

70° Congresso Nazionale



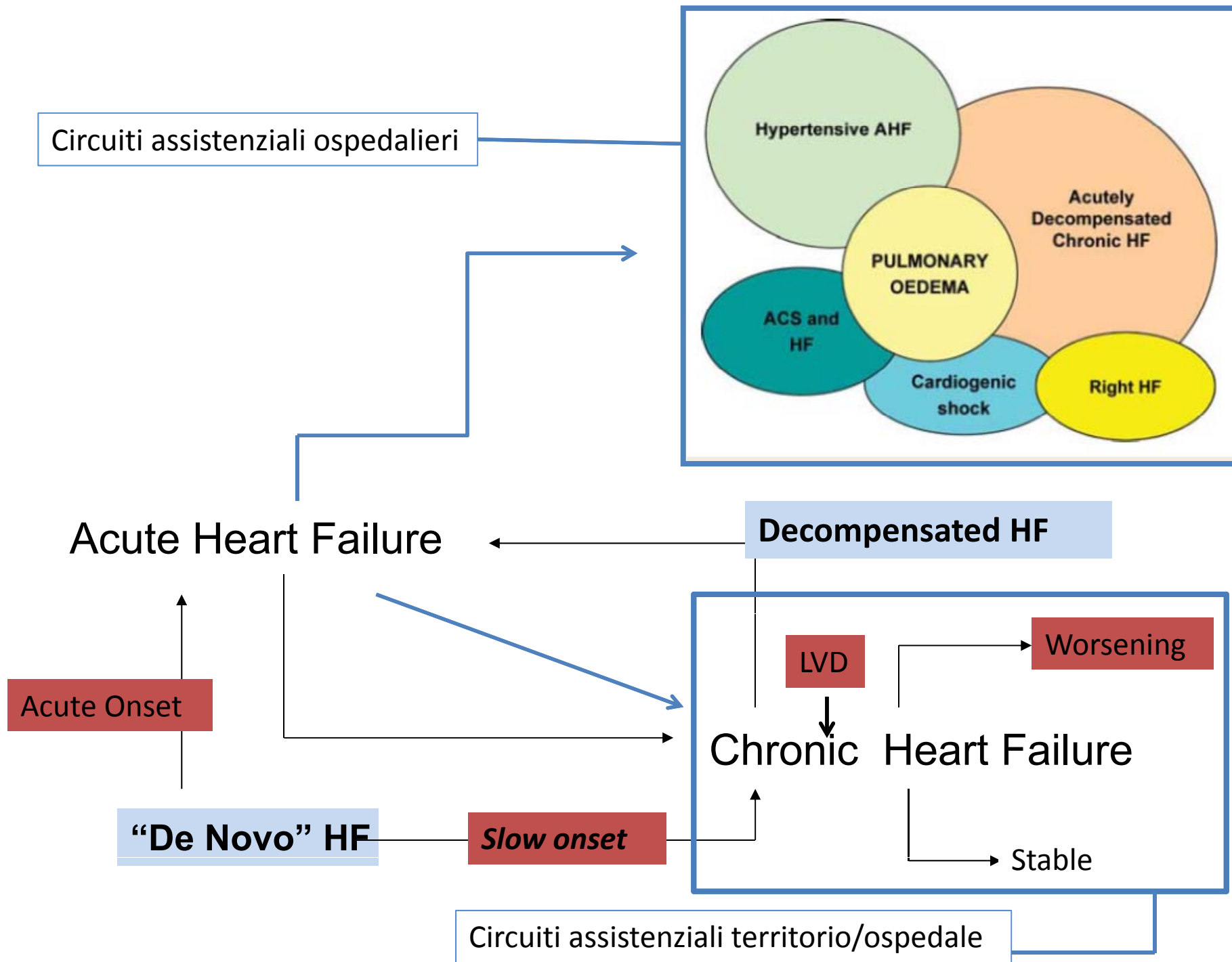
**Noi, orgogliosamente
Medici di Famiglia**
fiducia innovazione
competenza organizzazione

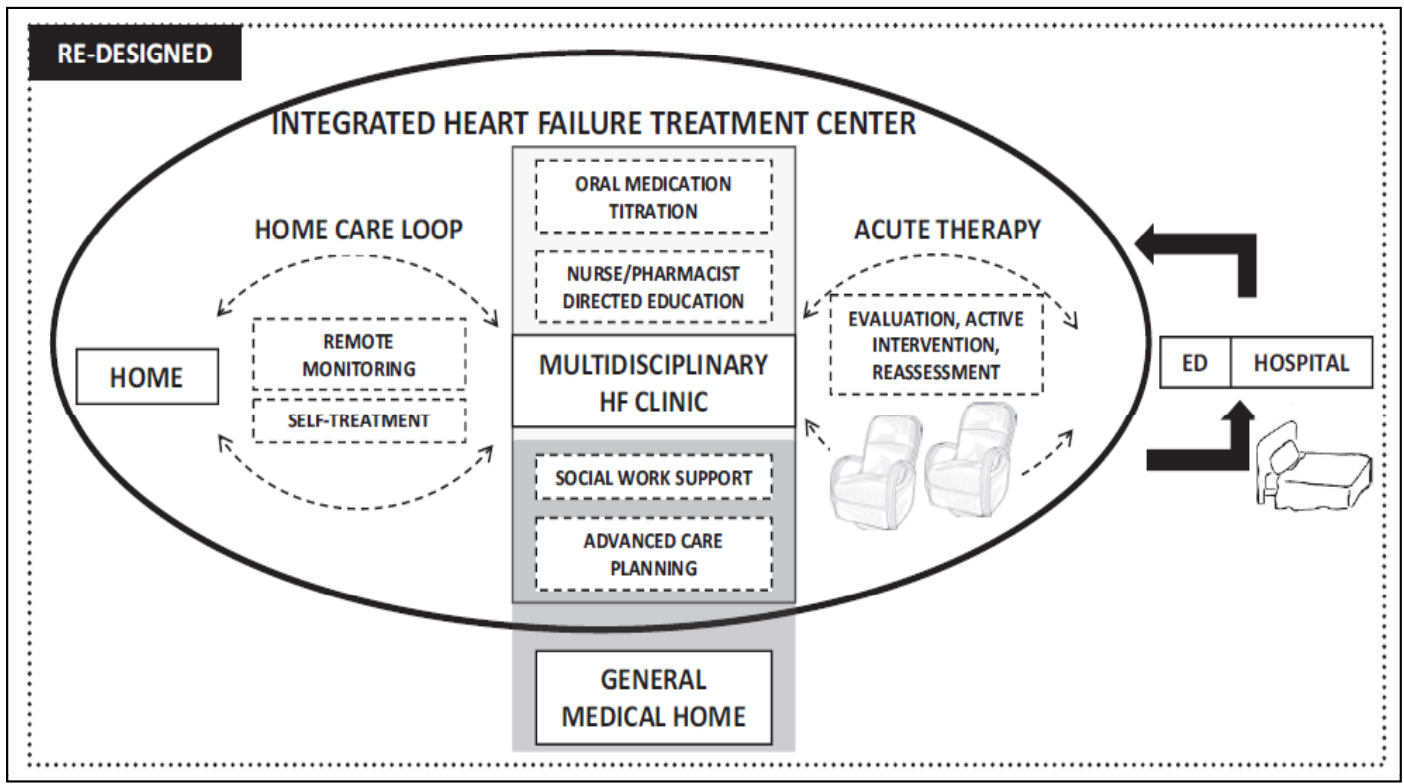
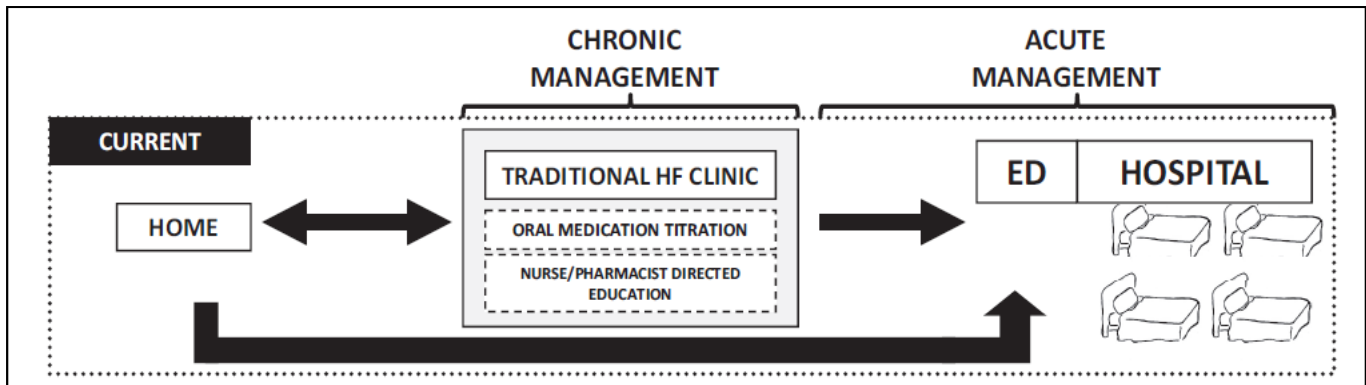
6 - 11 ottobre 2014
Forte Village
Santa Margherita di Pula

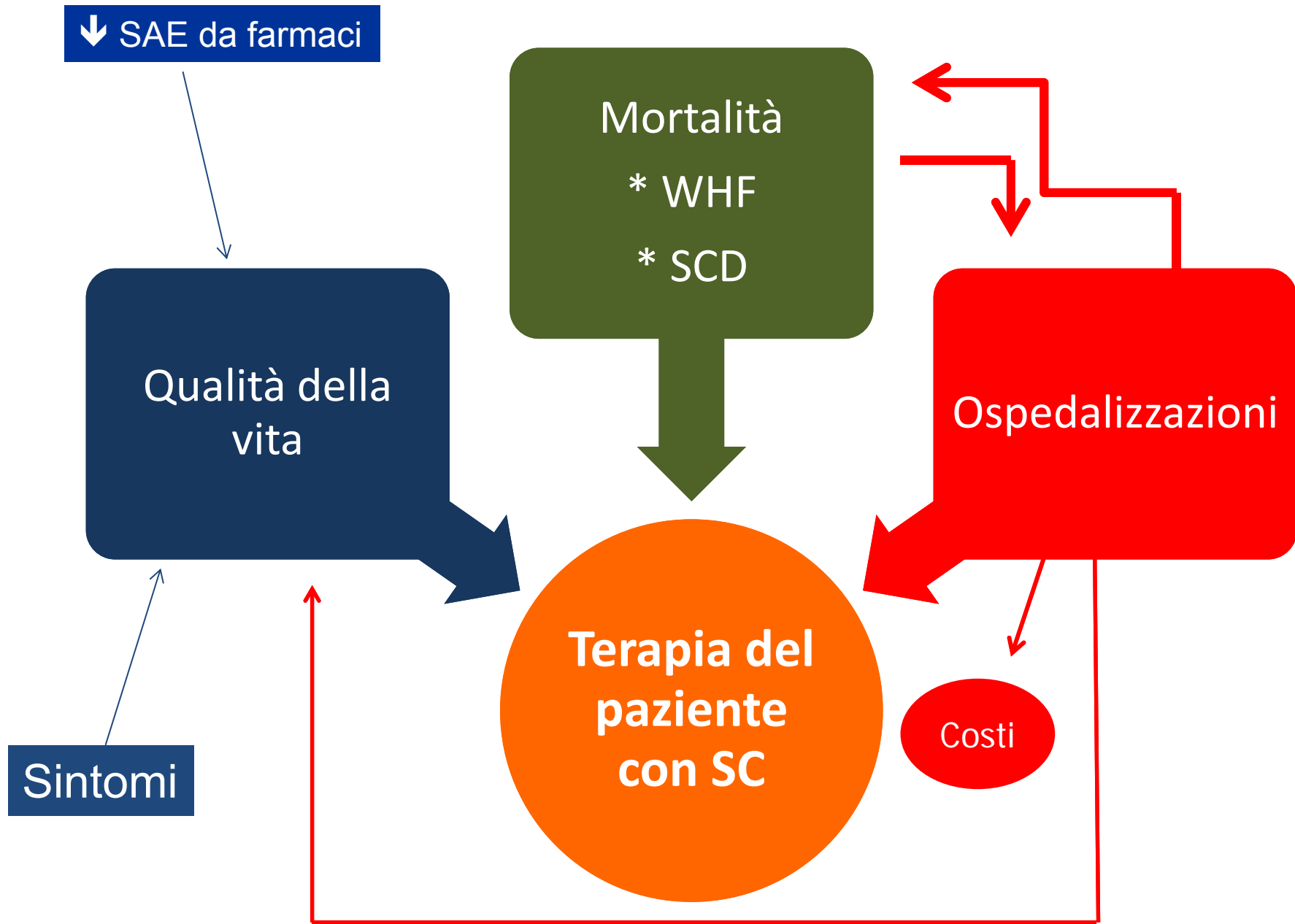
#orgogliosamentemmg

Circuiti assistenziali e gestione terapeutica
del paziente con scompenso cardiaco:
obiettivi condivisi tra medicina
specialistica e del territorio.

Il punto di vista dello
specialista Cardiologo

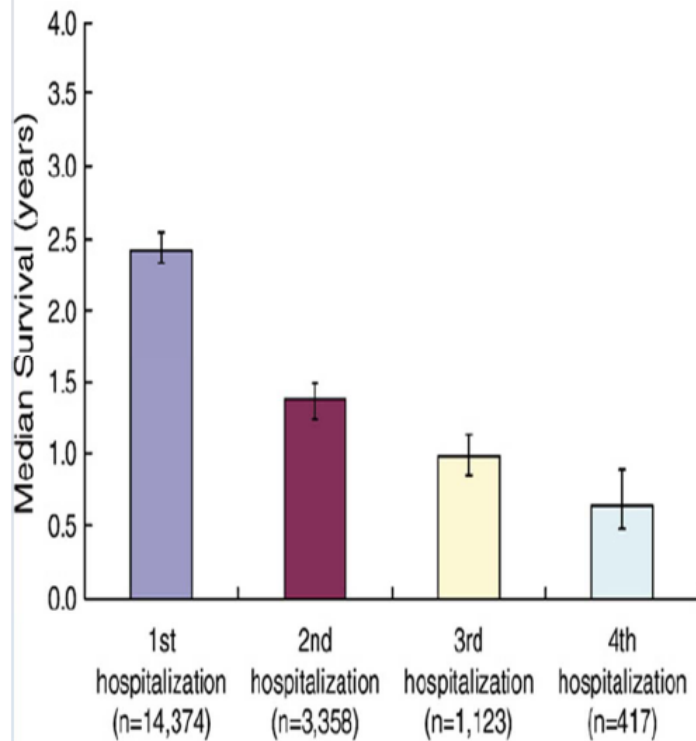




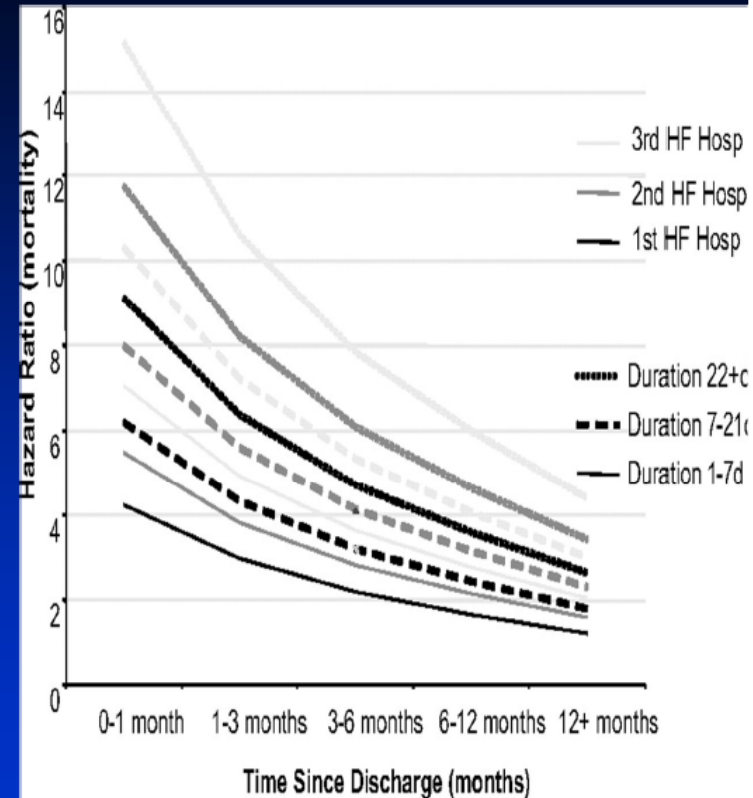


Il rischio di morte aumenta ad ogni ospedalizzazione

Hospitalization for HF: why so important ?



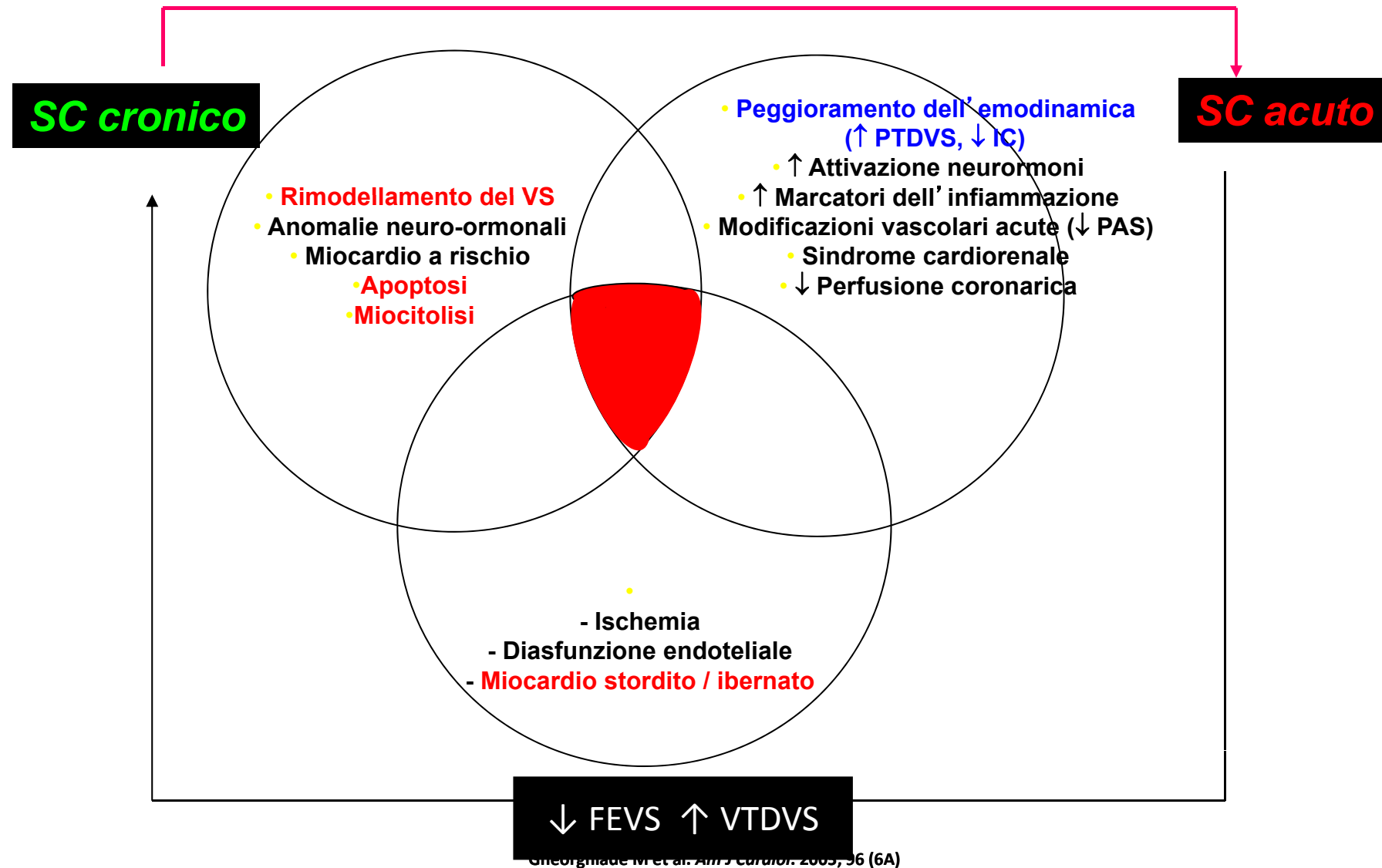
Setoguchi S. et al. *Am Heart J* 2007.



