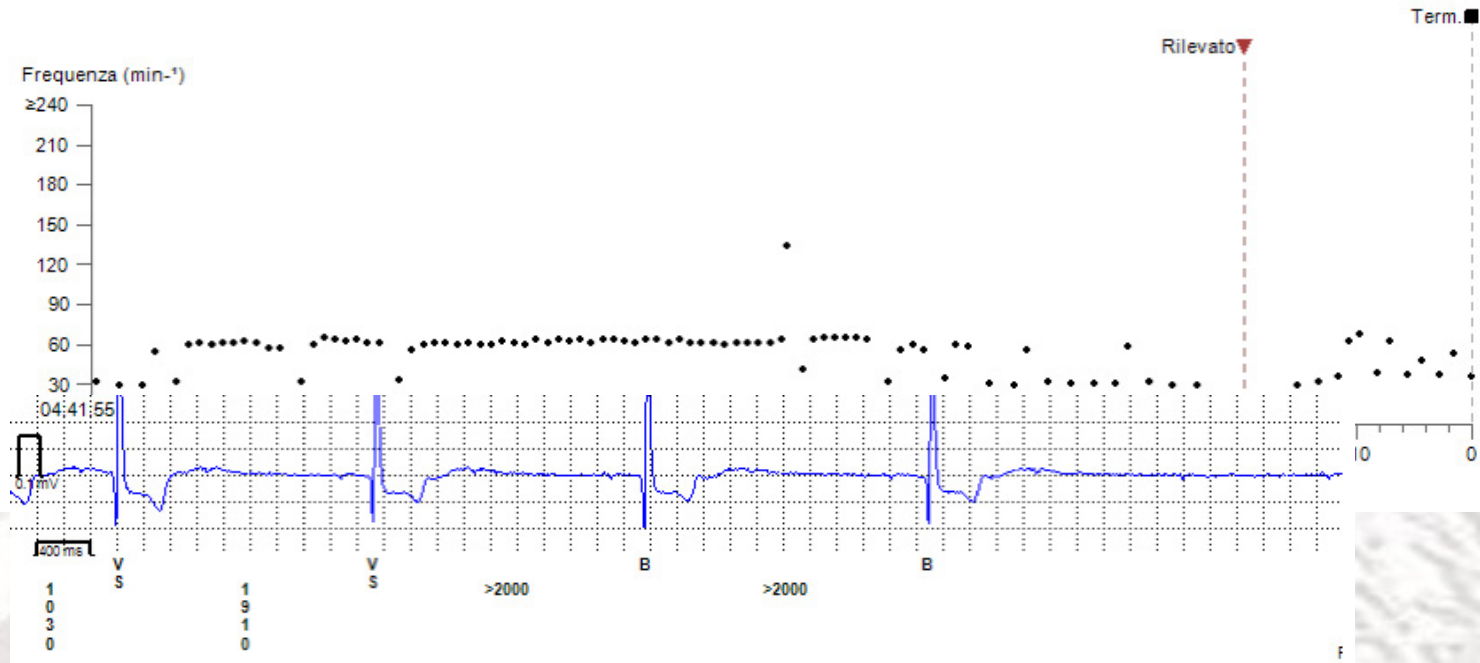


Borderline Indication to Pacing

MUST-T PATIENTS NEGATIVE PES



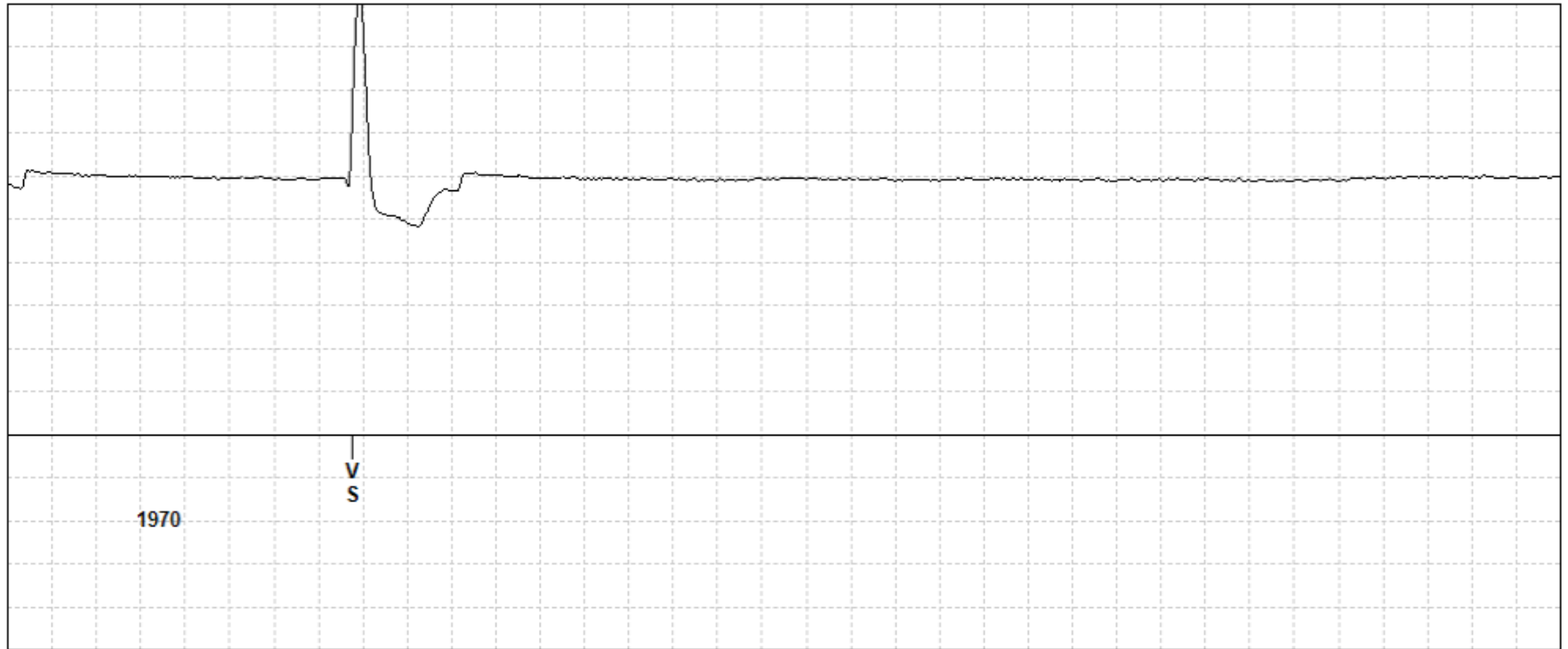
"VAGAL" 1° AV BLOCK



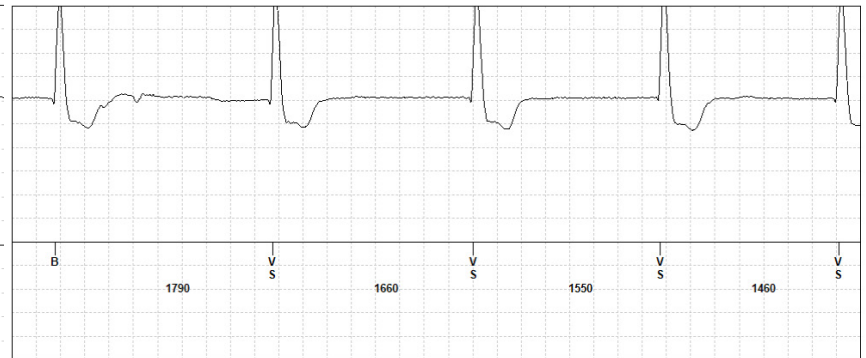
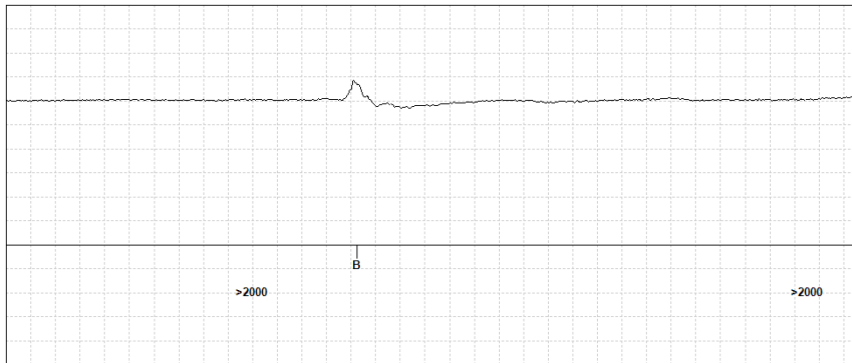
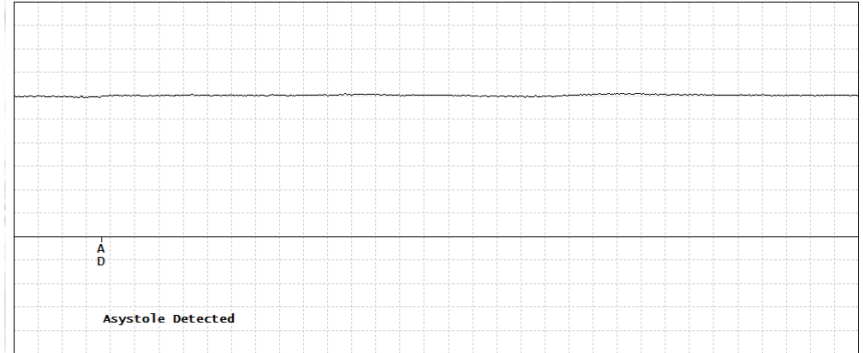
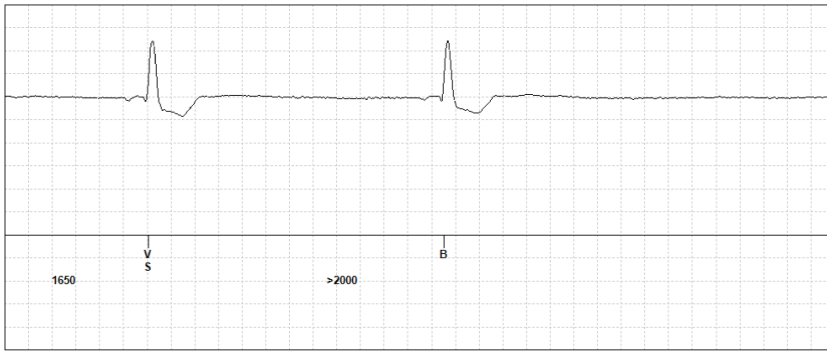
A faint, stylized illustration of a turtle in the background. The turtle is depicted with a patterned shell and four legs, rendered in a light, sketchy style. The word "Syncope" is overlaid in the center of the image.