Solomon et al. *Circulation* 2007.

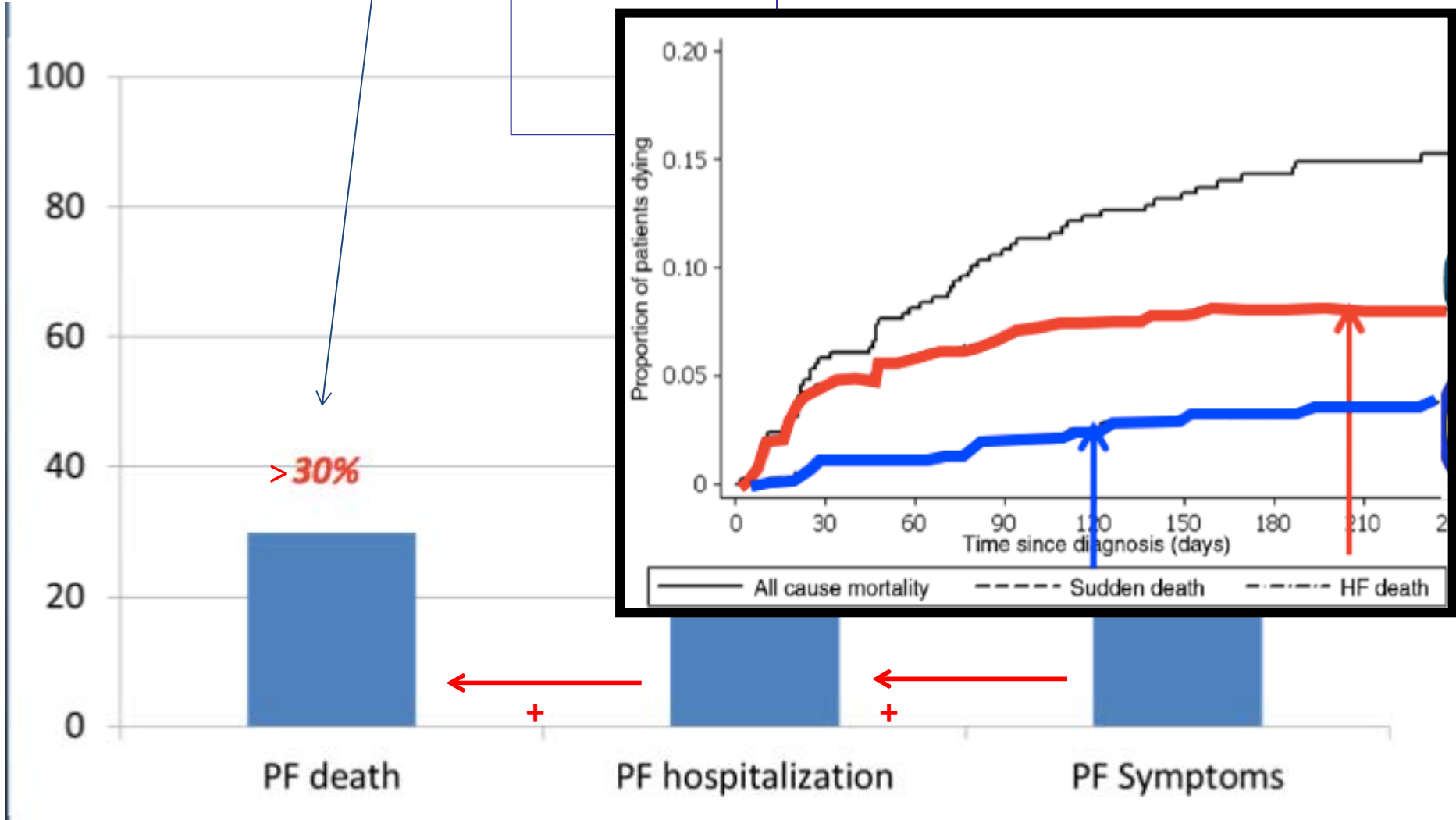
Risk of death increases substantially with each subsequent HF hospitalization

Il danno miocardico nelle instabilizzazioni : “la tempesta perfetta” e la progressione della patologia



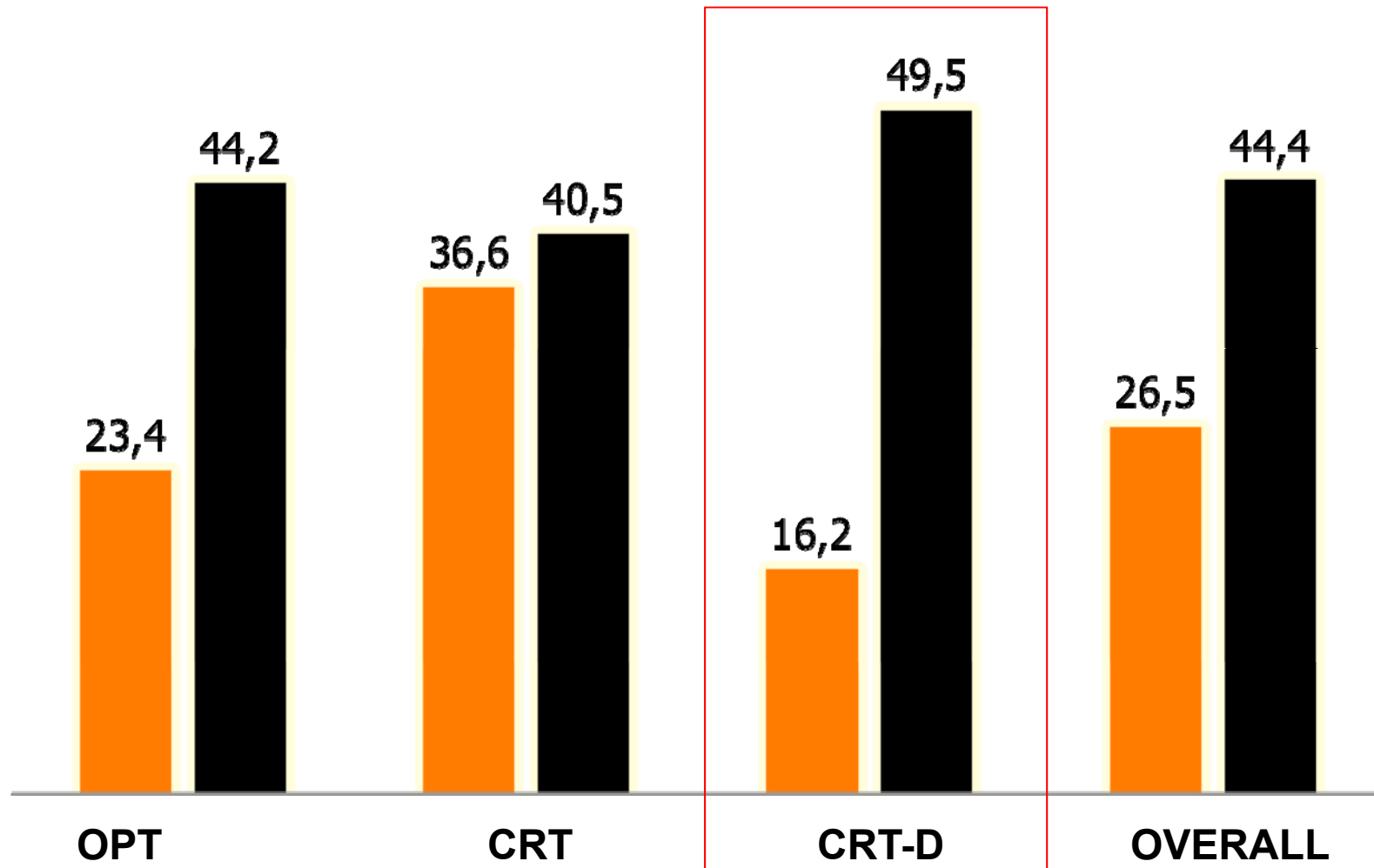
↓ FEVS ↑ VTDVS

Pump-failure



MODE OF DEATH IN COMPANION TRIAL

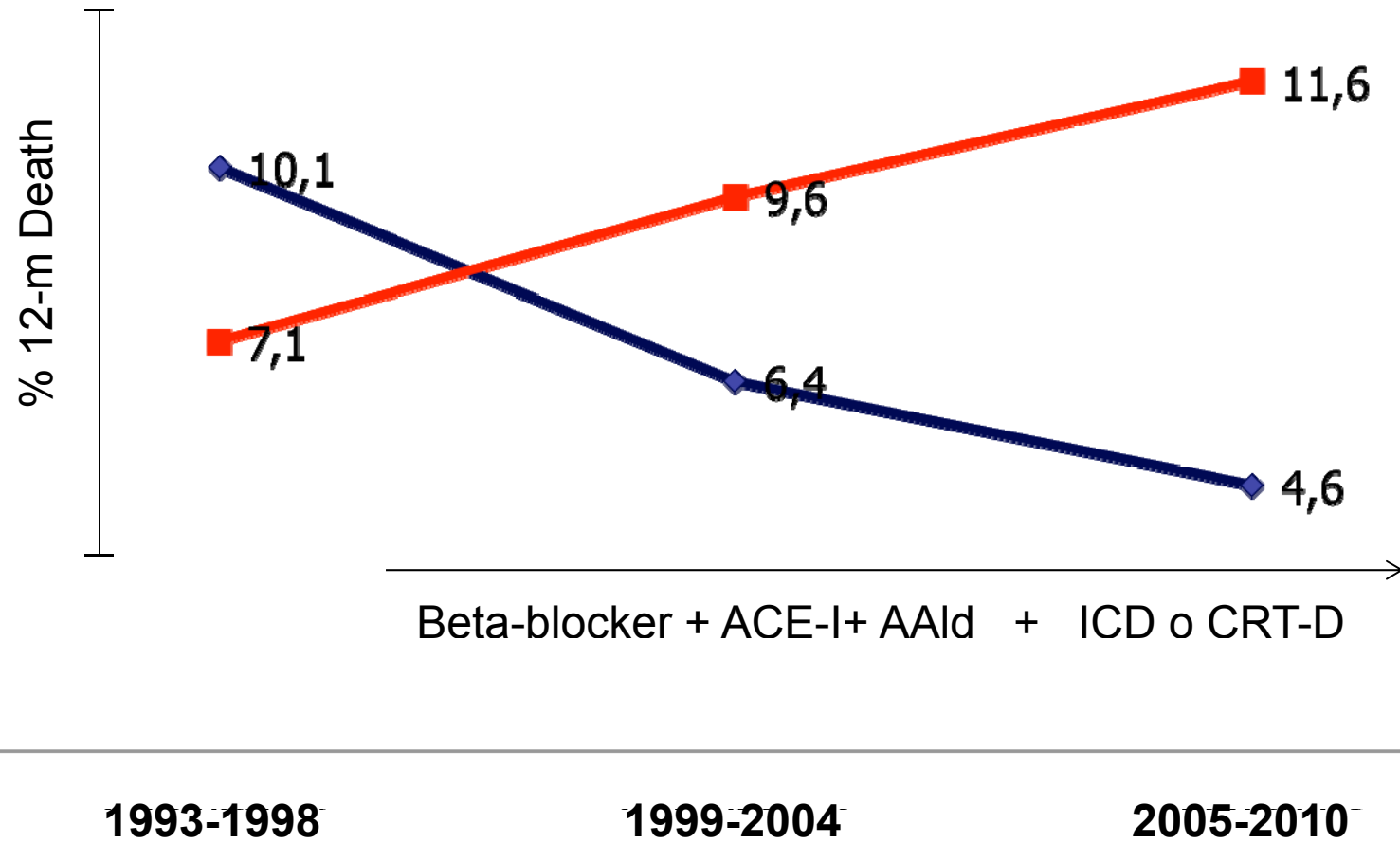
■ SCD ■ PF

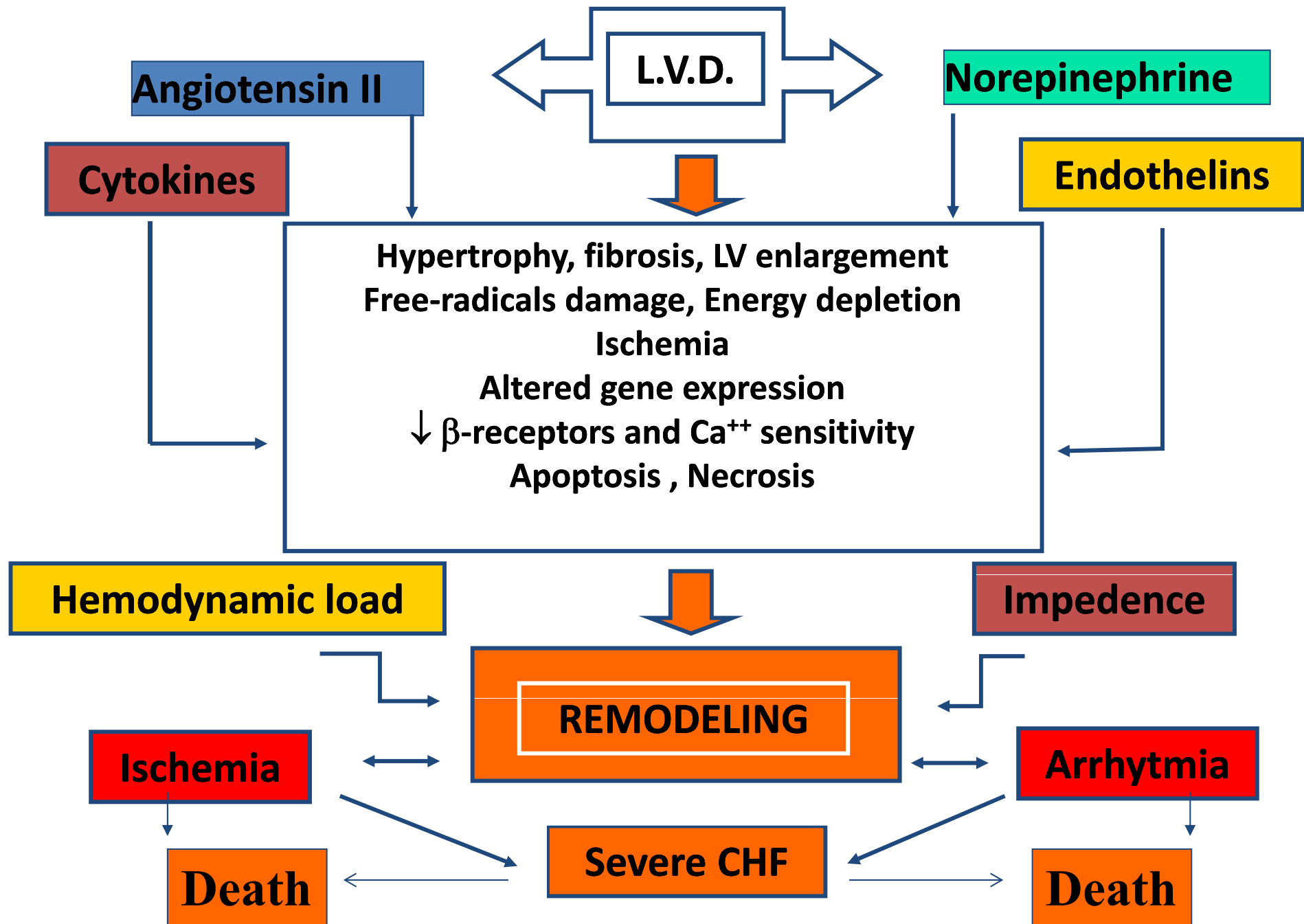


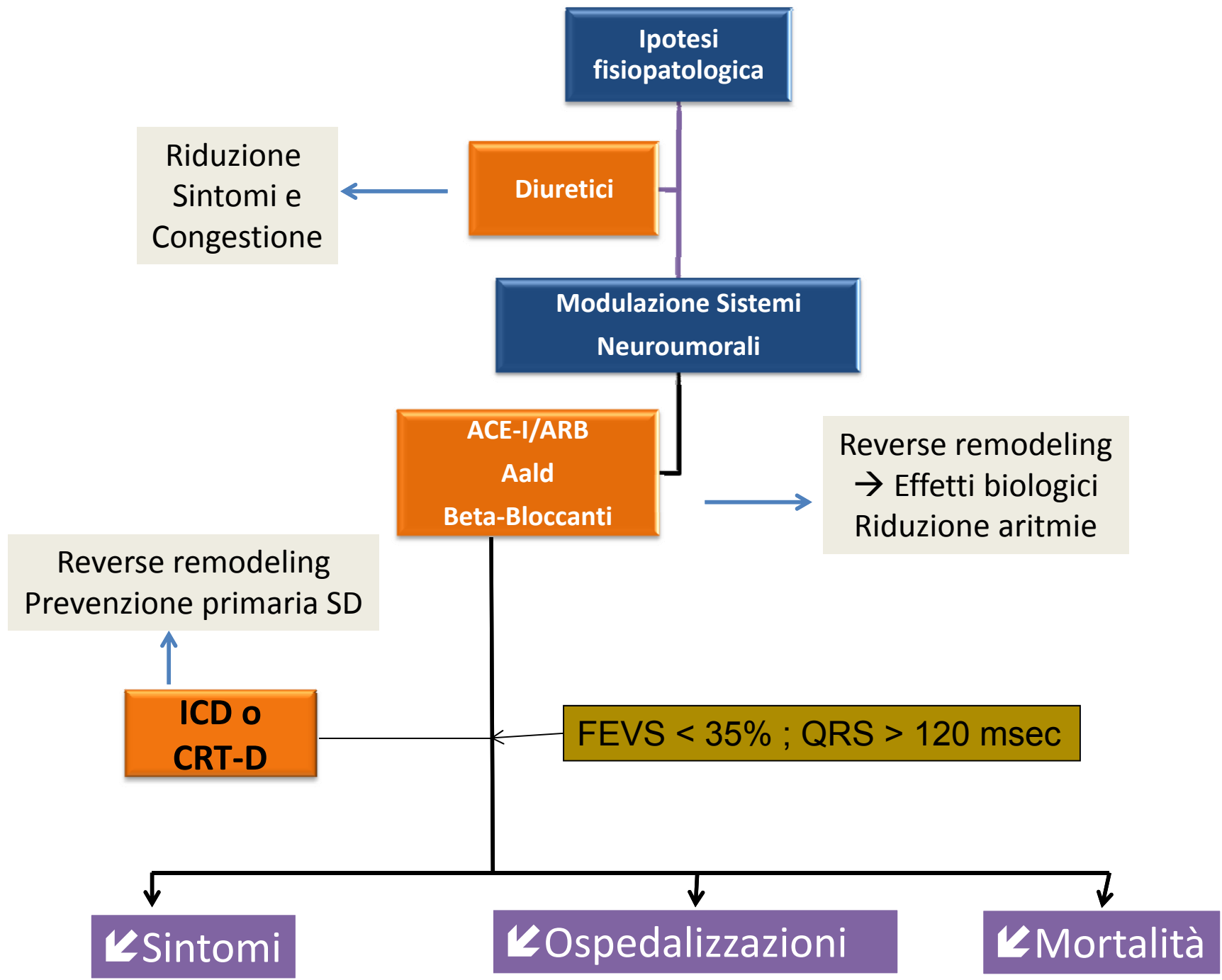
(JACC 2005)

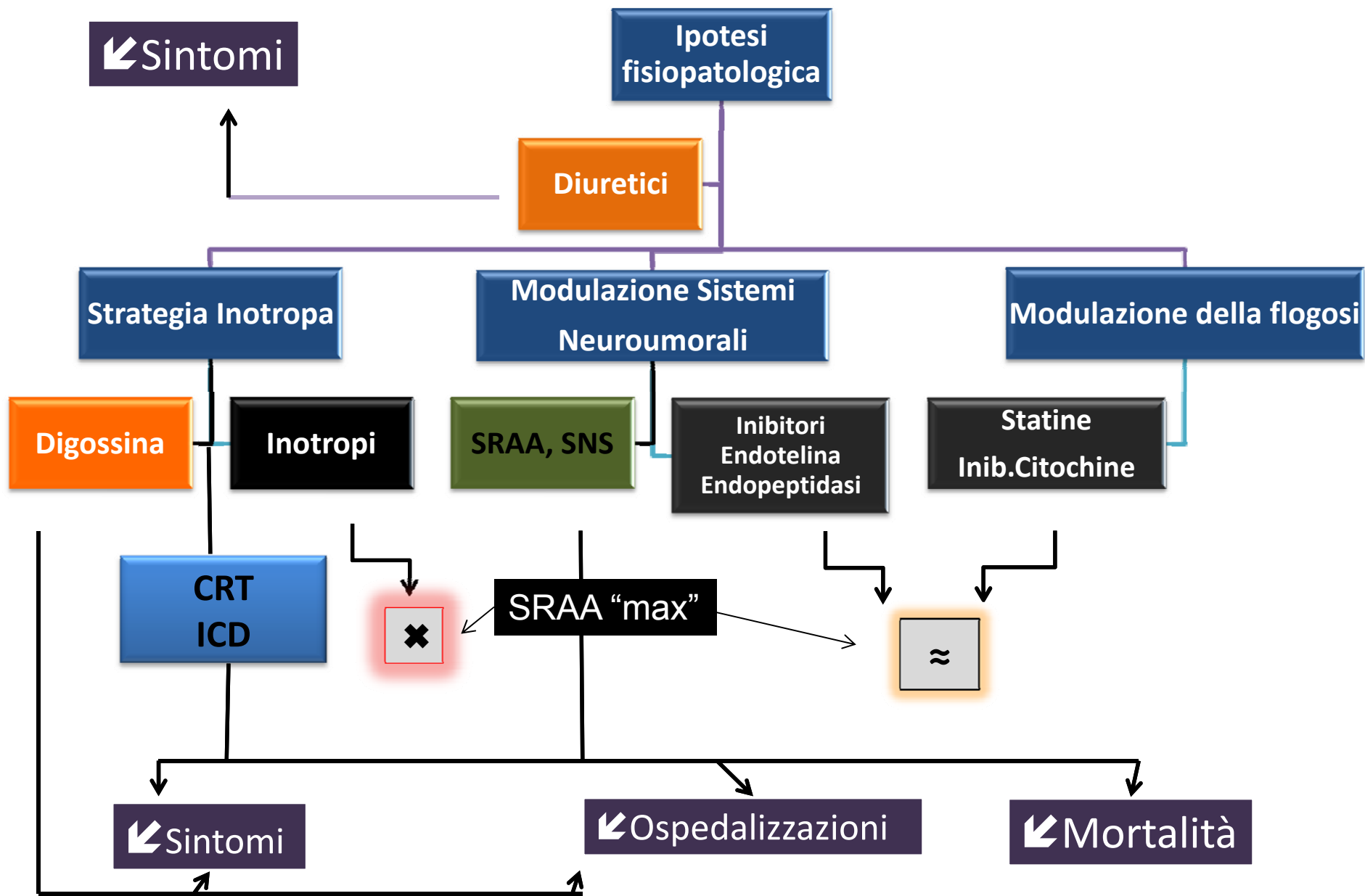
MORTALITA' A 12 MESI

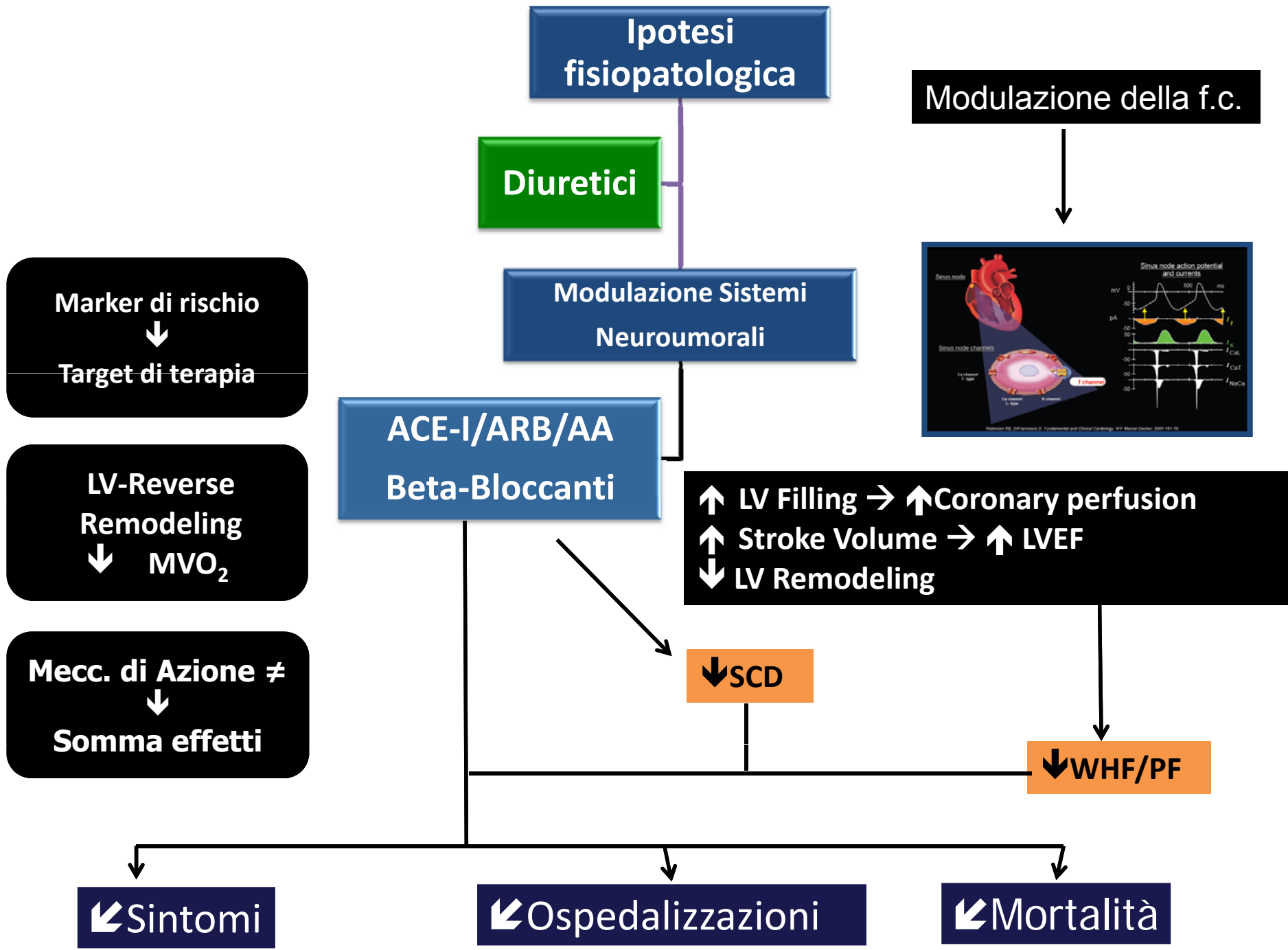
◆ SCD ■ PF





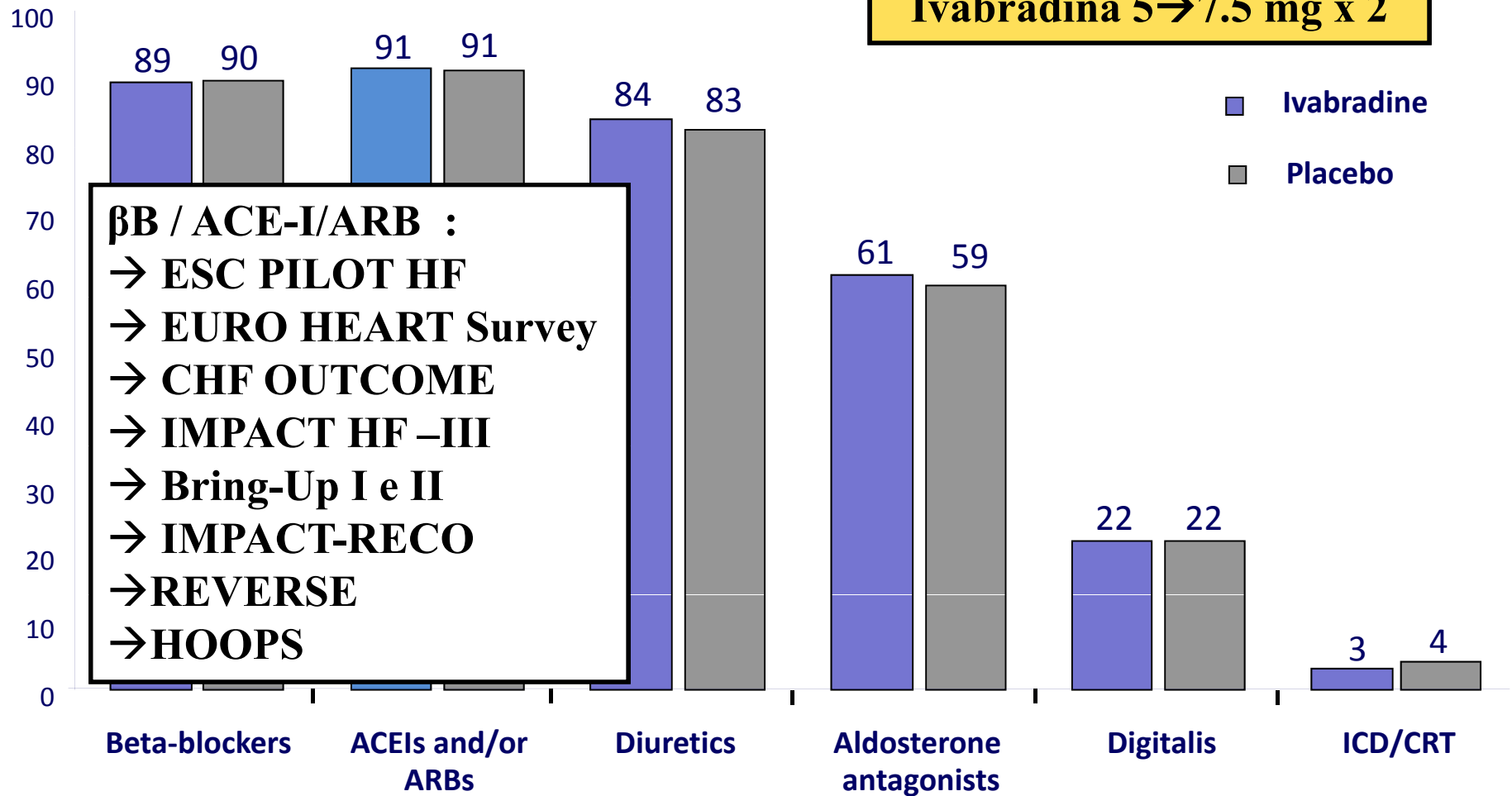






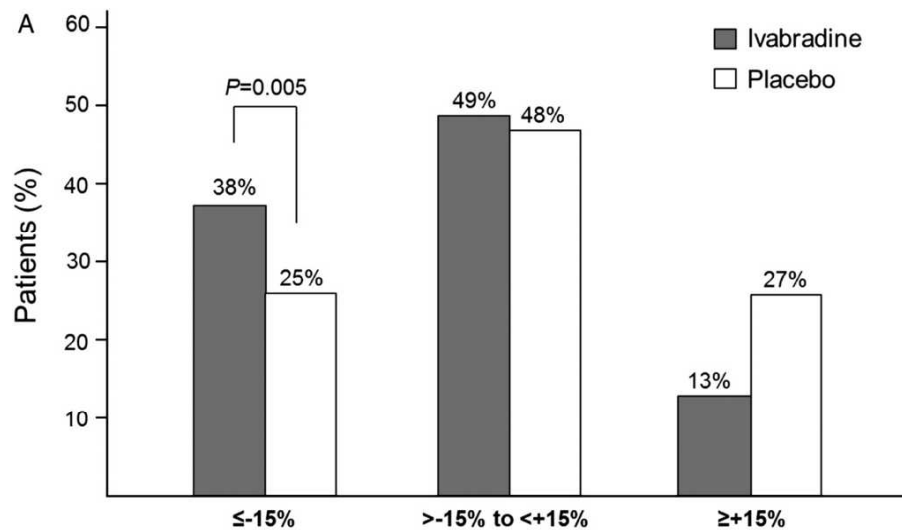
6558 pts
NYHA II-IV
LVEF < 35%
SR, HR > 70 bpm
Ivabradina 5→7.5 mg x 2

Patients (%)



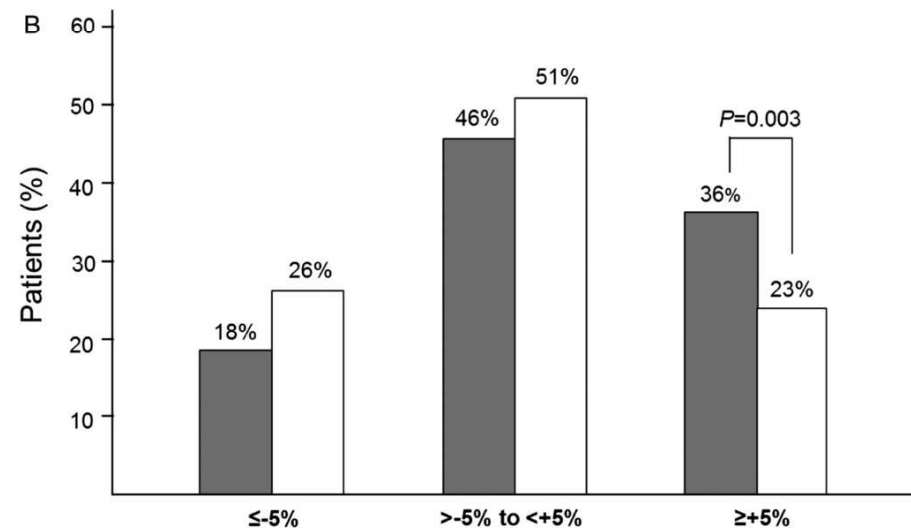
Effetti della Ivabradina sul rimodellamento ventricolare e sulla funzione ventricolare sin