Syncope

OCT 2, ASYMPTOMATIC 6 s



OCT 19, SYMPTOMATIC 16 s

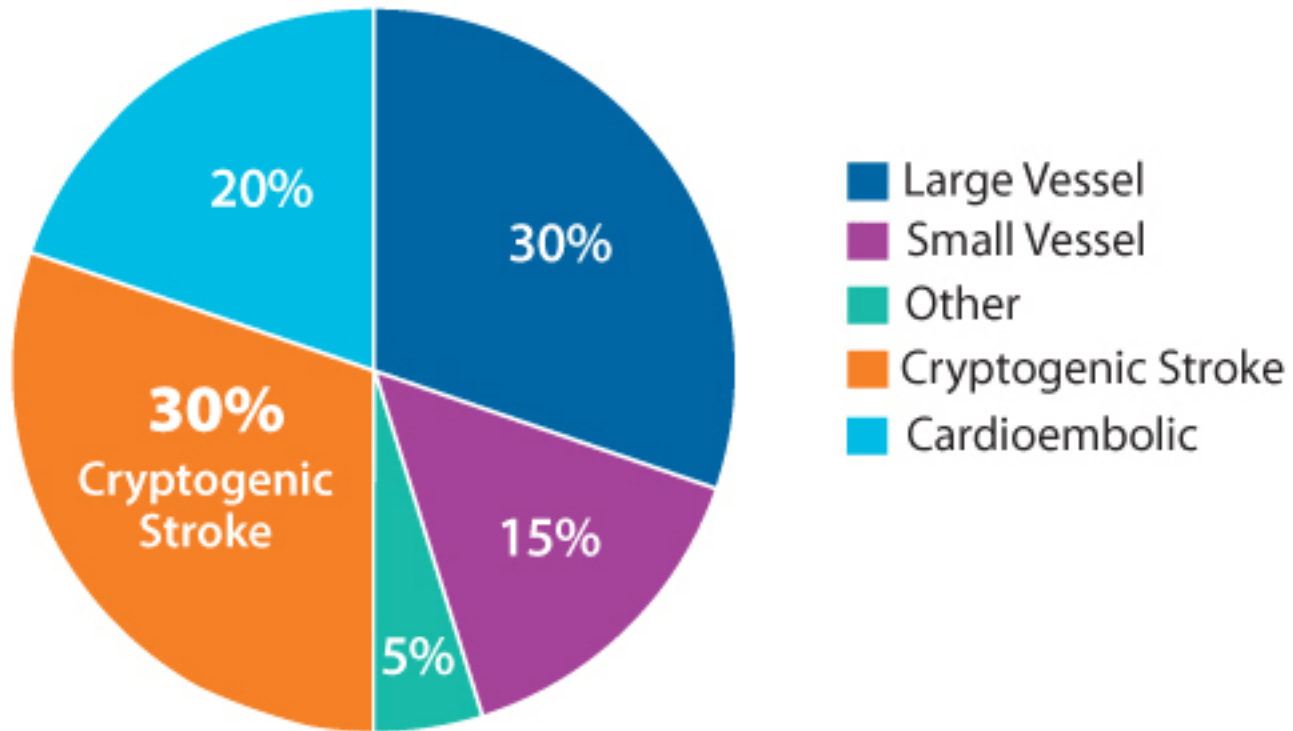


MANAGEMENT OF AF PATIENTS

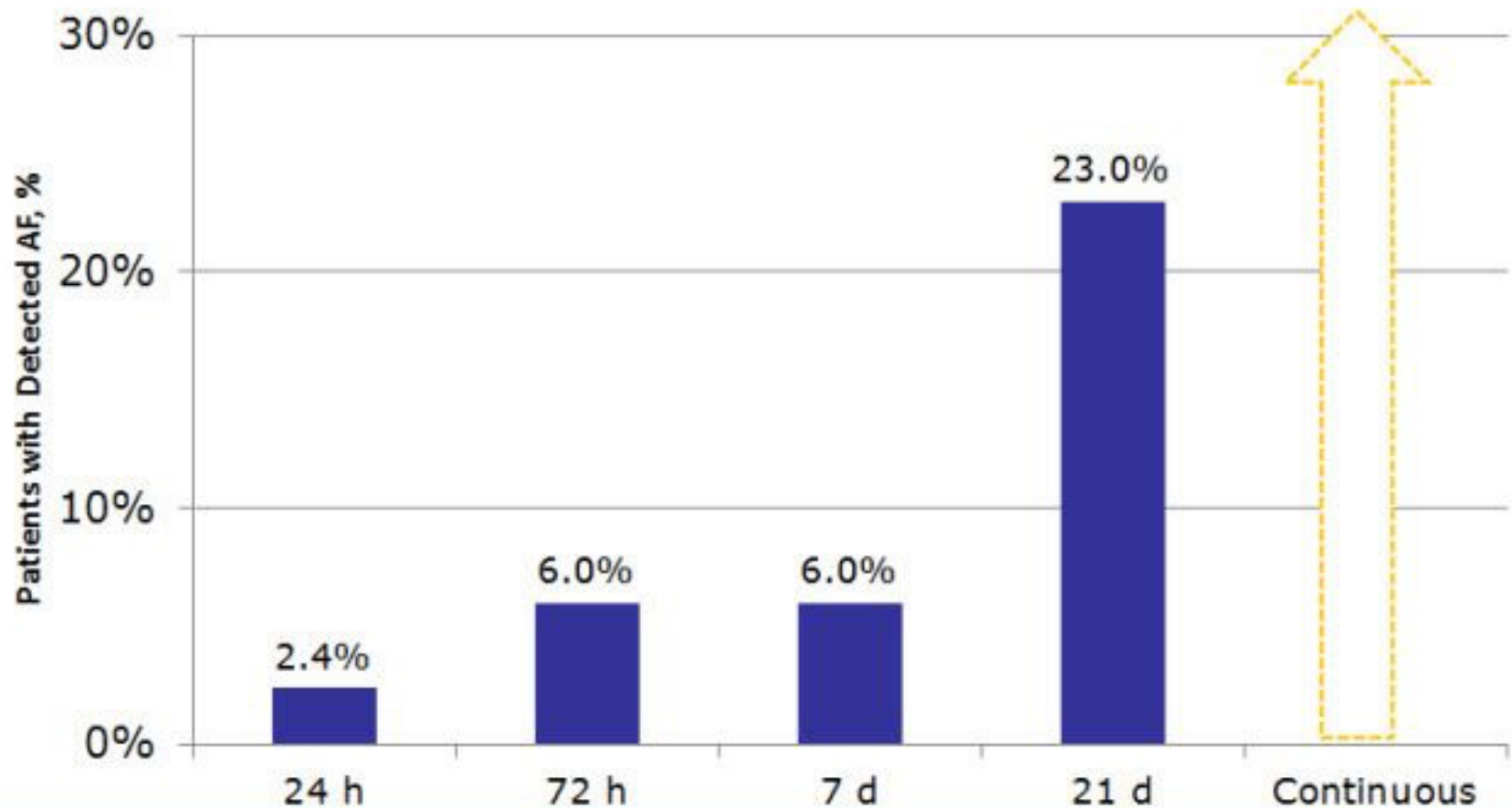
A faint, light-colored background illustration of a human torso, focusing on the chest area. The heart is depicted with a network of lines representing electrical activity or circuitry, suggesting a medical or scientific theme related to the text.

- Advantages of continuous monitoring AF patients:
 - Detection of AF in cryptogenic stroke
 - Evaluation of follow-up after PVI
 - Identification of mechanisms in individual patients to tailor ablation approach

CRYPTOGENIC STROKE

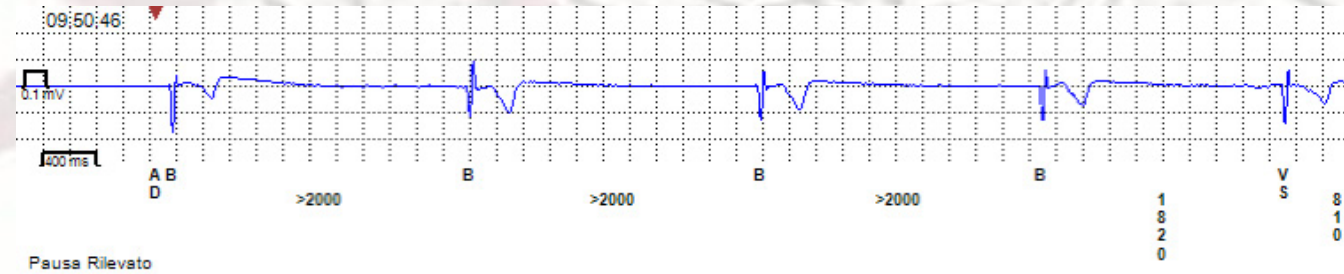
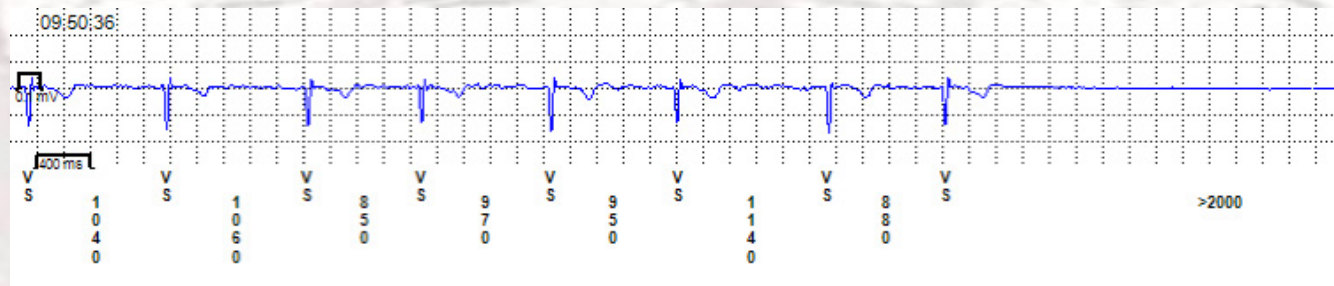