Δ LVESVI



Variazione relativa dell' indice di fine sistole dal basale a 8 mesi

Δ LVEF

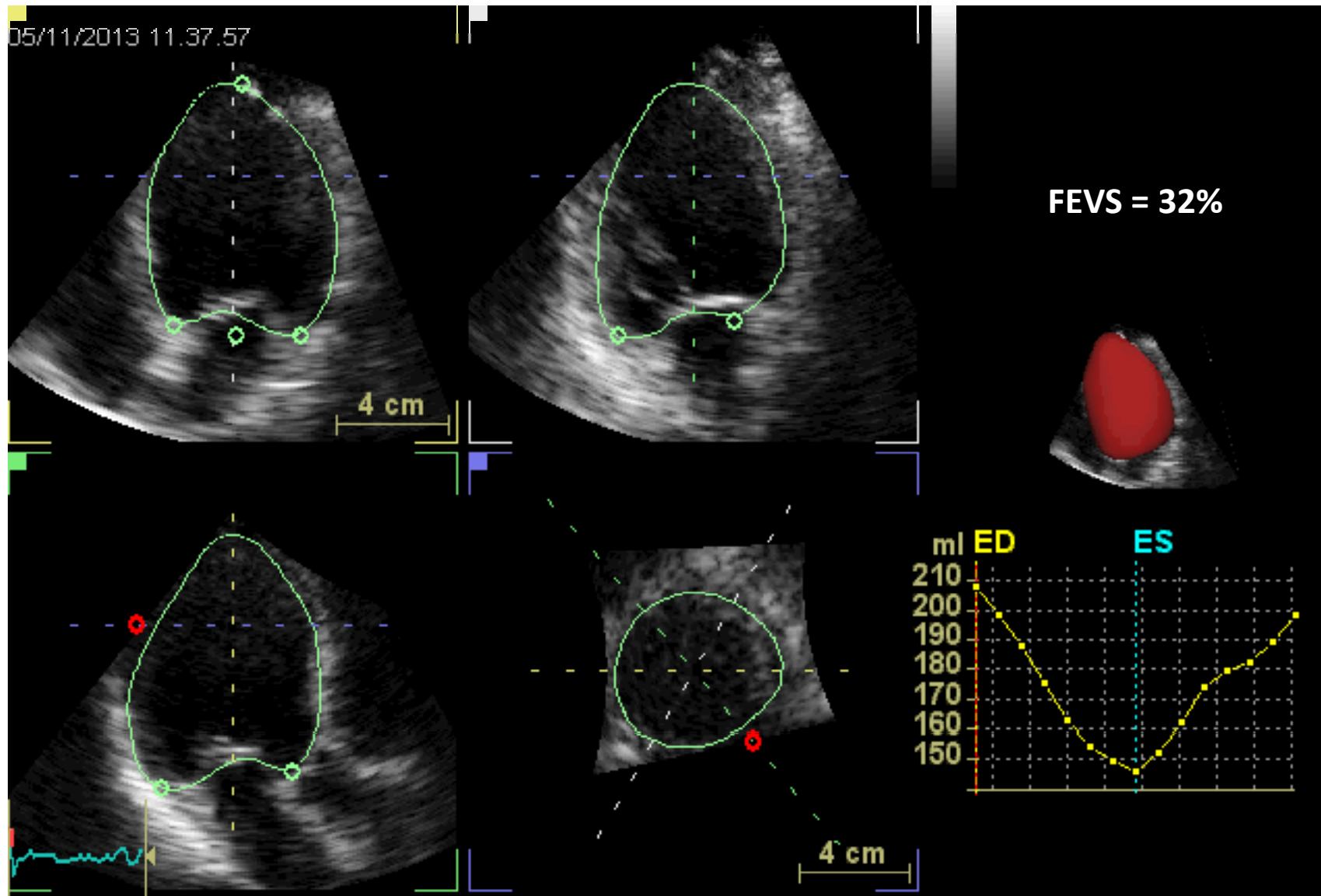


Variazione assoluta del valore di frazione d' eiezione dal basale a 8 mesi

ΔHR -14.7 bpm
 ΔLVESVI - 7 ml/m²
 ΔLVEDVI -7.9 ml/m²

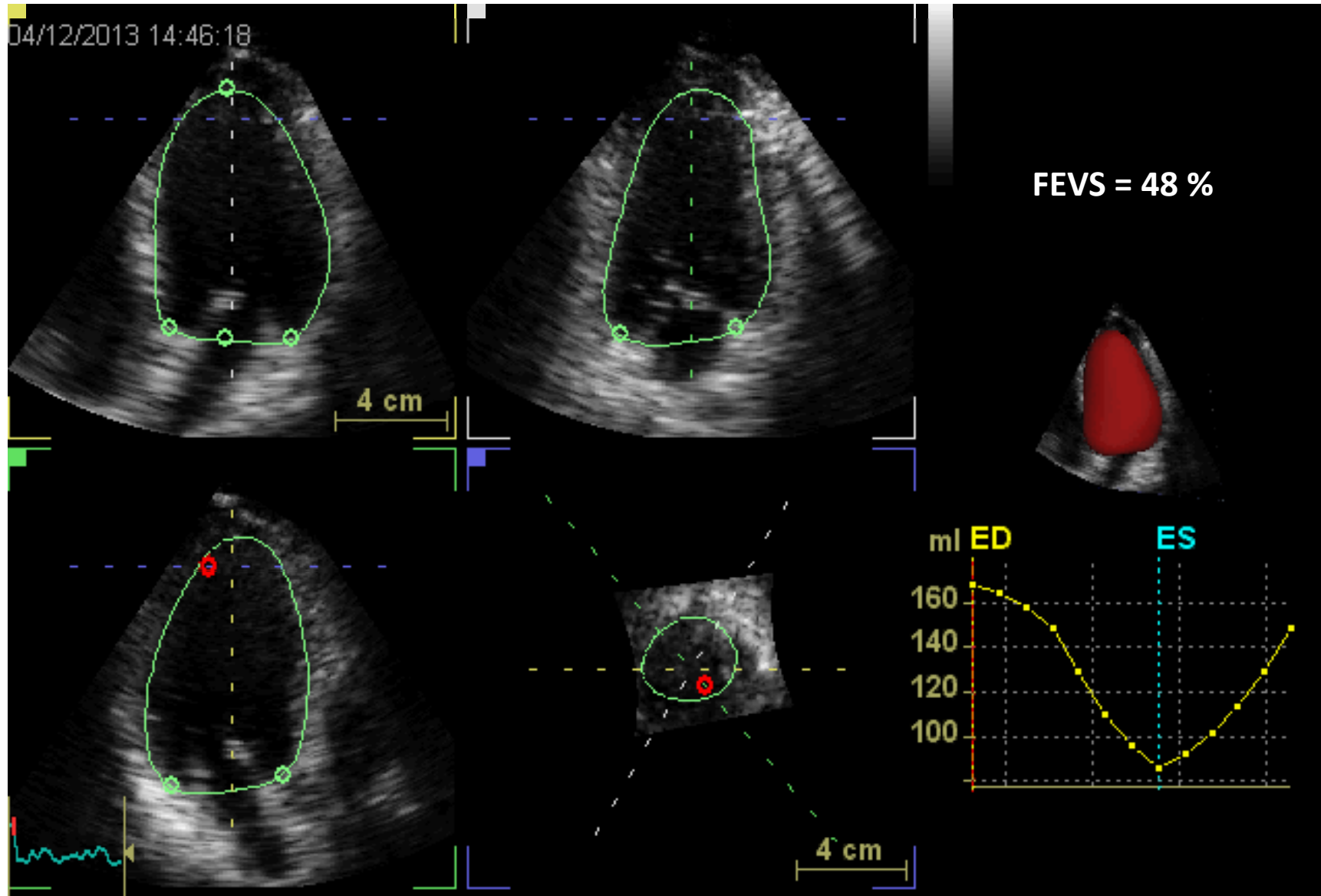
→ ↙ MVO₂

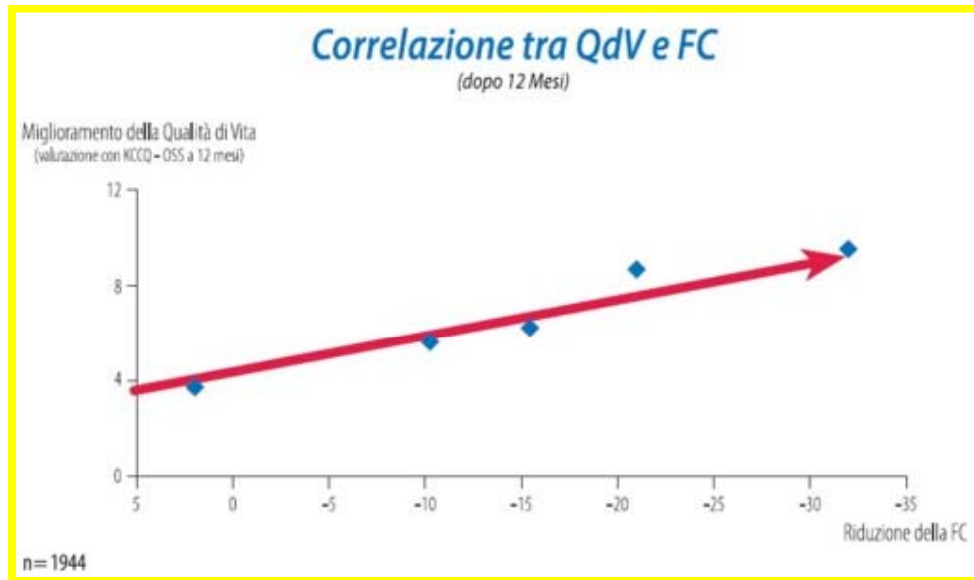
C.S. aa 49. DVS non ischemica . ACE-I + BB* + Furosemide + Spironolattone



*Carvedilolo 6.25 mg x 2

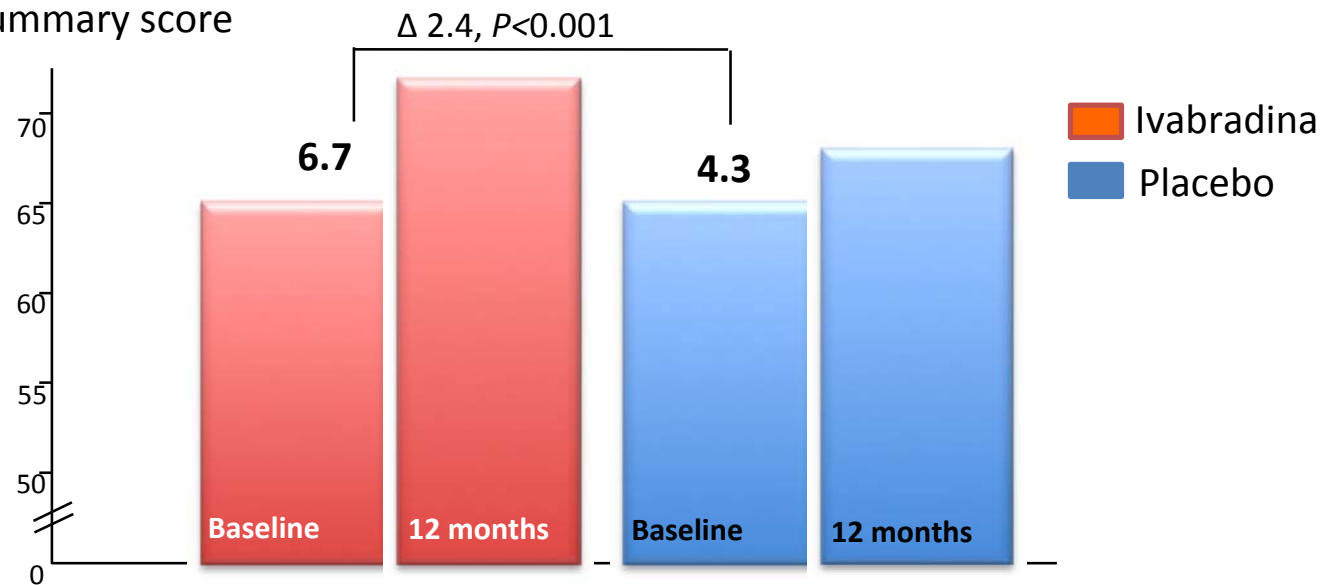
C.S. aa 49. DVS non ischemica. Standard Therapy + Ivabradina 7.5 mg x 2



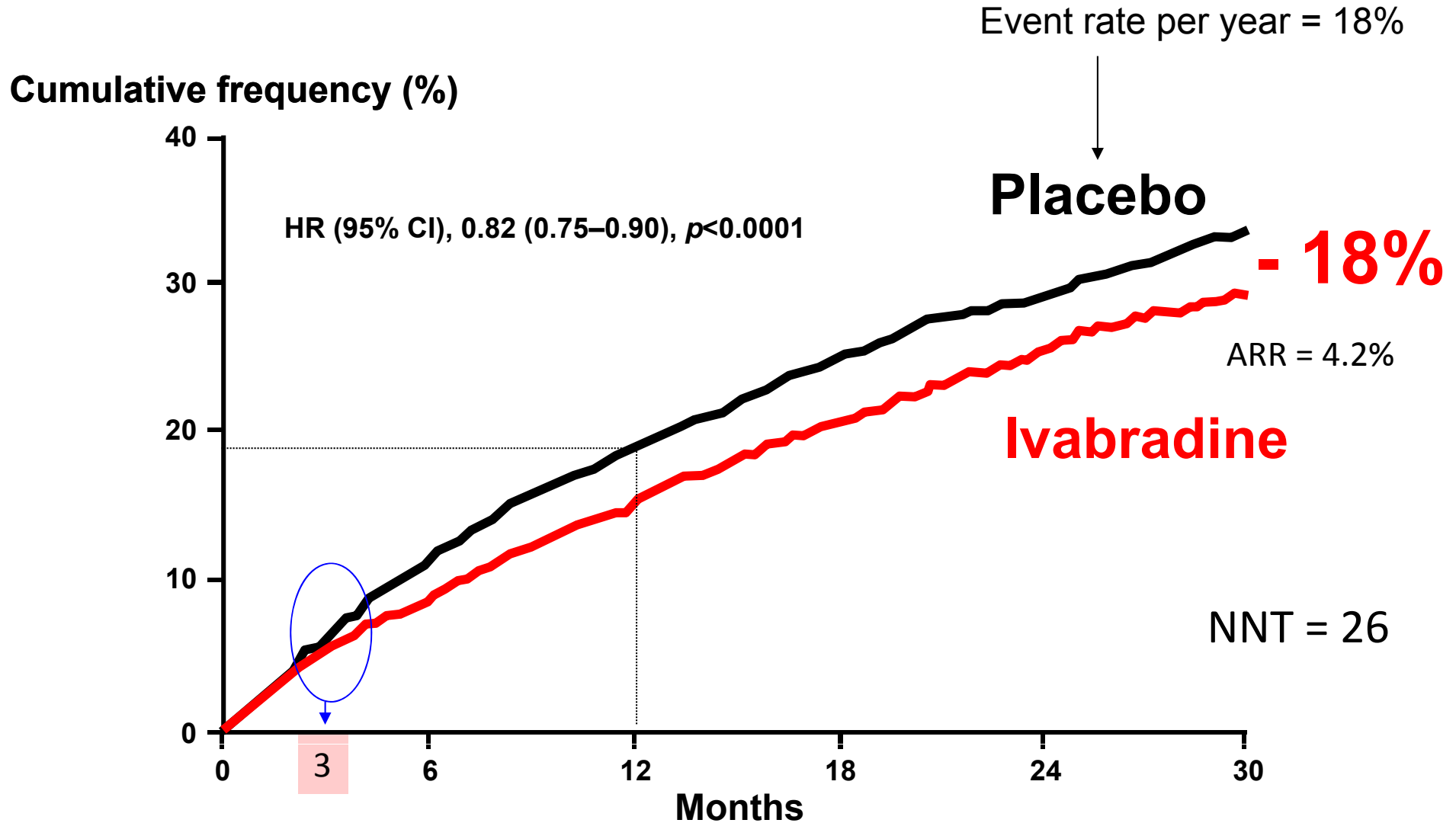


All adverse event $\Delta < 1\%$
Ivabradine vs Placebo

Overall summary score



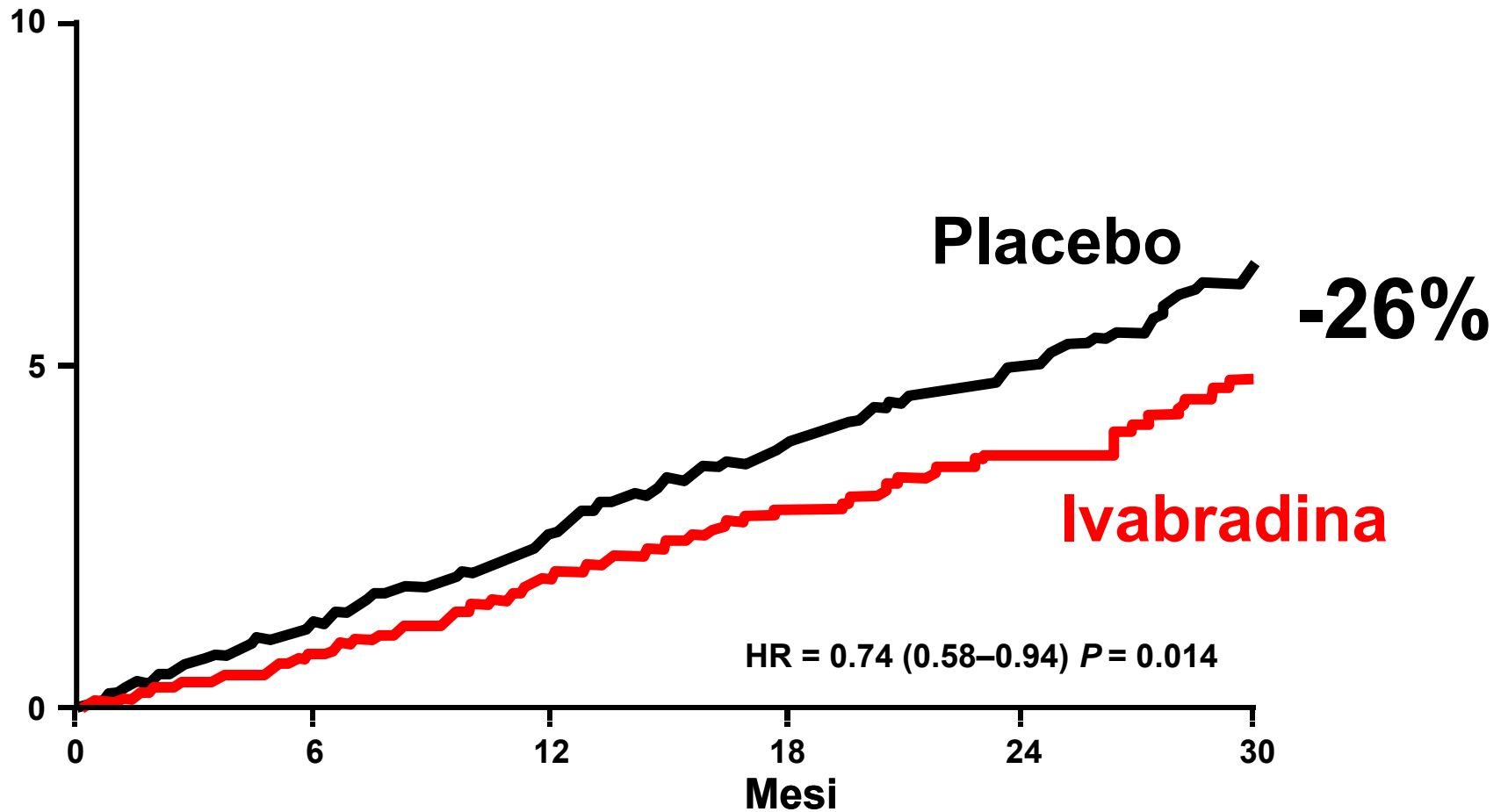
Primary composite endpoint
(CV death or hospital admission for worsening HF)





Morte per scompenso

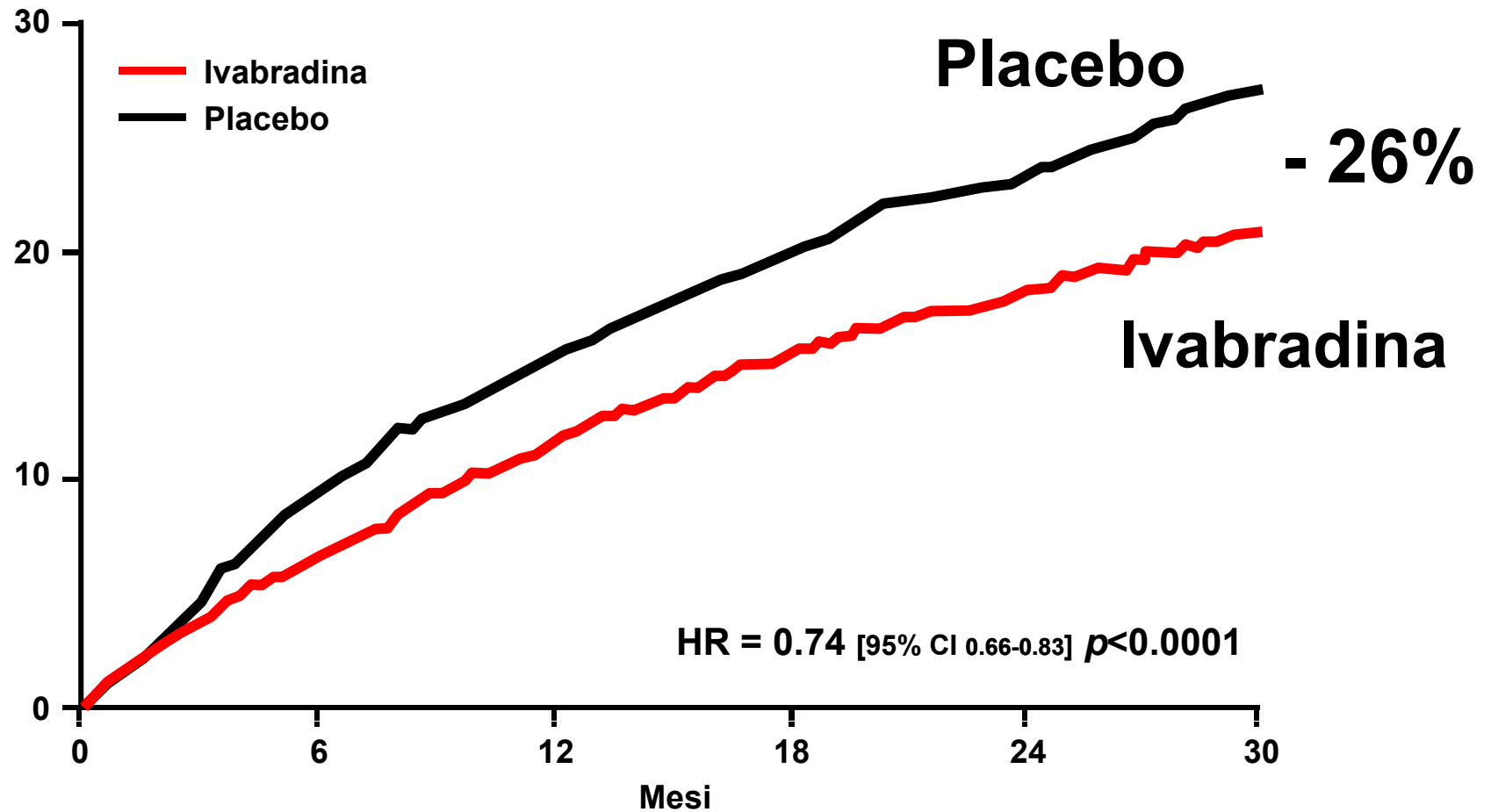
Frequenza cumulativa (%)