Cryptogenic Stroke Patients With AF Detected by Various Monitoring Methods

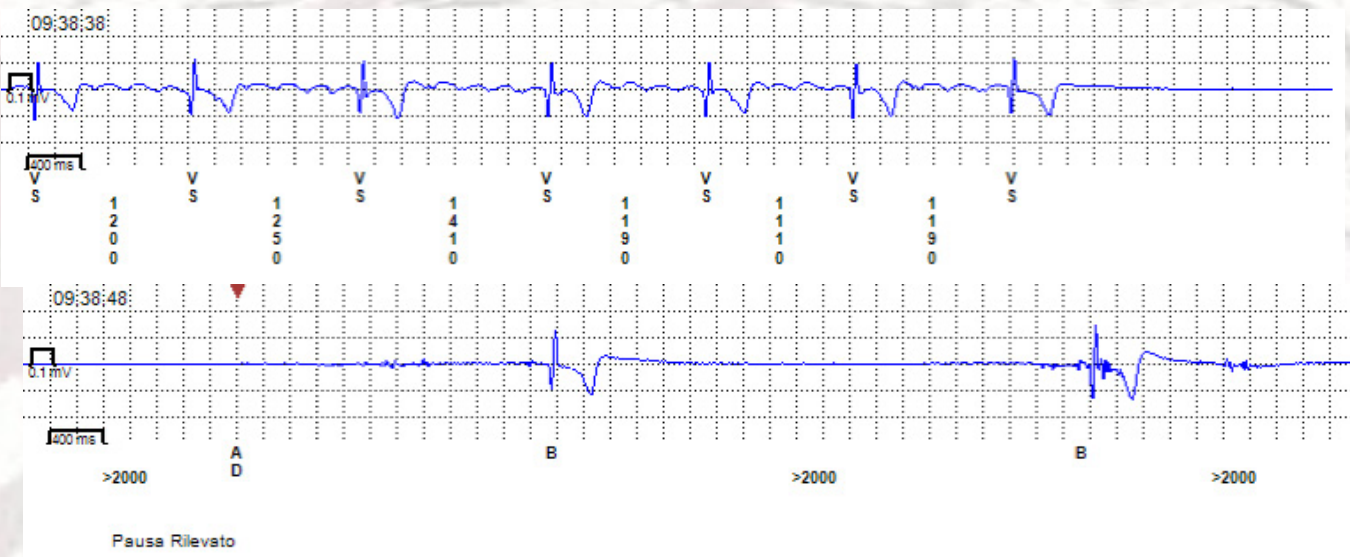


Recommendations	Class^a	Level^b	Ref^c
Opportunistic screening for AF is recommended by pulse taking or ECG rhythm strip in patients >65 years of age.	I	B	130, 134, 155
In patients with TIA or ischaemic stroke, screening for AF is recommended by short-term ECG recording followed by continuous ECG monitoring for at least 72 hours.	I	B	27, 127
It is recommended to interrogate pacemakers and ICDs on a regular basis for atrial high rate episodes (AHRE). Patients with AHRE should undergo further ECG monitoring to document AF before initiating AF therapy.	I	B	141, 156
In stroke patients, additional ECG monitoring by long-term non-invasive ECG monitors or implanted loop recorders should be considered to document silent atrial fibrillation.	IIa	B	18, 128
Systematic ECG screening may be considered to detect AF in patients aged >75 years, or those at high stroke risk.	IIb	B	130, 135, 157