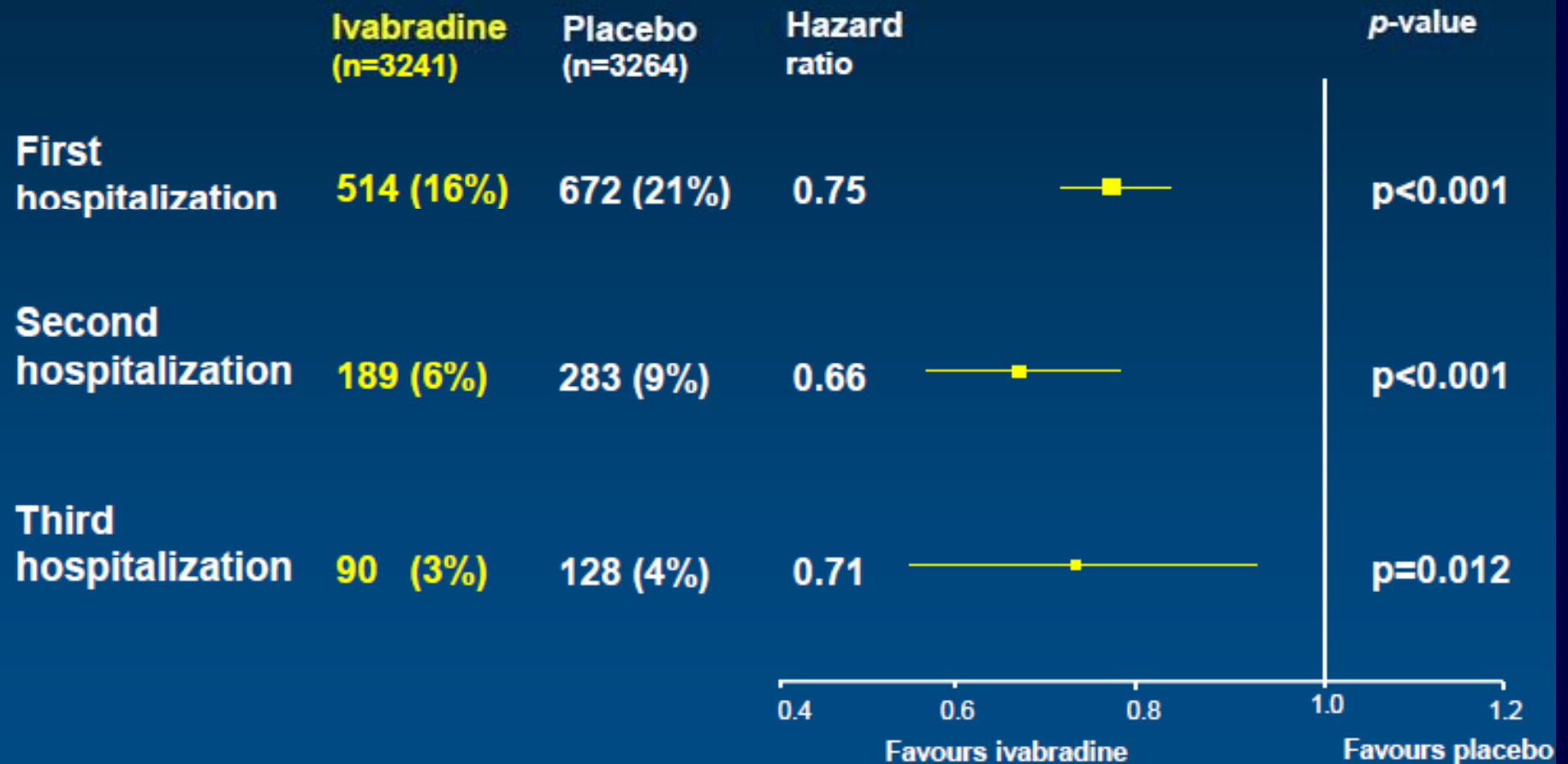
Ospedalizzazioni per scompenso

Frequenza cumulativa (%)



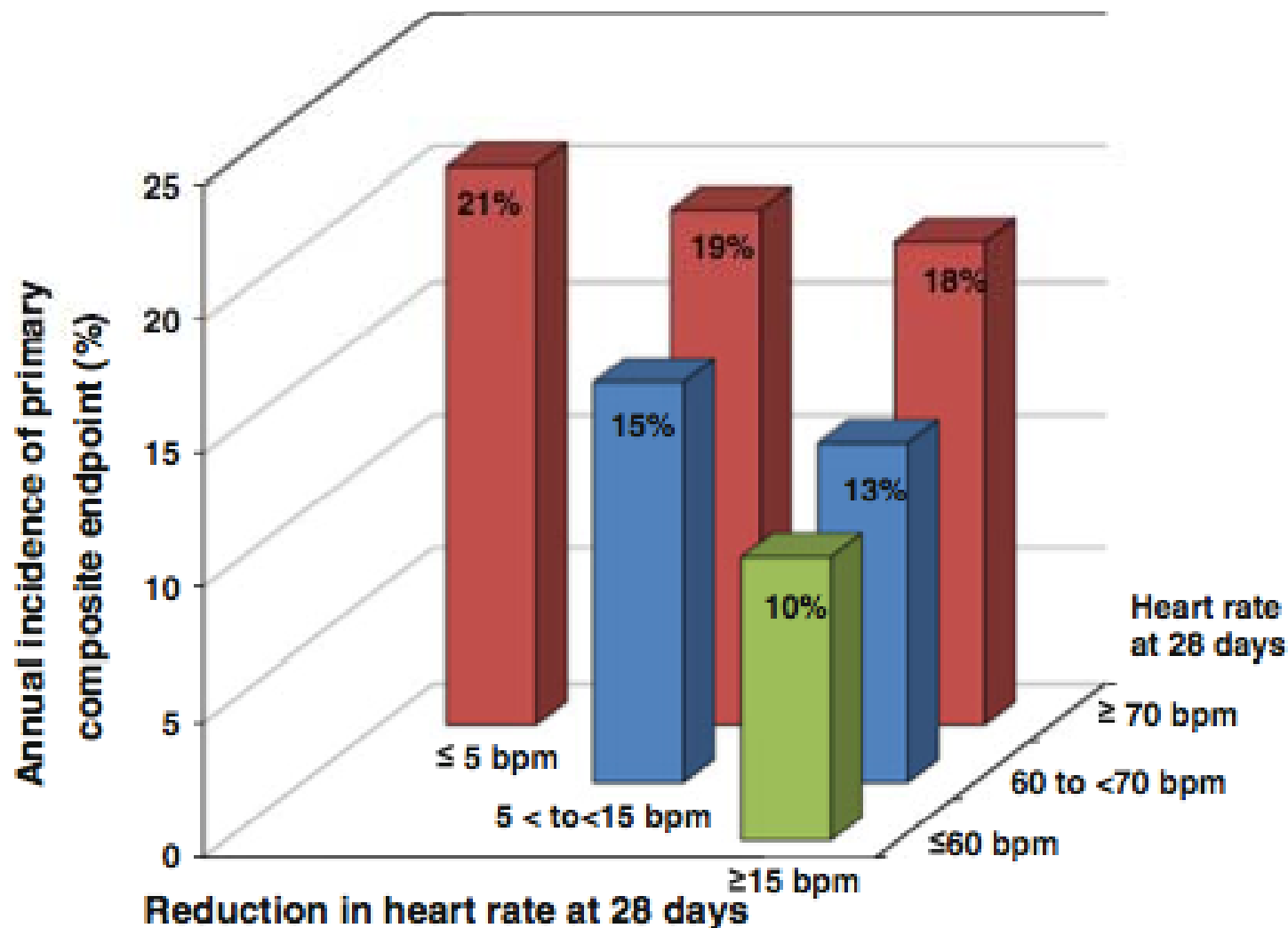
Effect of ivabradine on recurrent hospitalization for worsening heart failure in patients with chronic systolic heart failure: the SHIFT Study

Jeffrey S. Borer^{1*}, Michael Böhm², Ian Ford³, Michel Komajda⁴, Luigi Tavazzi⁵, Jose Lopez Sendon⁶, Marco Alings⁷, Esteban Lopez-de-Sa⁸, and Karl Swedberg⁹, on behalf of the SHIFT Investigators

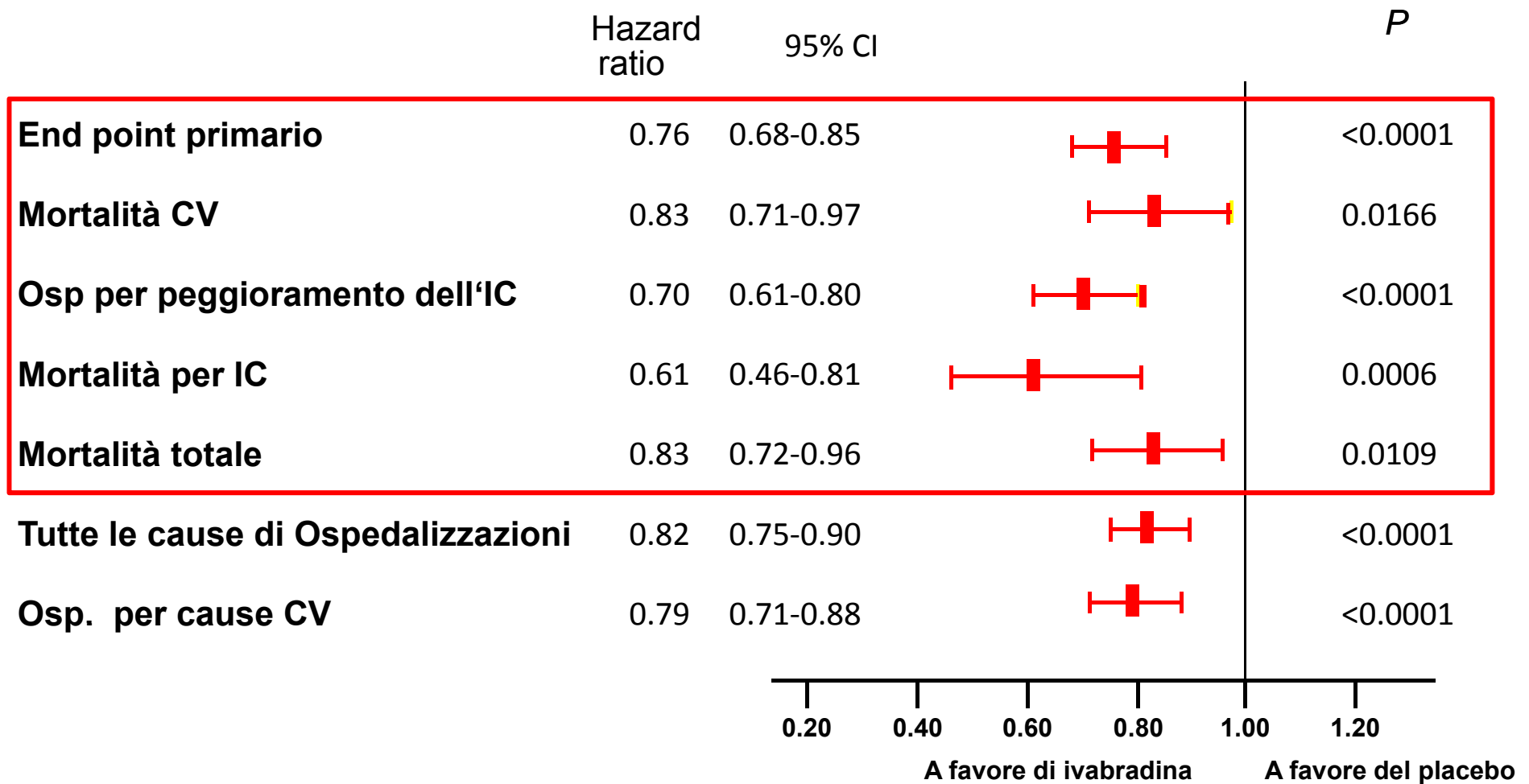


Risultati migliori per Ivabradina + Terapia Standard per “pts SHIFT” :

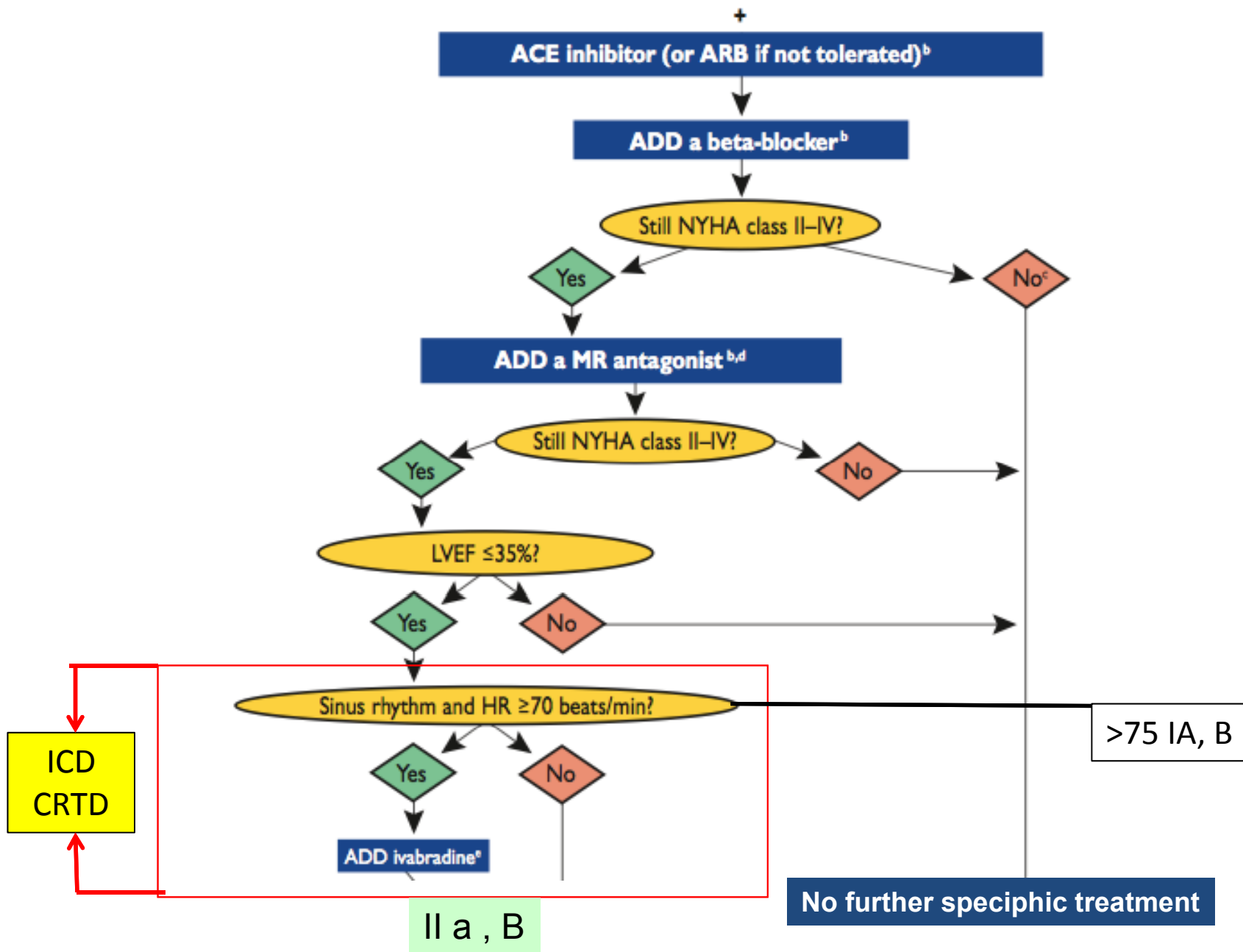
- HR pre-trattamento > 75 bpm
- Riduzione HR > 10 bpm
- HR raggiunta in terapia < 60 bpm

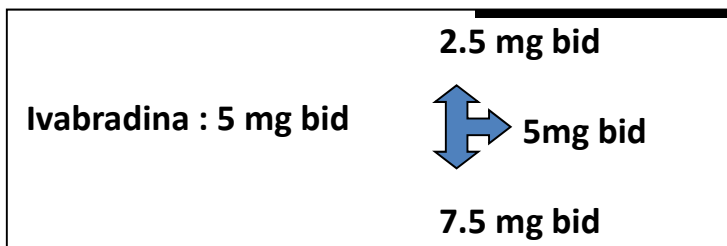
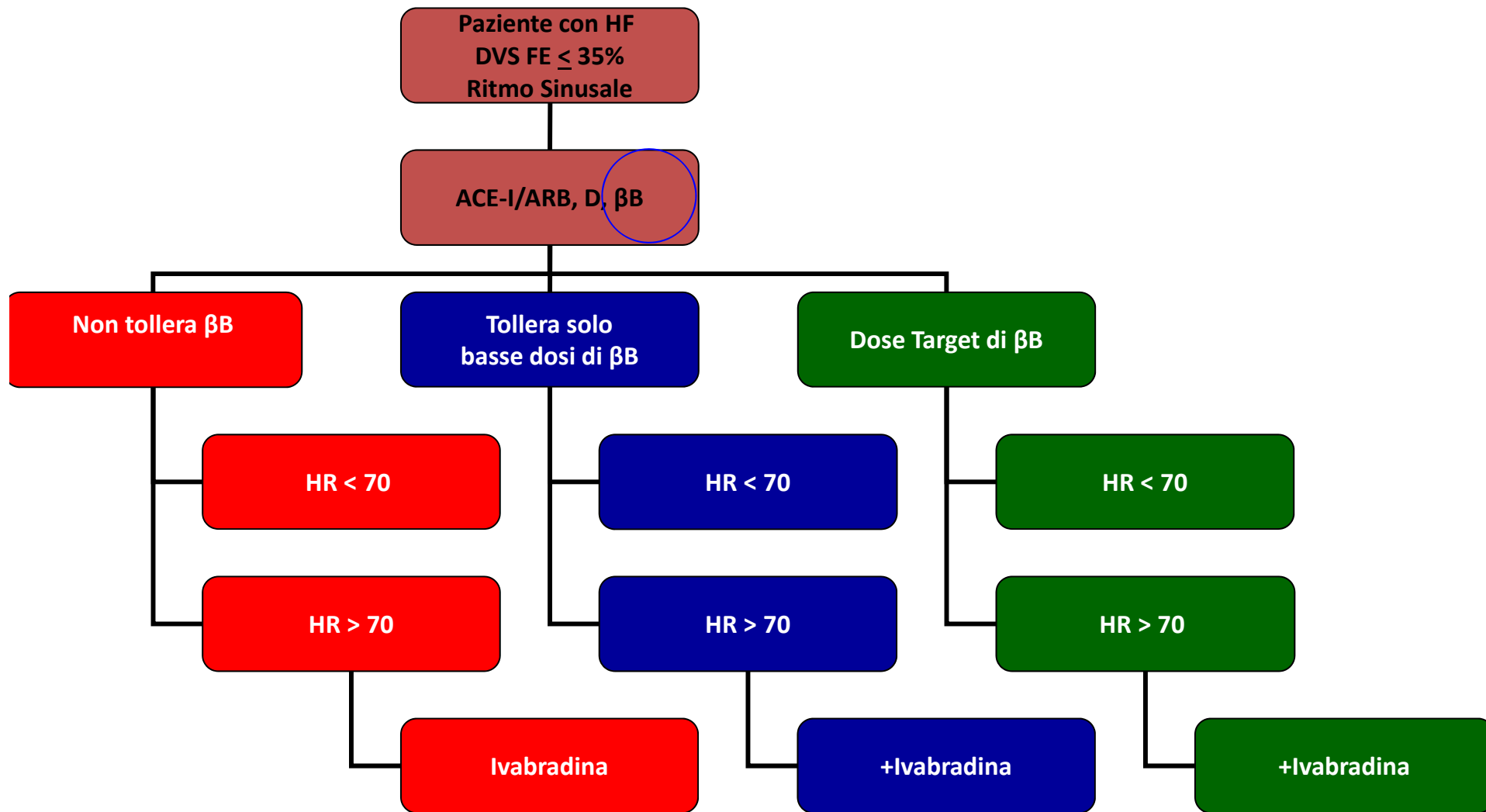


Efficacia di ivabradina sui principali "outcomes" in pazienti con FC ≥ 75 bpm



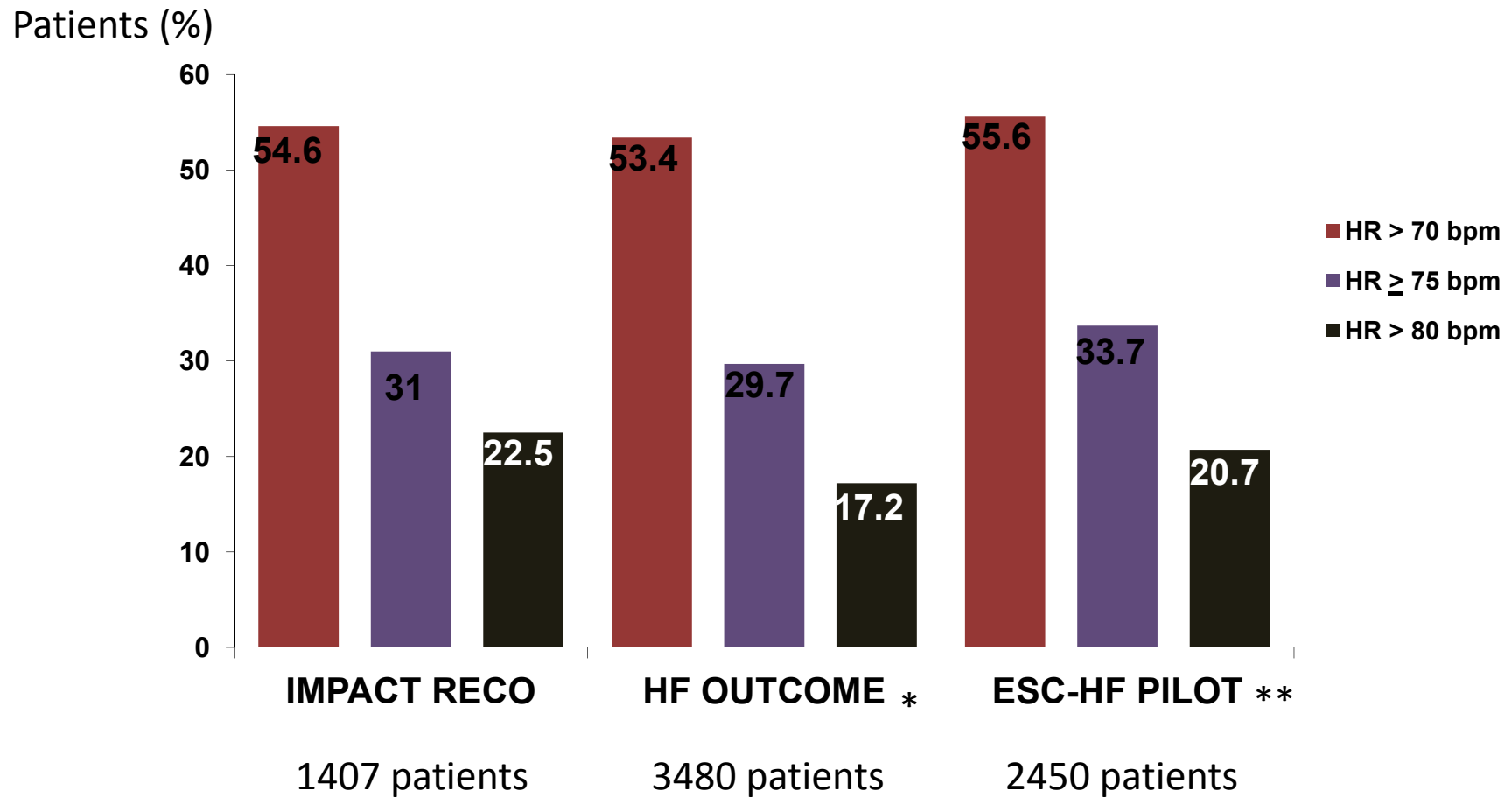
Diuretics to relieve symptoms/signs of congestion^a





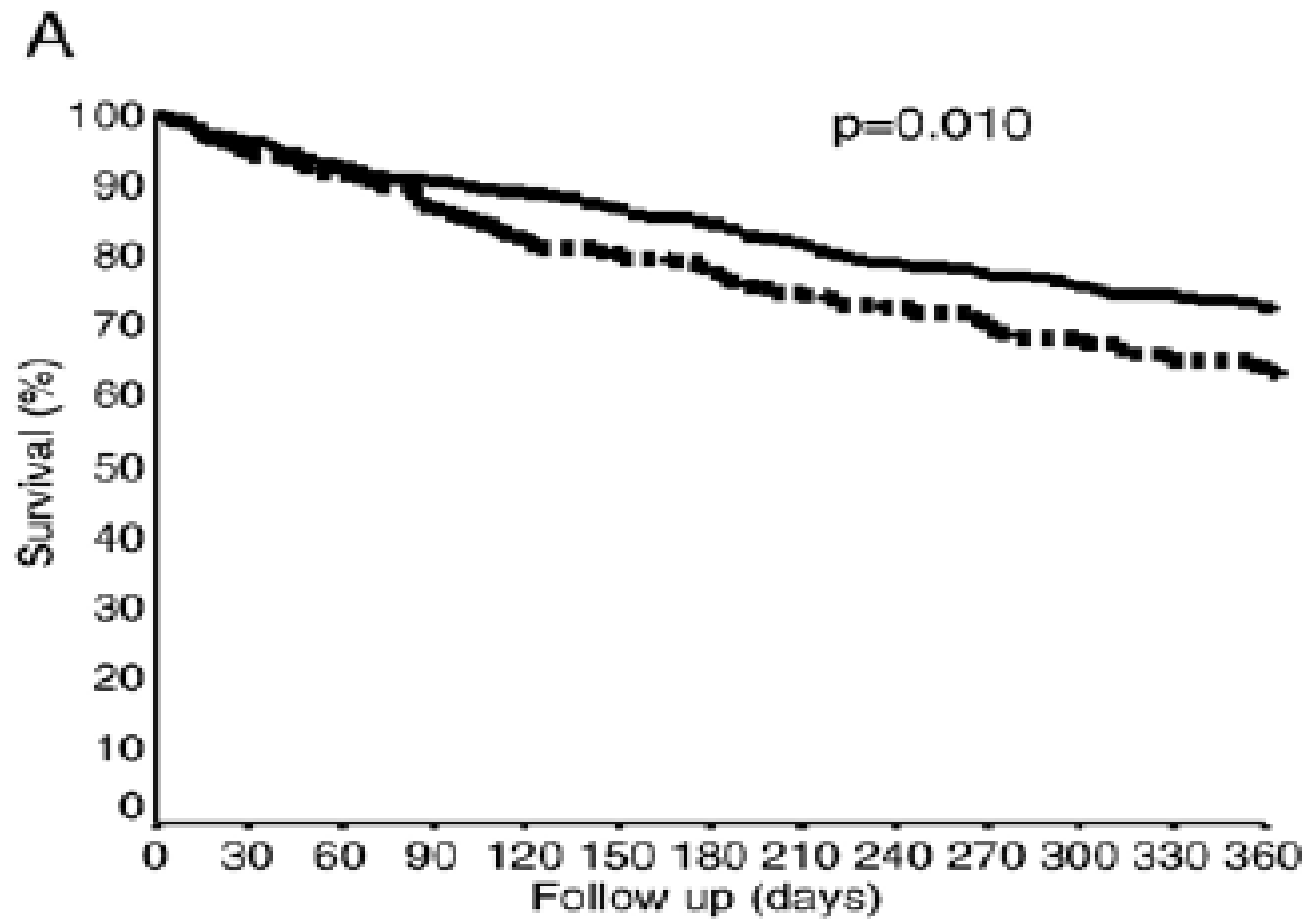
TARGET : fc < 60 bpm in assenza di effetti sfavorevoli / intolleranza

Insufficient heart rate control in majority of patients with heart failure

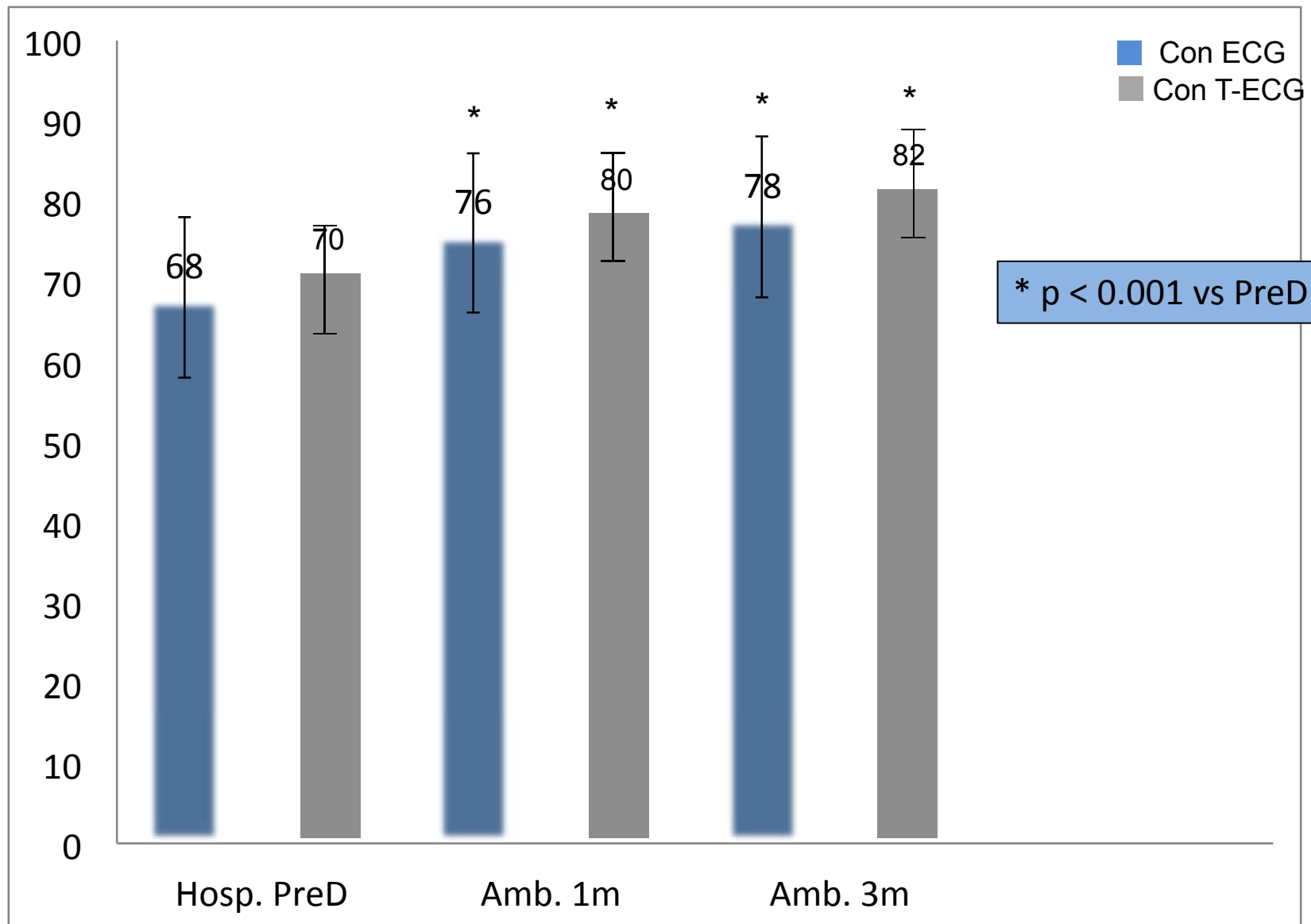


*Courtesy of Prof Tavazzi; **Maggioni AP, et al. *Euro J Heart Fail.* 2010;12:1076-1084.

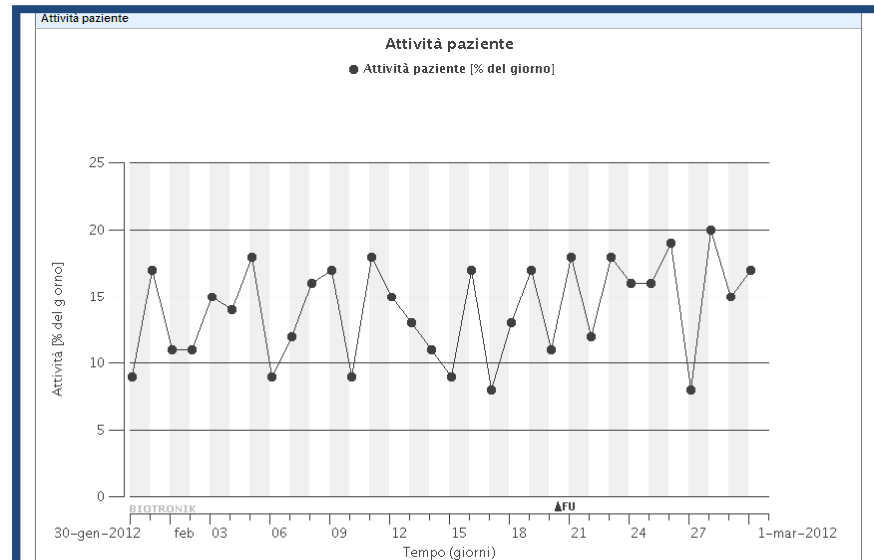
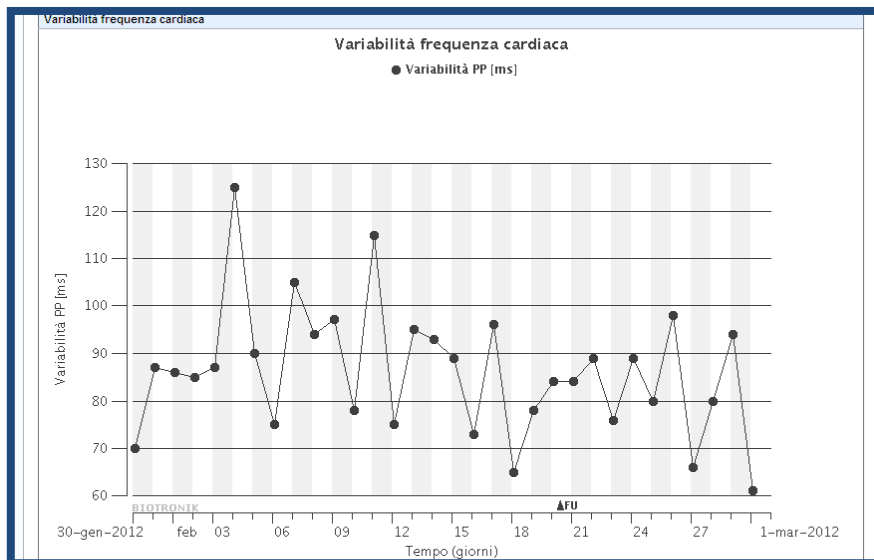
Pazienti con BPCO (fc elevate, PAPS aumentata, Bassa tolleranza ai BB)



Frequenza Cardiaca a riposo in 80 pts in RS ospedalizzati per ICA
Valutazione della fc in predimissione e a distanza di 1 e 3 mesi:

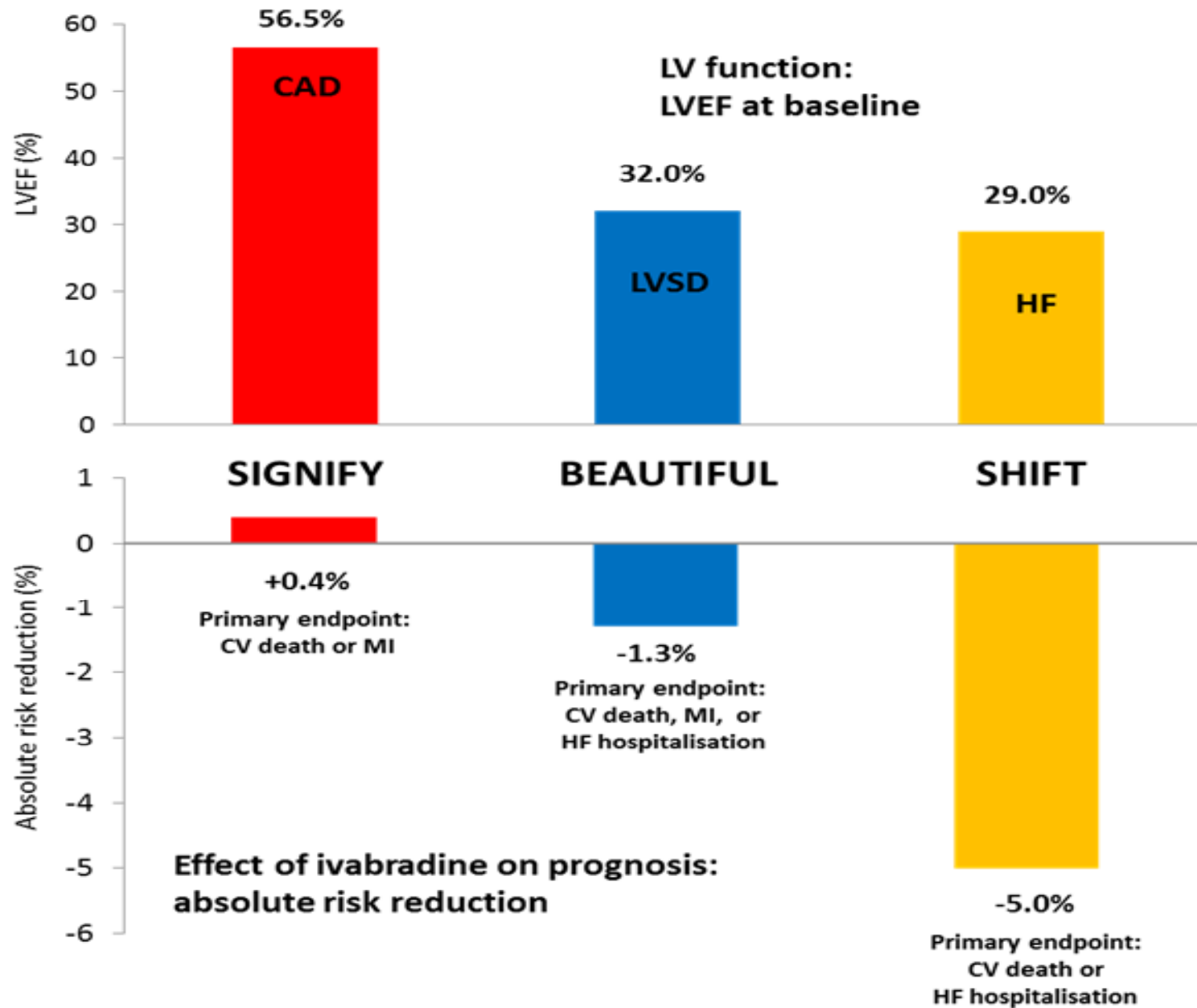


Variabilità della fc nel TMA



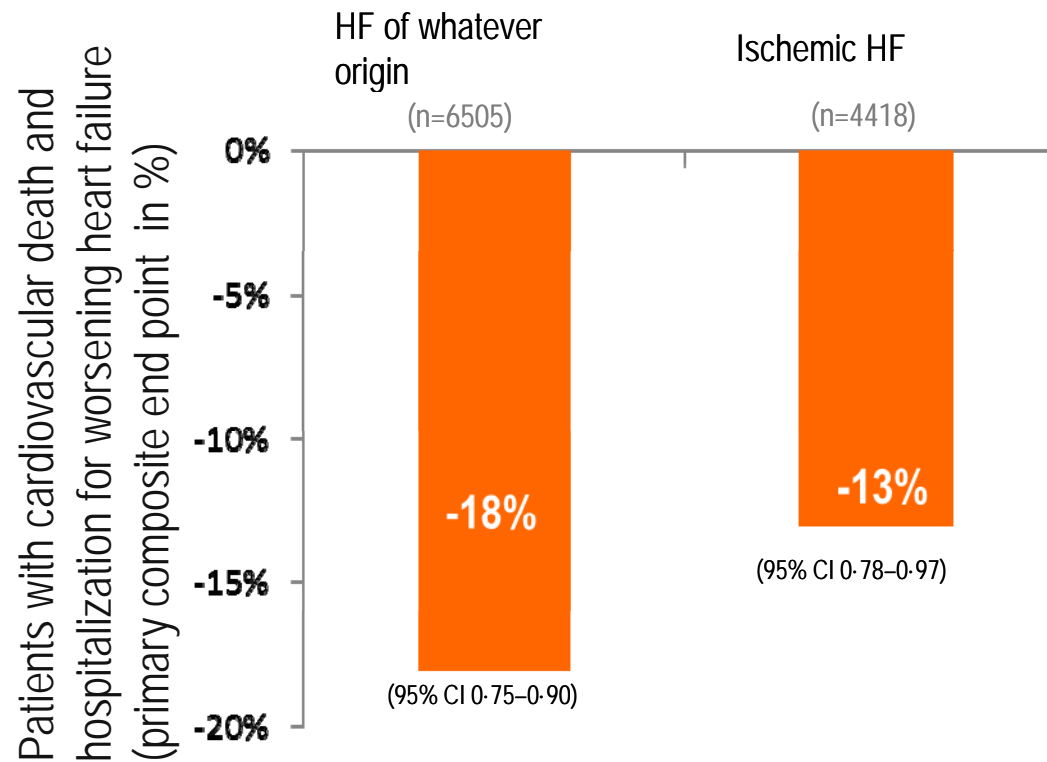
- Scarsa compliance ai trattamenti
- Riduzione della posologia dei B-bloccanti
- Effetto delle attività quotidiane sulla fc a riposo
- Deterioramento funzionale
- Disturbi del sonno (OSAS, CSA)