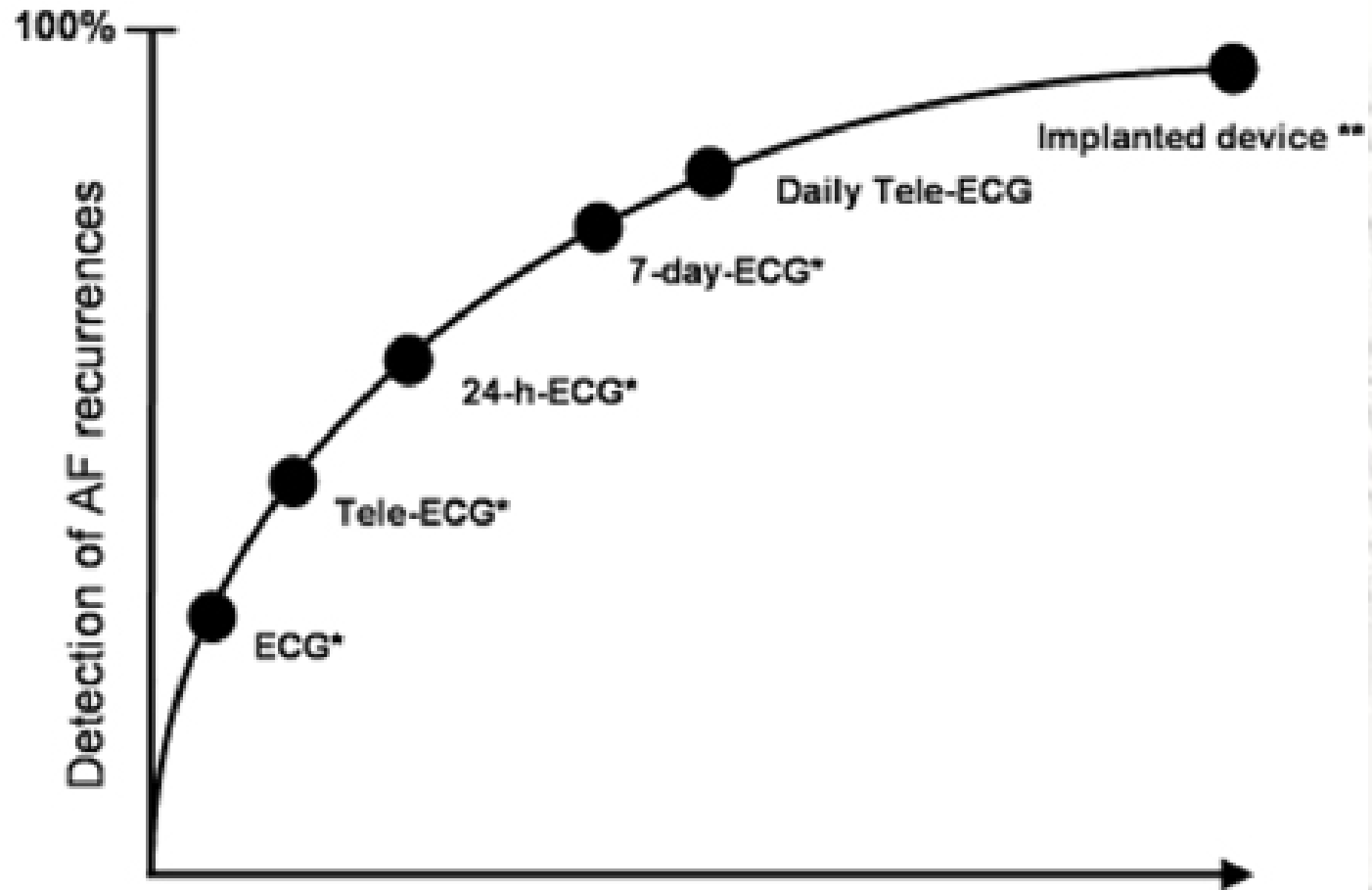
15 DAYS AFTER HOSPITAL DISCHARGE



15 DAYS AFTER HOSPITAL DISCHARGE



EVALUATION OF FOLLOW-UP AFTER PVI



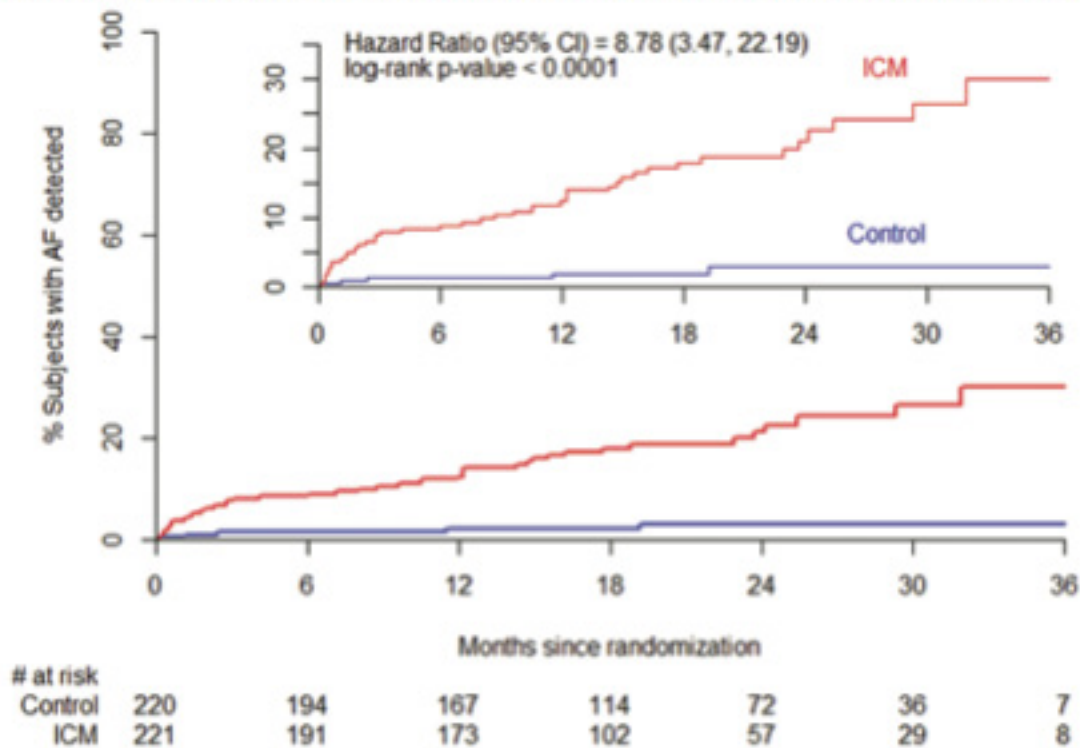
* During the three months follow ups

** As the *theoretic* gold standard

EVALUATION OF FOLLOW-UP AFTER PVI

Detection of AF at 3 years

ICM found 30% of patients had AF - almost 9 times more than standard follow-up



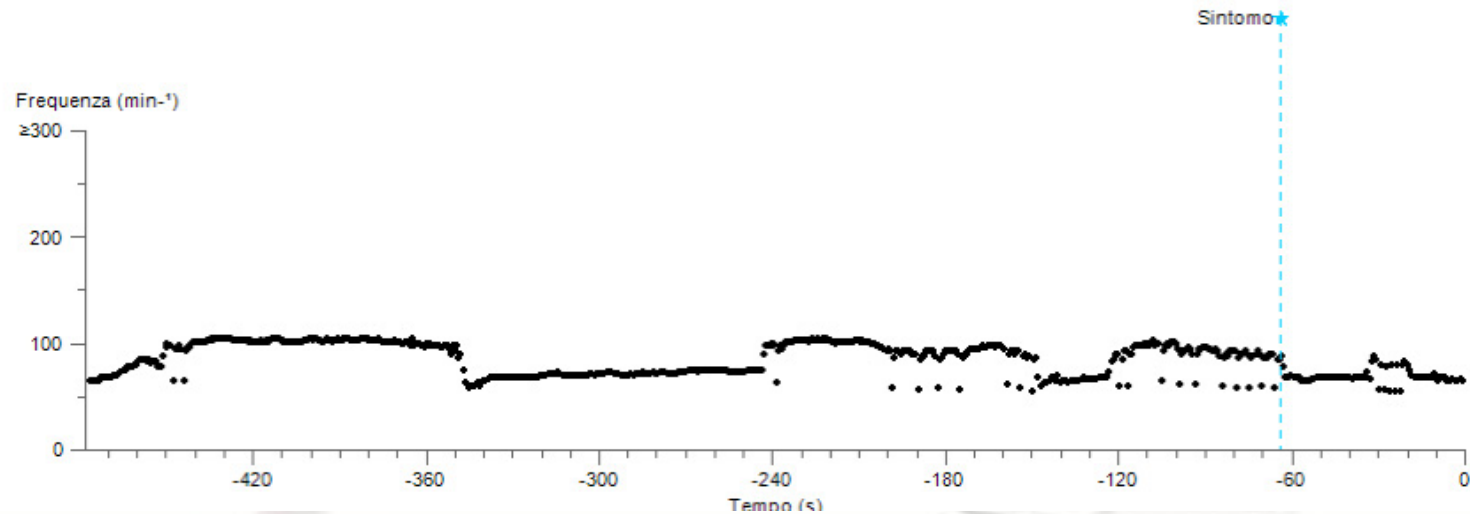
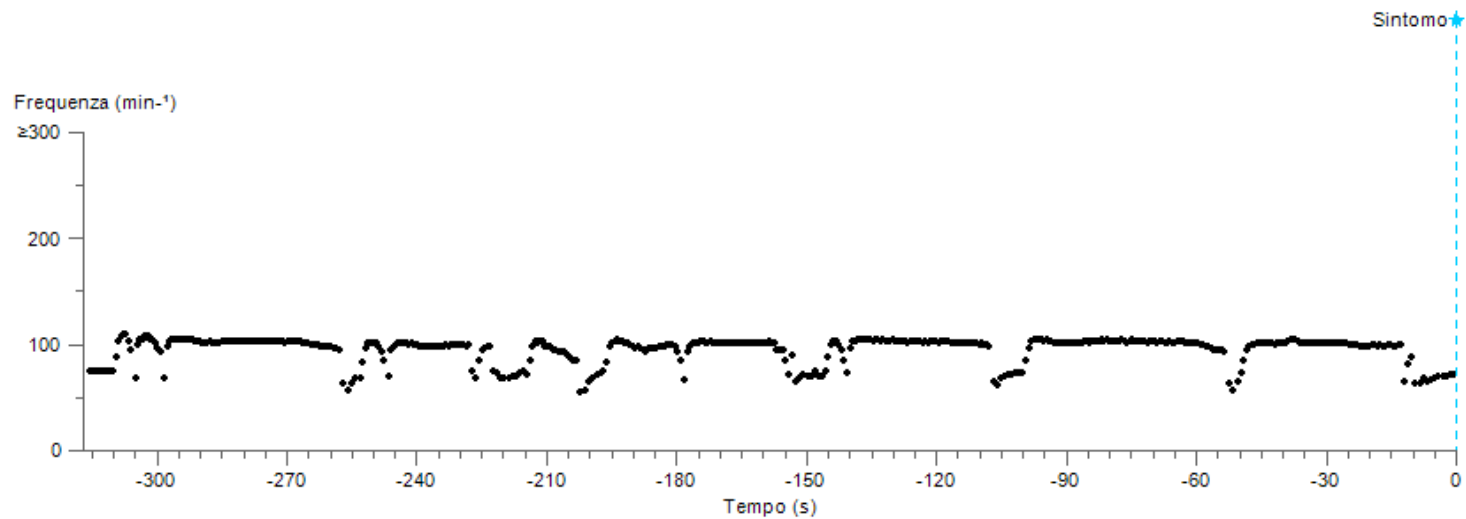
Rate of detection in ICM arm was 30.0% vs. 3.0% in control arm

Figure 1: AF detection from CRYSTAL-AF.

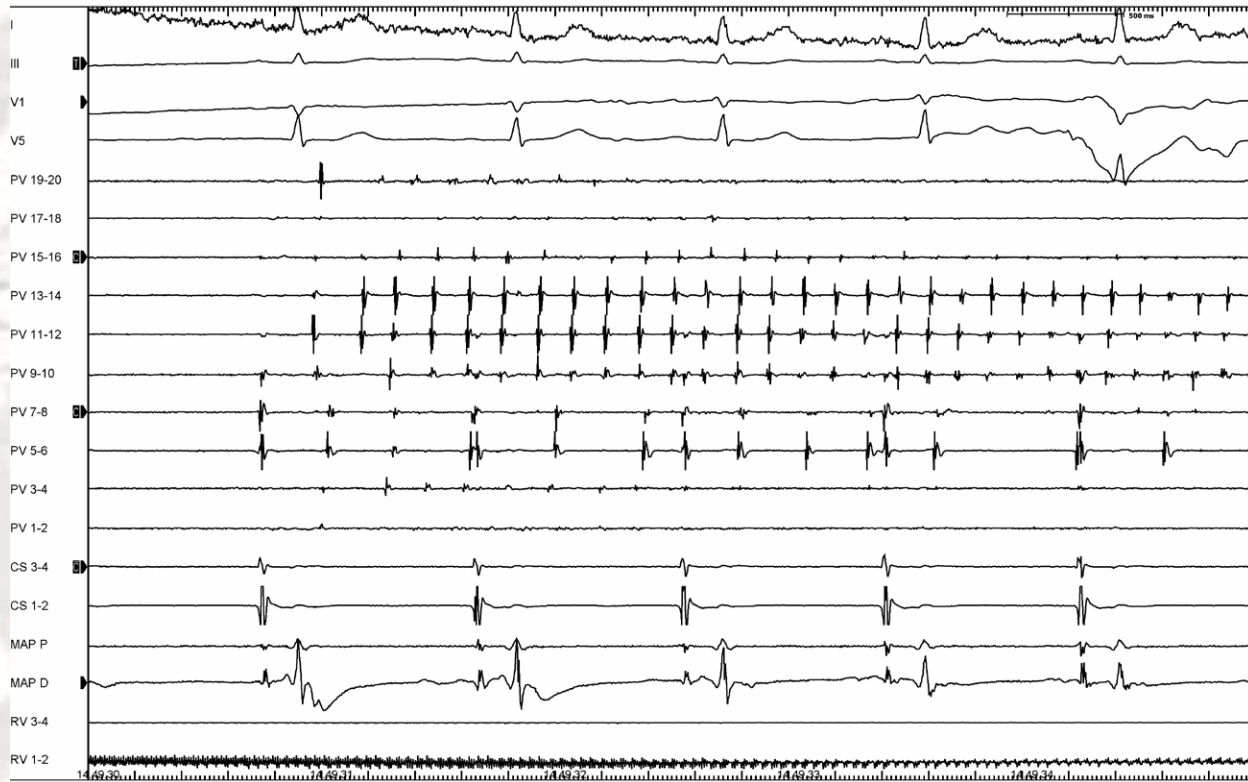


Identification of AF substrate

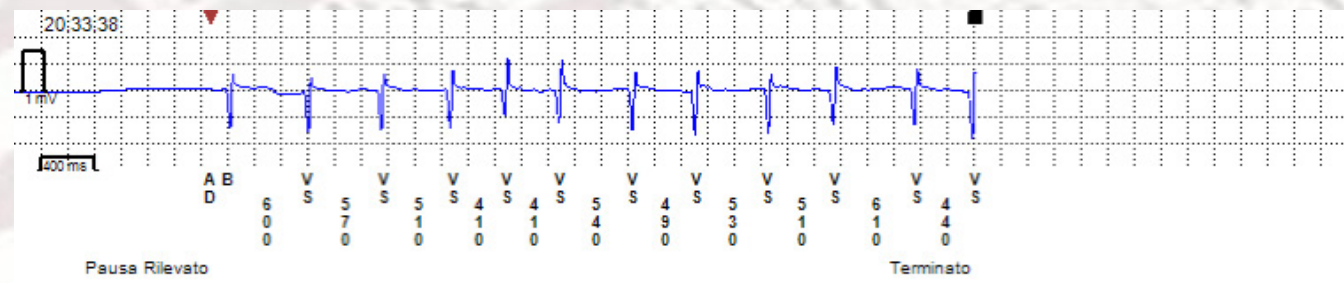
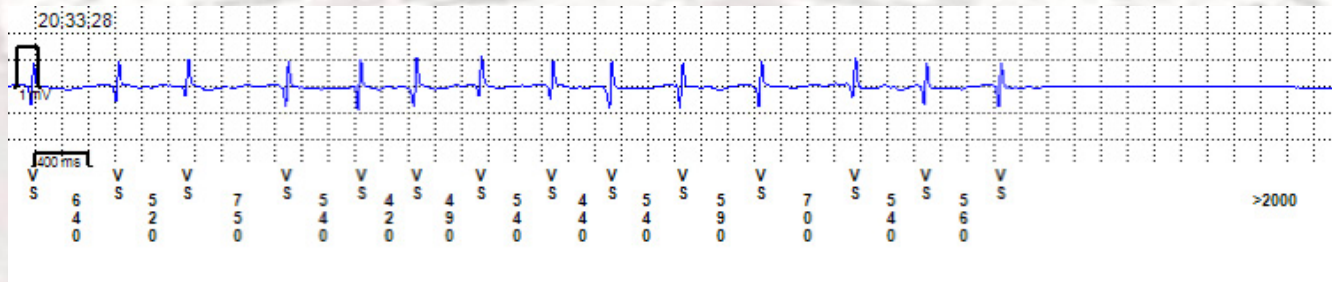
TRIGGER BASED AF

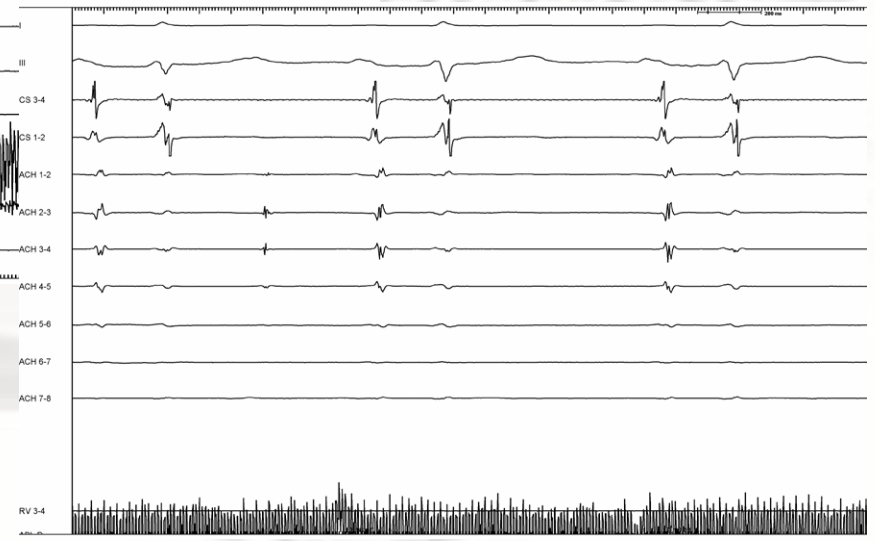
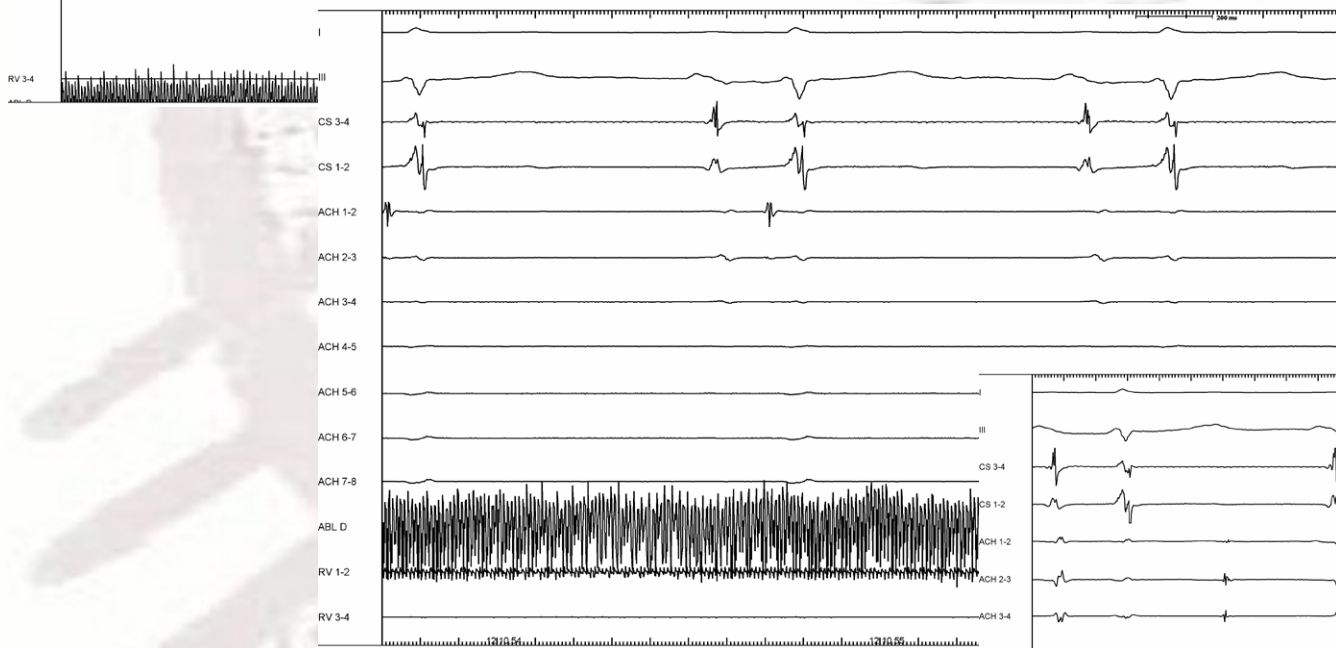
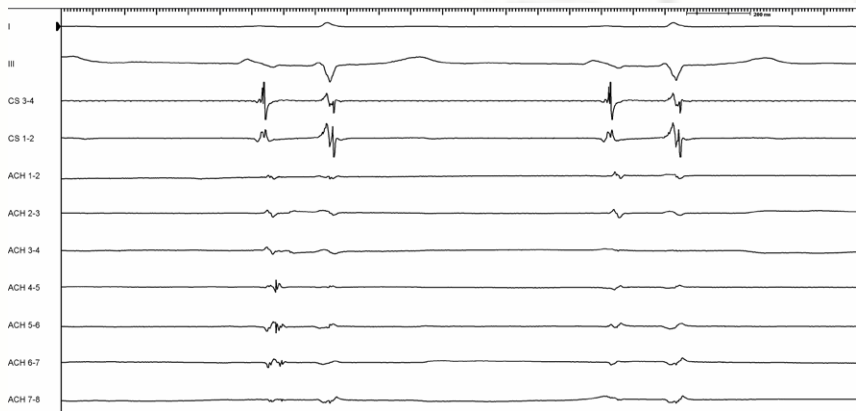


SUCCESSFUL ABLATION

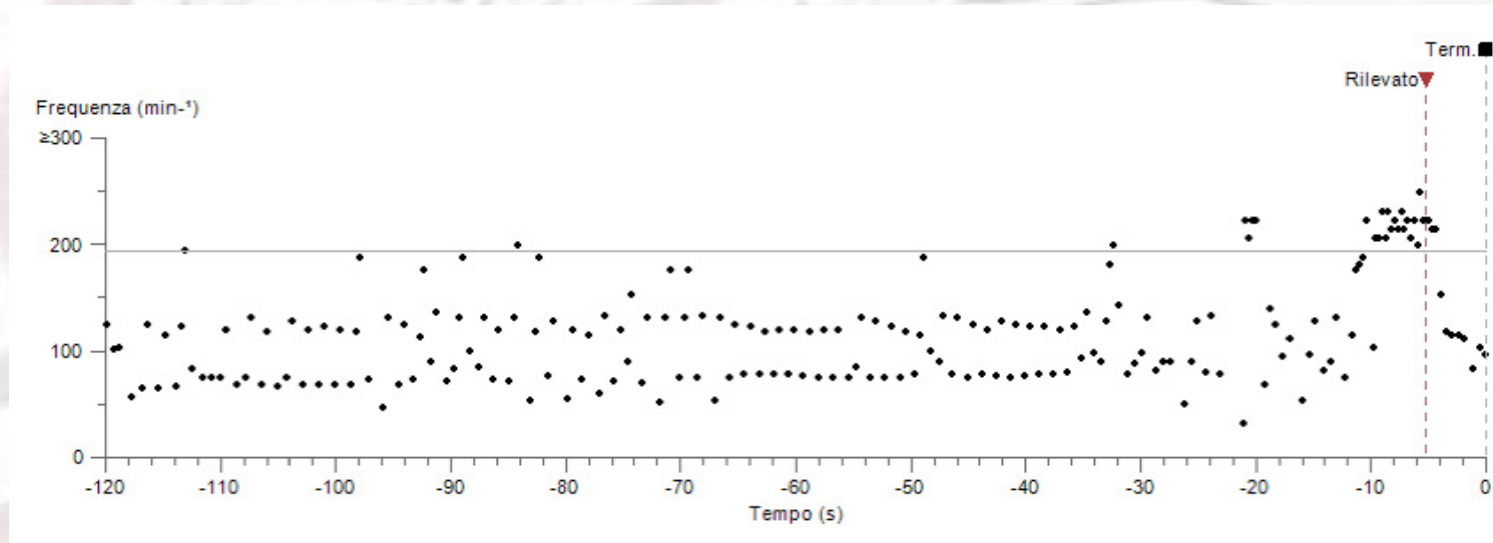


ABLATION OR PACE?