LV function and outcomes in Ivabradine Trials





Ivabradine reduces the risk of death for heart failure whatever the etiology of heart failure



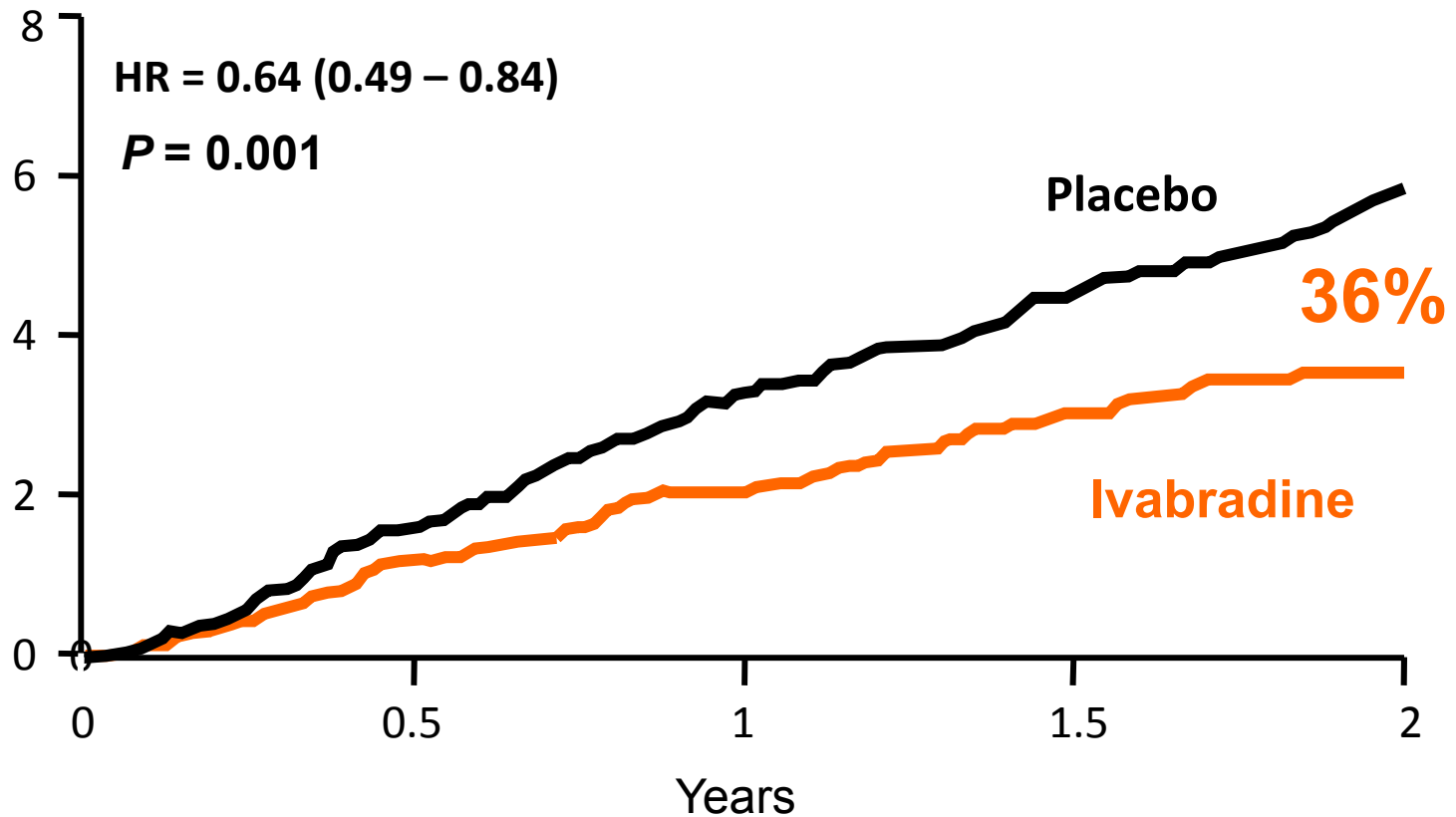
Ivabradine is given on top of guideline-recommended therapy including ACE inhibitor, β -blocker, mineralocorticoid receptor antagonist

Swedberg K et al; *Lancet*. 2010;376(9744):875-885.



- Documented CAD (10.917 pts , ≥ 55 y)
- Documented LV systolic dysfunction (LVEF < 40%)
- Resting HR ≥ 60 bpm in OMT (ACE-I/ARB, BB, Statins, ASA)

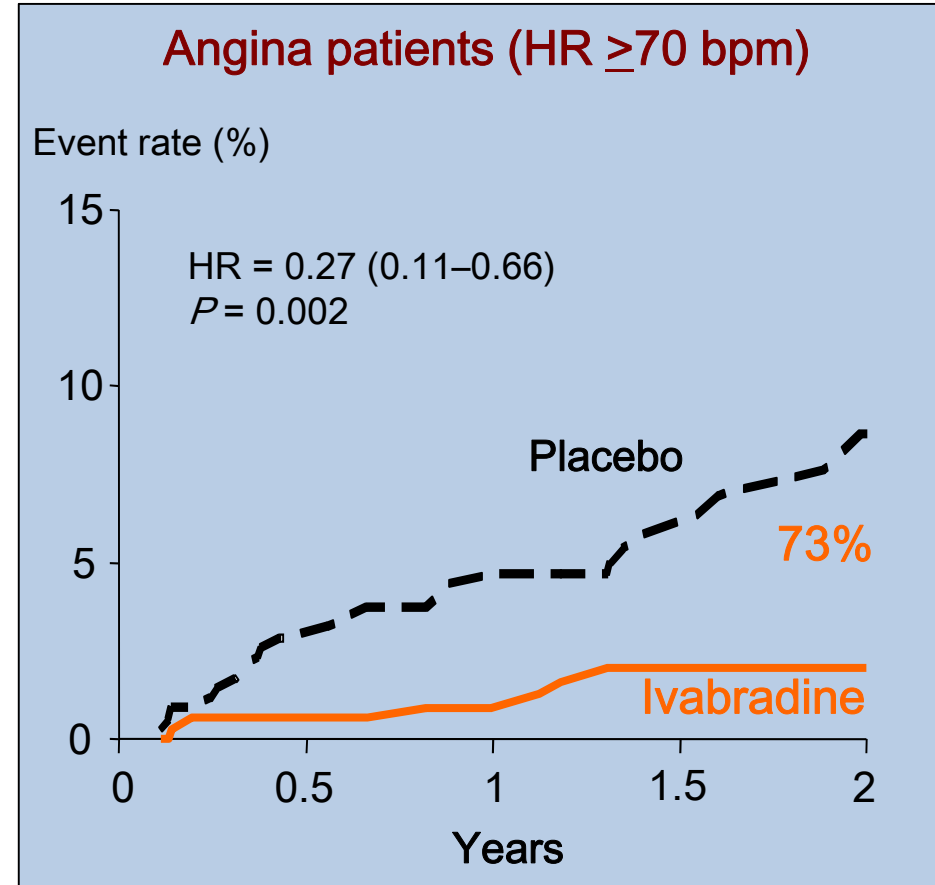
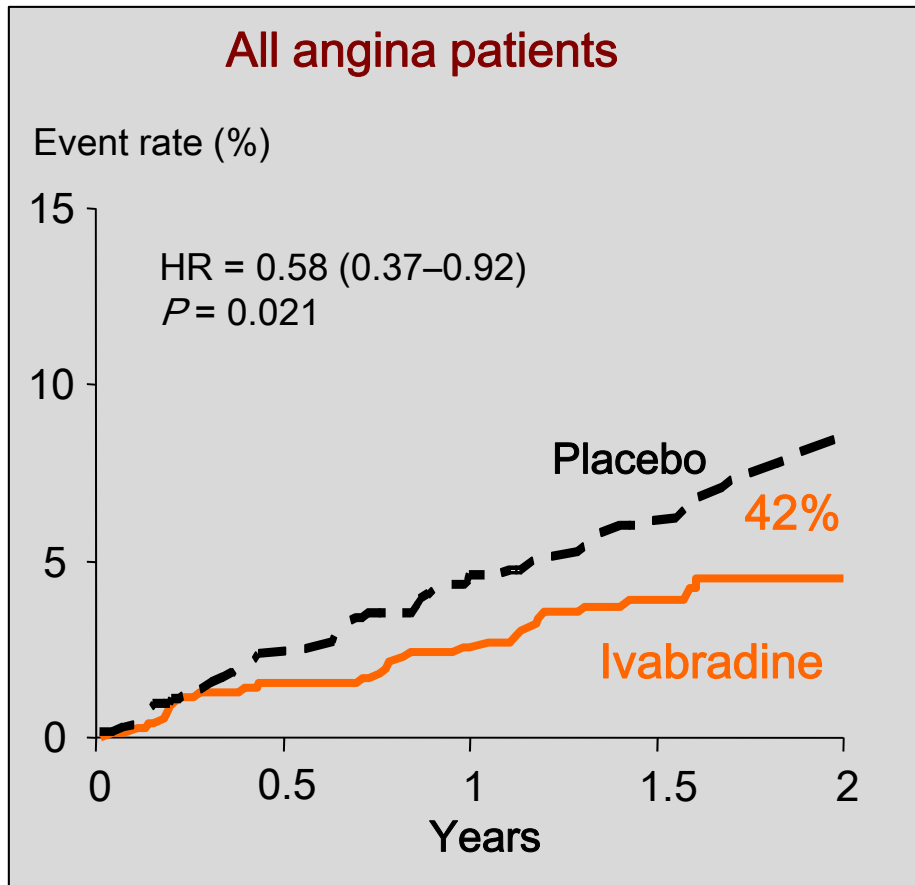
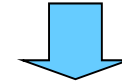
Hospitalisation for fatal and non-fatal MI of stable CAD with LVSD (%)



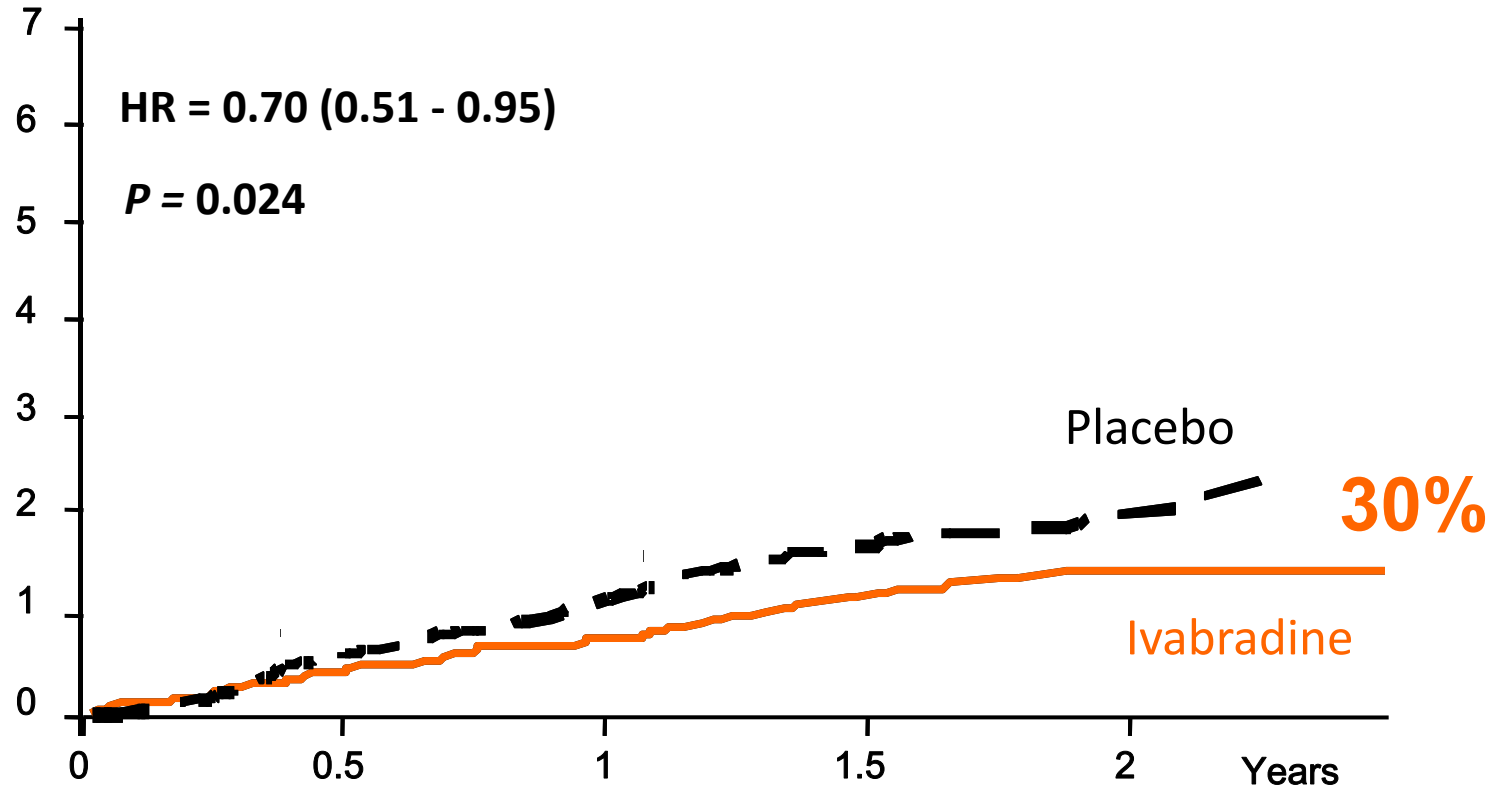
On top optimal preventive therapy

OMT + Ivabradine 5 mg \rightarrow 7,5 mg bid
HR : -7.2 bpm at 6m, -6.4 bpm at 12m

Hospitalization for MI



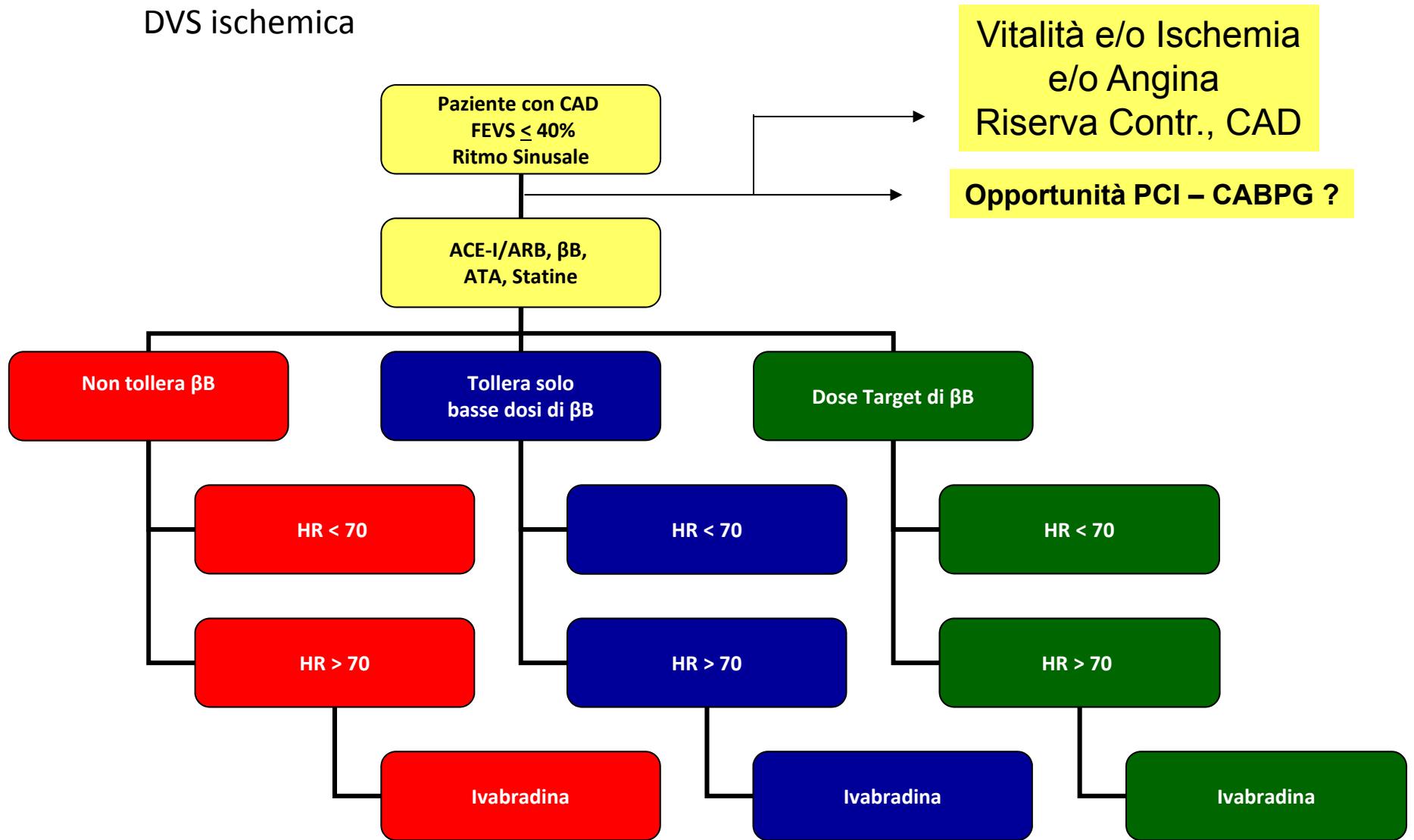
Rate of elective revascularization (%) in All Angina Patients