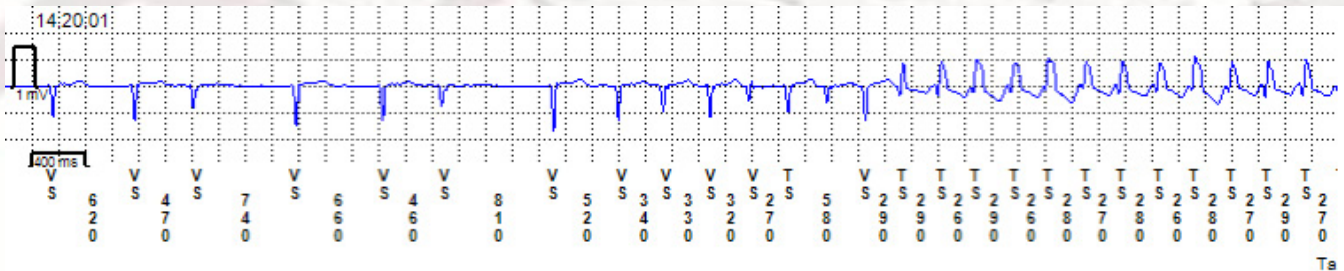
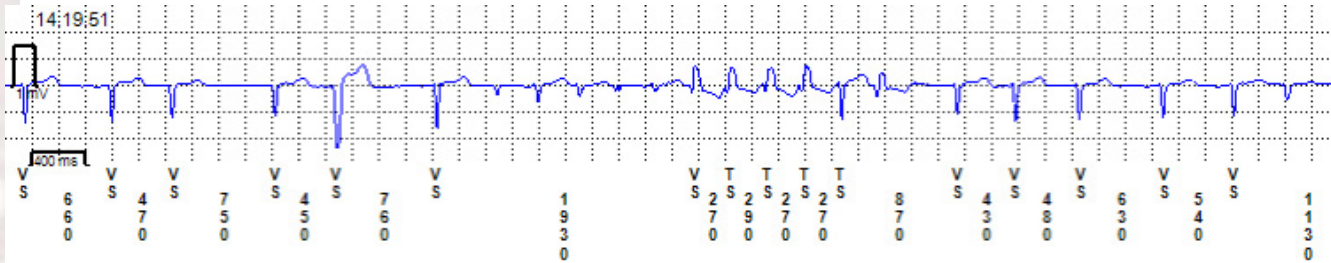
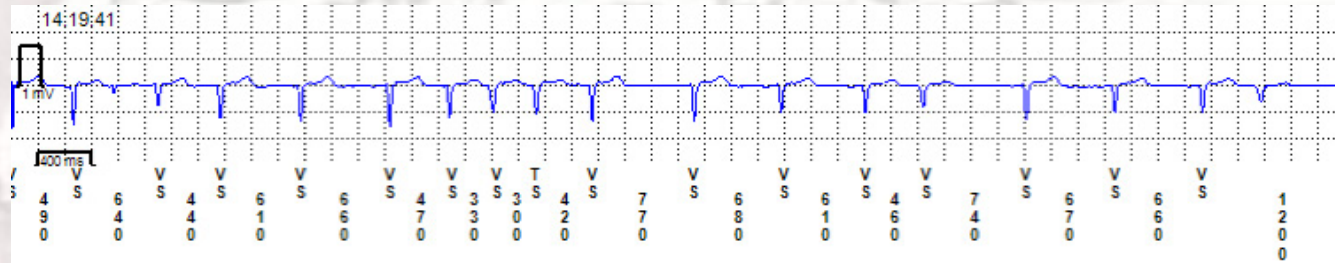




ECTOPY-BASED AF (2)



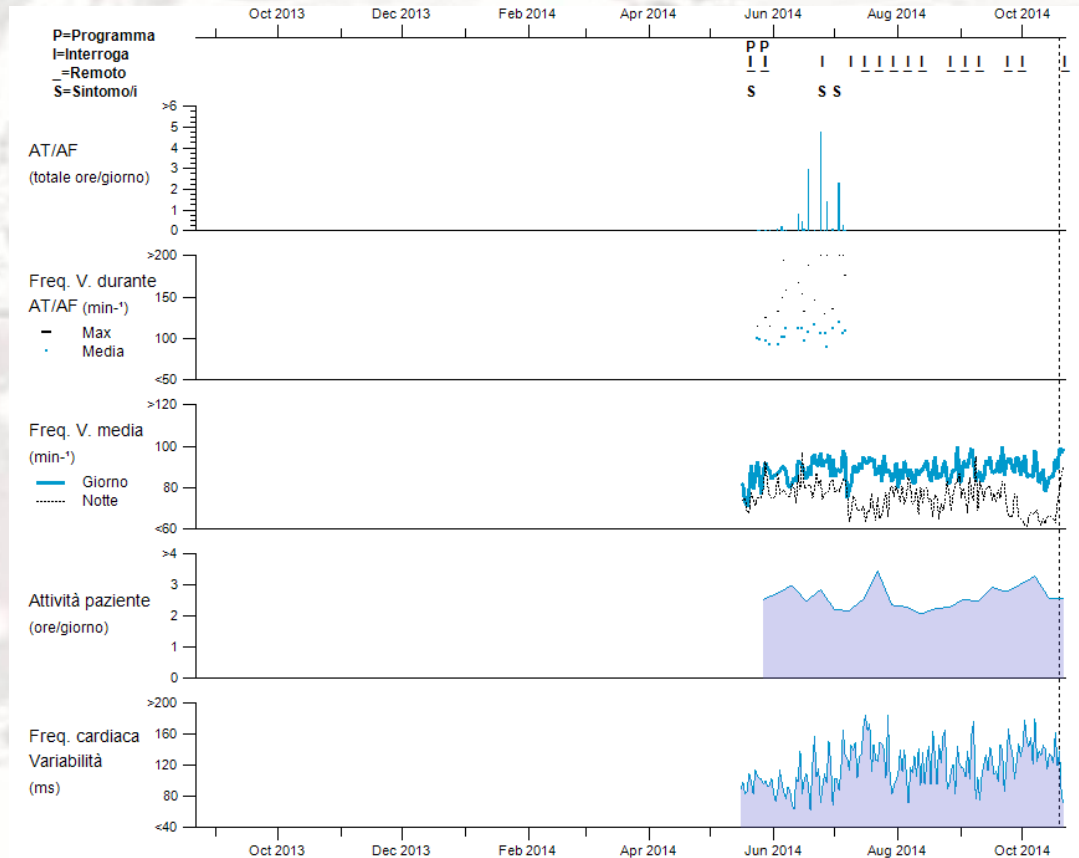
ECTOPY-BASED AF (2)



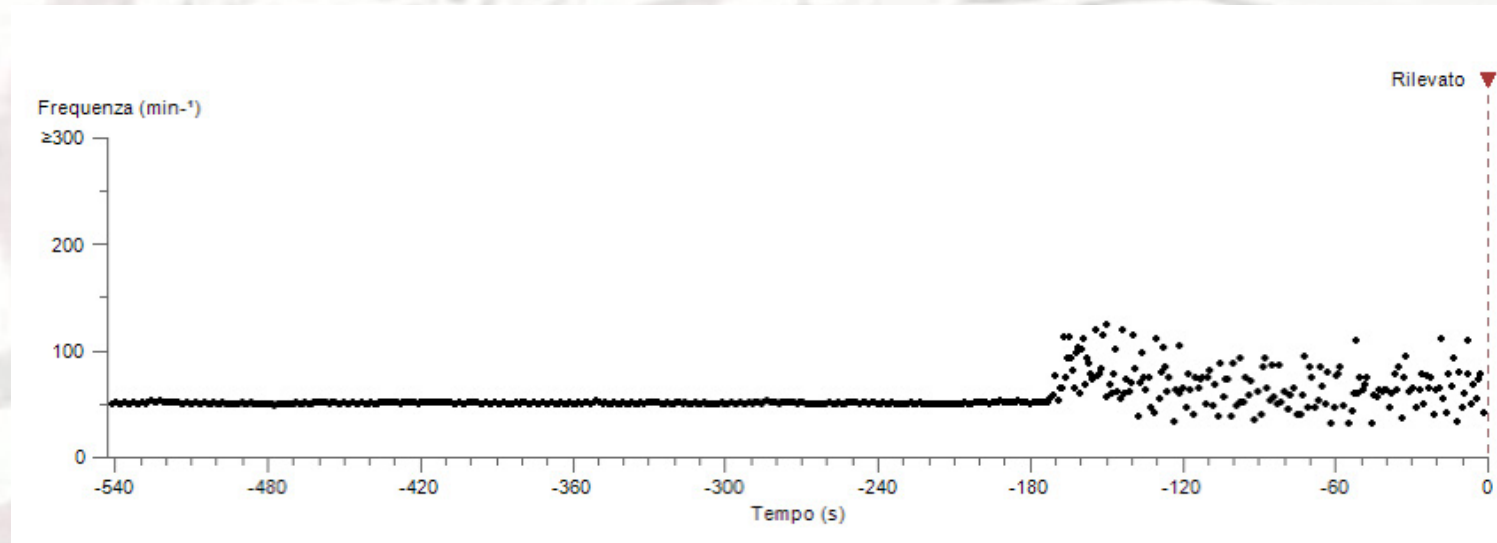
SUCCESSFUL LIPV ONLY ABLATION



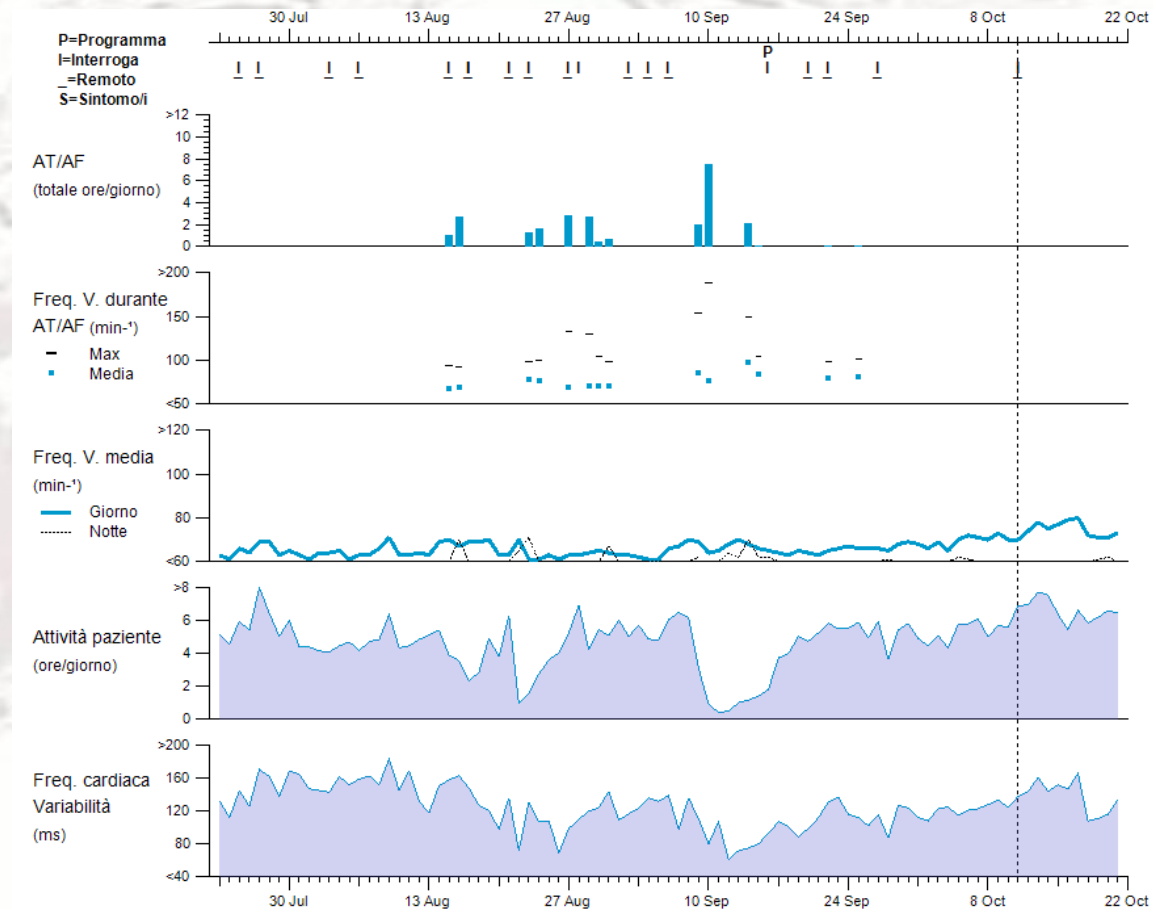
SUCCESSFUL LIPV ONLY ABLATION



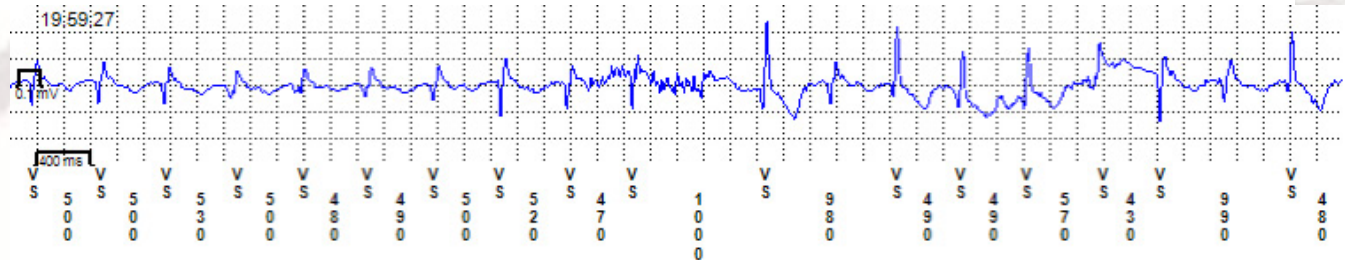
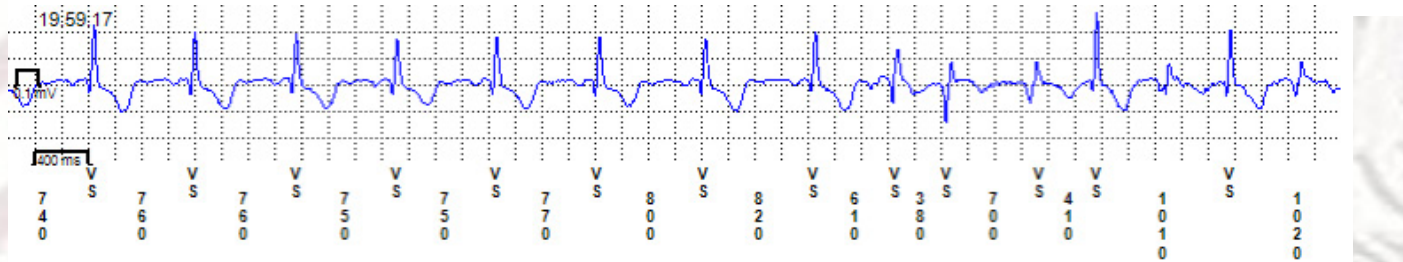
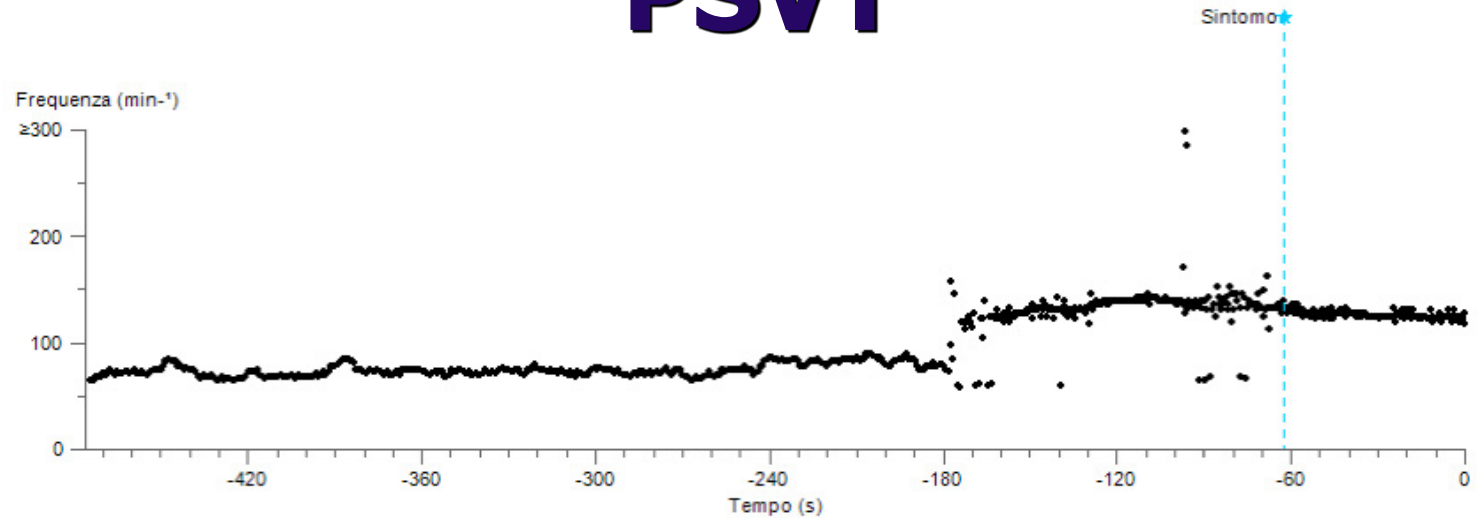
NON TRIGGER AF "LONE" AF



SUCCESSFUL ANTRAL 4 PV ABLATION



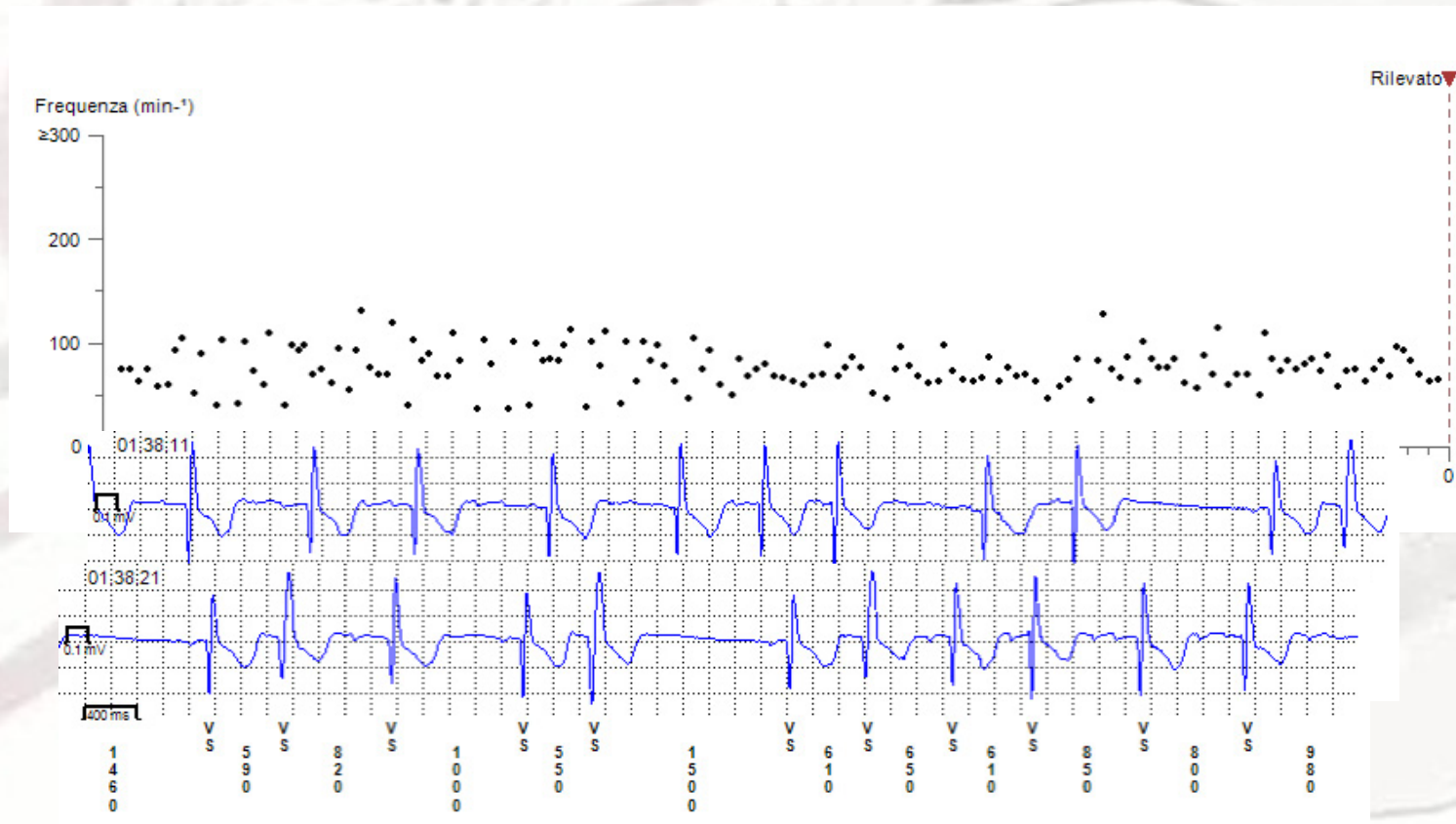
WAITING FOR PV ABLATION PSVT



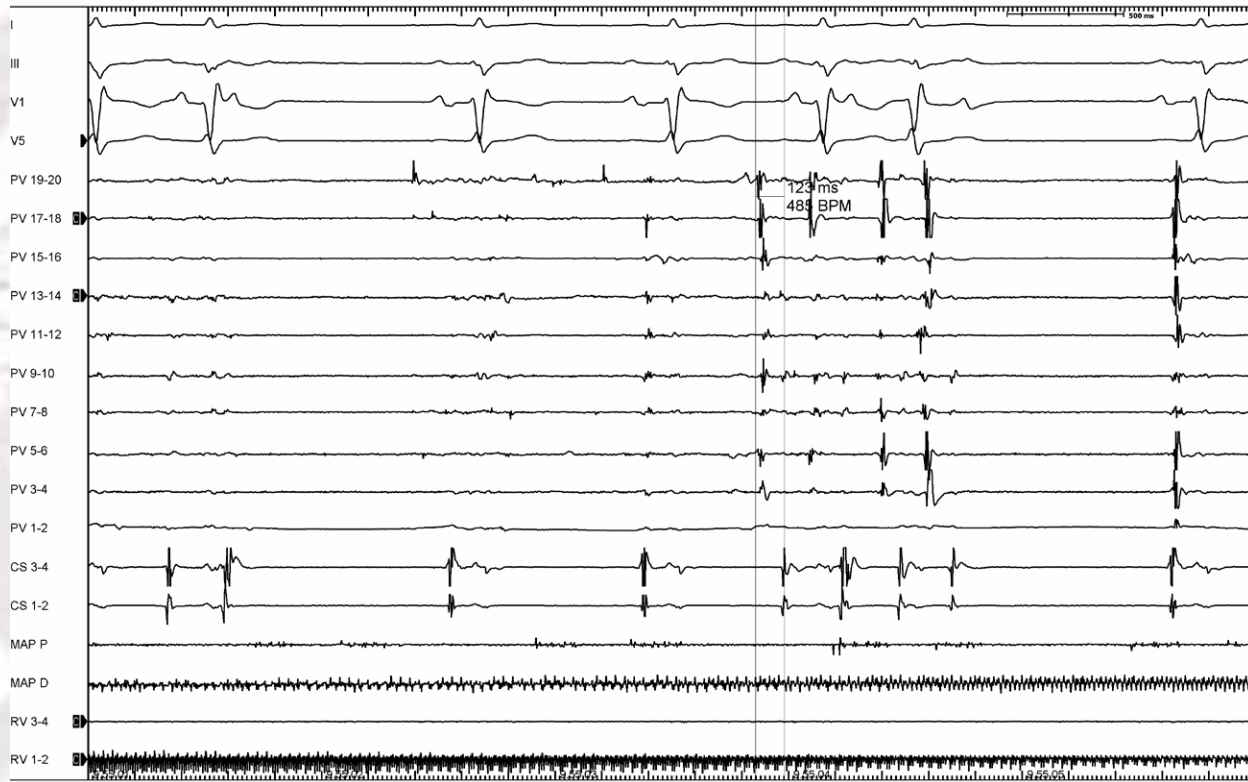
AVNRT



ECTOPY-BASED AF (3)



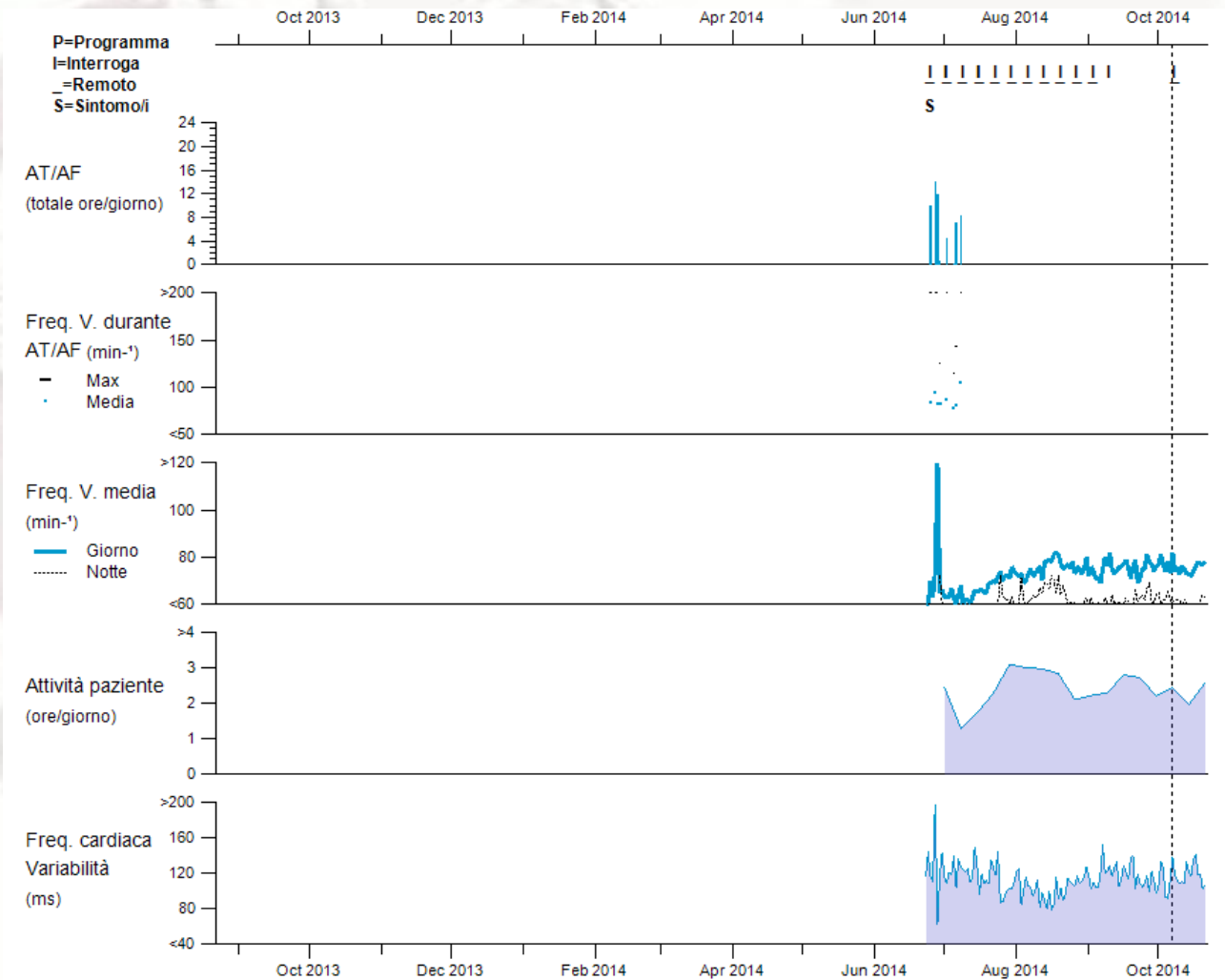
SUCCESSFUL LSPV ONLY ABLATION



SUCCESSFUL LSPV ONLY ABLATION



SUCCESSFUL LSPV ONLY ABLATION



Conclusions

- Ambulatory insertion, 1 min.
- Automatic every-day follow-up enables faster diagnosis of causes of syncope and ictus (pre-clinically)
- **OBVIOUSLY** accurate follow-up after PVI
- Evaluation of AF substrate relevant to ablation to tailor intervention: are we burning too much in young patients?

ICCS - Ongoing study

- Less tissue is ablated, the less are complications
- Thus, young patients (<50y) with lone AF and trigger-based onset of AF can undergo to adenosine testing during the EP study to search the “culprit” PV with automatic activity

Preliminary data

- N=16
- All with LinQ
- Median targeted PV=2,2
- All patients discharged without any AAD, only apixaban 5 mg bid for 30 days
- 14/16 no longer AF
- 1/16 recovered conduction in common LPV
- 1/16 further isolation of remaining PVs



**Thank you for your
attention**