Number at risk

| | | | | | |
|------------|------|------|------|------|------|
| Ivabradine | 5479 | 5245 | 4837 | 3109 | 1358 |
| Placebo | 5438 | 5201 | 4810 | 3020 | 1327 |

DVS ischemica



Nb : Calcioantagonisti controindicati ; altri farmaci : non evidenze

Recommendations for the pharmacological treatment of stable angina pectoris in patients with symptomatic HF (NYHA functional class II–IV) and LV systolic dysfunction ESC – Guideline 2012

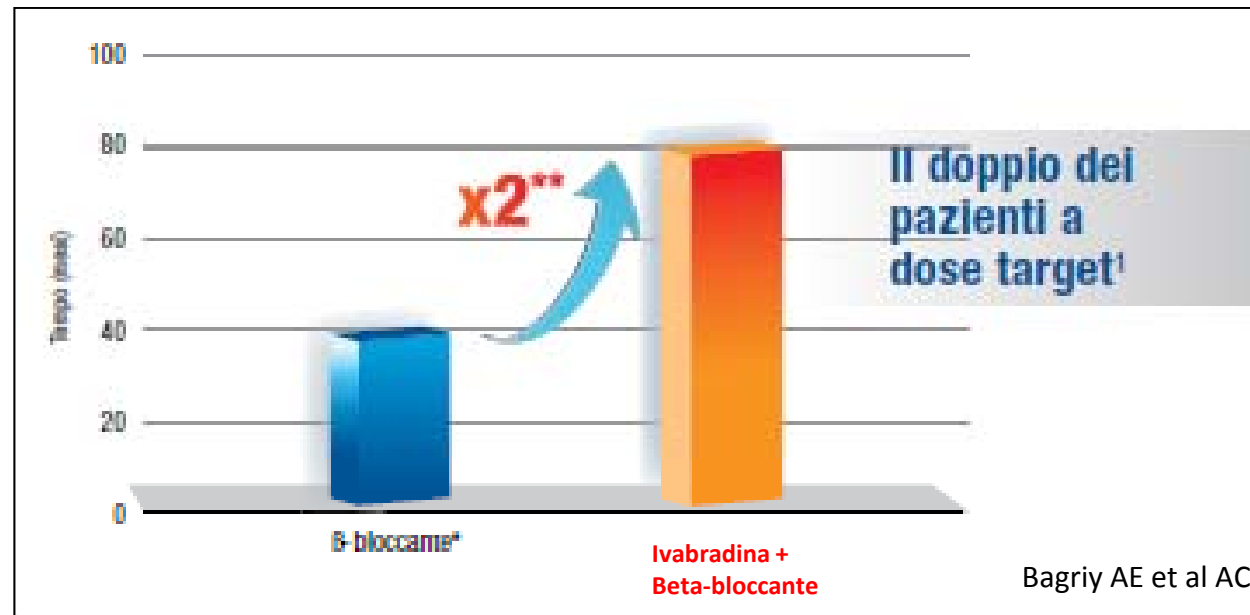
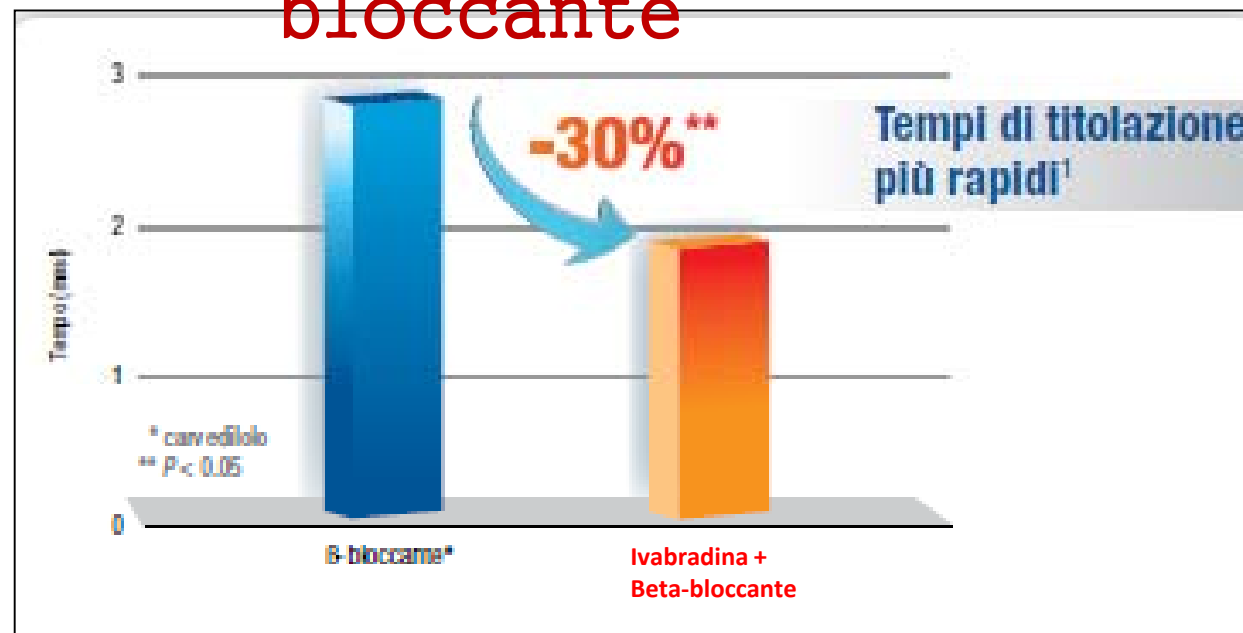
| Recommendations | Class ^a | Level ^b | Ref ^c |
|---|--------------------|--------------------|------------------|
| Step 1: A beta-blocker | | | |
| A beta-blocker is recommended as the preferred first-line treatment to relieve angina because of the associated benefits of this treatment (reducing the risk of HF hospitalization and the risk of premature death). | I | A | 92–98 |
| Alternatives to a beta-blocker: | | | |
| (i) Ivabradine should be considered in patients in sinus rhythm who cannot tolerate a beta-blocker, to relieve angina (effective antianginal treatment and safe in HF). | IIa | A | 112, 122 |
| (ii) An oral or transcutaneous nitrate should be considered in patients unable to tolerate a beta-blocker, to relieve angina (effective antianginal treatment and safe in HF). | IIa | A | 114–116 |
| (iii) Amlodipine should be considered in patients unable to tolerate a beta-blocker, to relieve angina (effective antianginal treatment and safe in HF). | IIa | A | 188, 189 |
| (iv) Nicorandil may be considered in patients unable to tolerate a beta-blocker, to relieve angina (effective antianginal treatment but safety in HF uncertain). | IIb | C | – |
| (v) Ranolazine may be considered in patients unable to tolerate a beta-blocker, to relieve angina (effective antianginal treatment but safety in HF uncertain). | IIb | C | – |
| Step 2: Add a second anti-anginal drug | | | |
| The following may be added to a beta-blocker (or alternative)—taking account of the combinations not recommended below. | | | |
| The addition of ivabradine is recommended when angina persists despite treatment with a beta-blocker (or alternative), to relieve angina (effective antianginal treatment and safe in HF). | I | A | 112, 122 |
| The addition of an oral or transcutaneous nitrate is recommended when angina persists despite treatment with a beta-blocker (or alternative), to relieve angina (effective antianginal treatment and safe in HF). | I | A | 114–116 |
| The addition of amlodipine is recommended when angina persists despite treatment with a beta-blocker (or alternative), to relieve angina (effective antianginal treatment and safe in HF). | I | A | 188, 189 |
| The addition of nicorandil may be considered when angina persists despite treatment with a beta-blocker (or alternative), to relieve angina (effective antianginal treatment but safety in HF uncertain). | IIb | C | – |
| The addition of ranolazine may be considered when angina persists despite treatment with a beta-blocker (or alternative), to relieve angina (effective antianginal treatment but safety in HF uncertain). | IIb | C | – |
| Step 3: Coronary revascularization | | | |

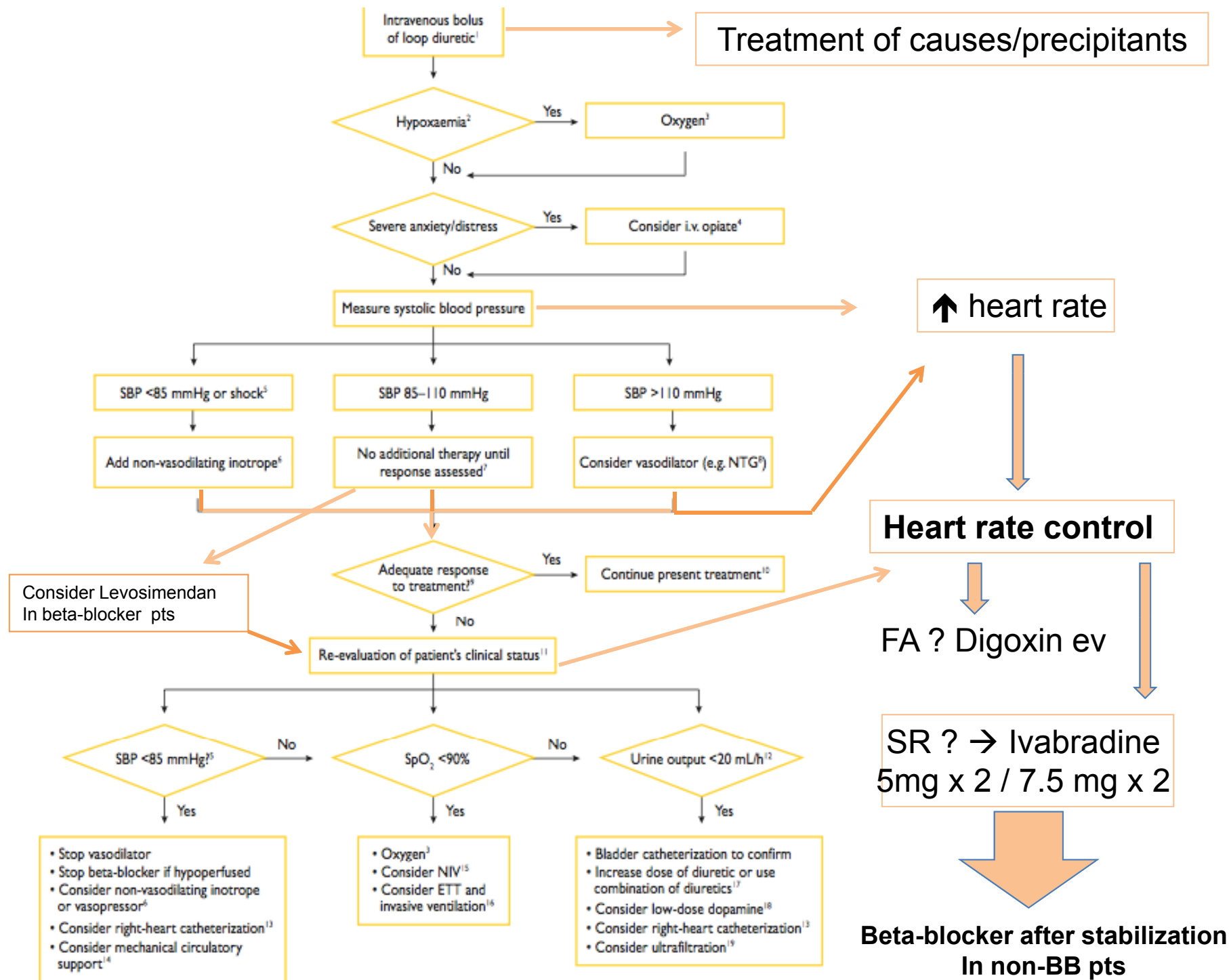


Uso più semplice del Beta bloccante

- ↓ Astenia da BB
- ↓ Ipotensione da BB
- ↓ Vasocostrizione periferica da BB
- ↓ Aumento PAPS
- ↑ Precoce della FE

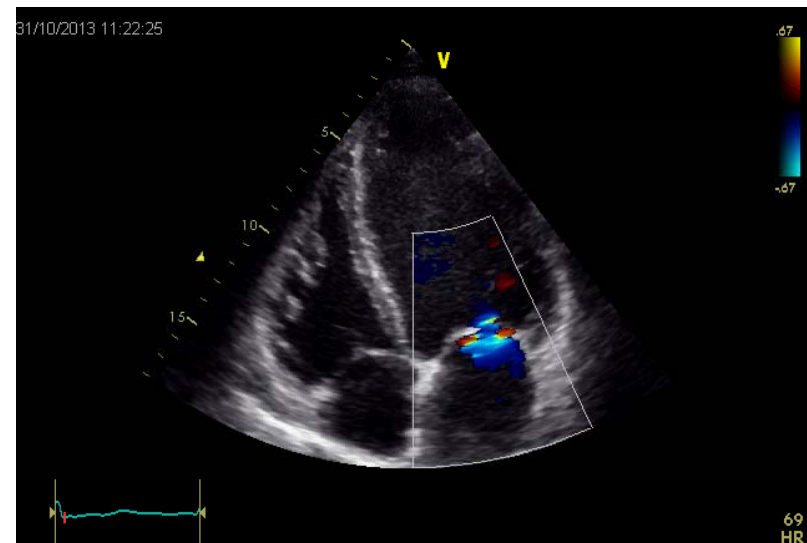
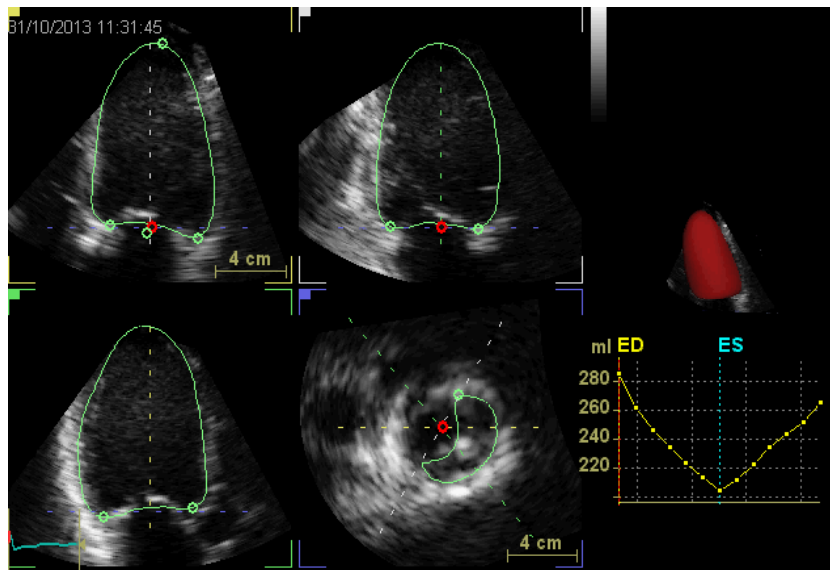
**Integrazione
Terapeutica
Ottimale**





V.D. aa 54 AHF da miocardite

fc 98 bpm (sinusale) ; PA 90/60 mmHg; FEVS 28%



Ivabradina 5mg x 2, Diuretici, Inotropi, Valsartan 20 mg x 2

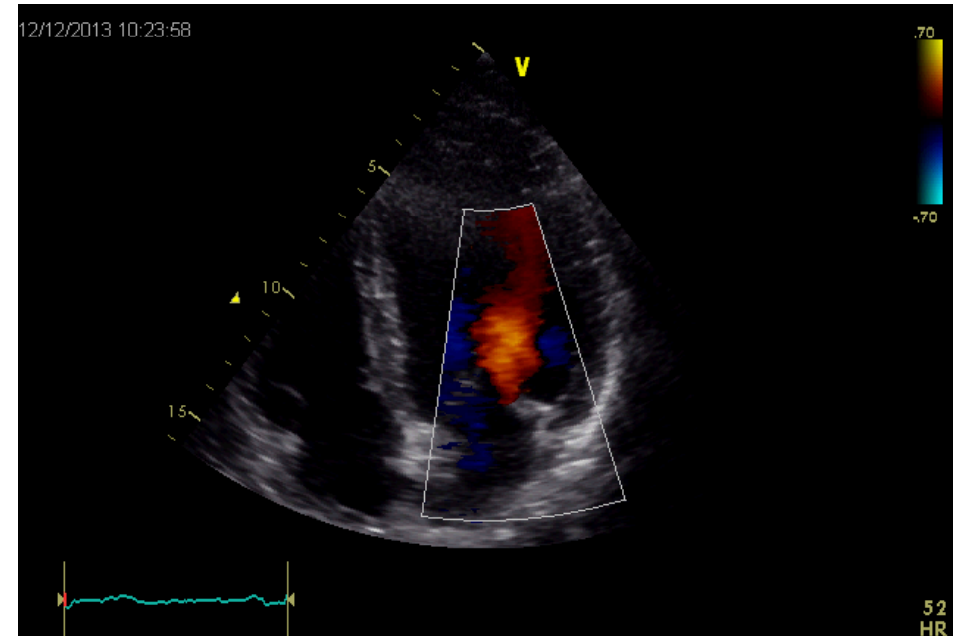
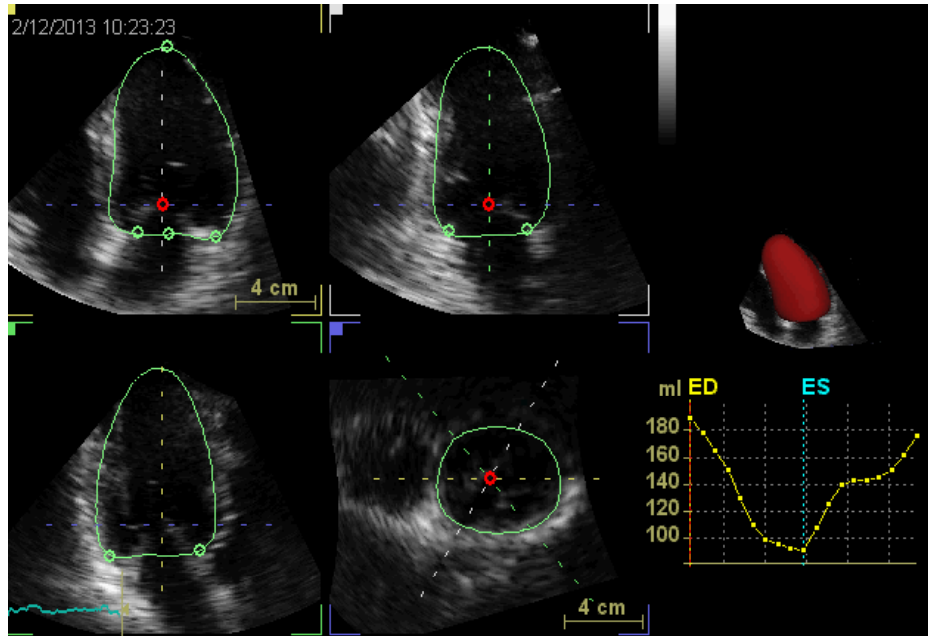
Ivabradina 7.5 mg x 2, Diuretici, Valsartan 40 mg x 2

Ivabradina 7.5 mg x 2 , Diuretici, Valsartan 40 mg x 2 , Bisoprololo 1.25 mg

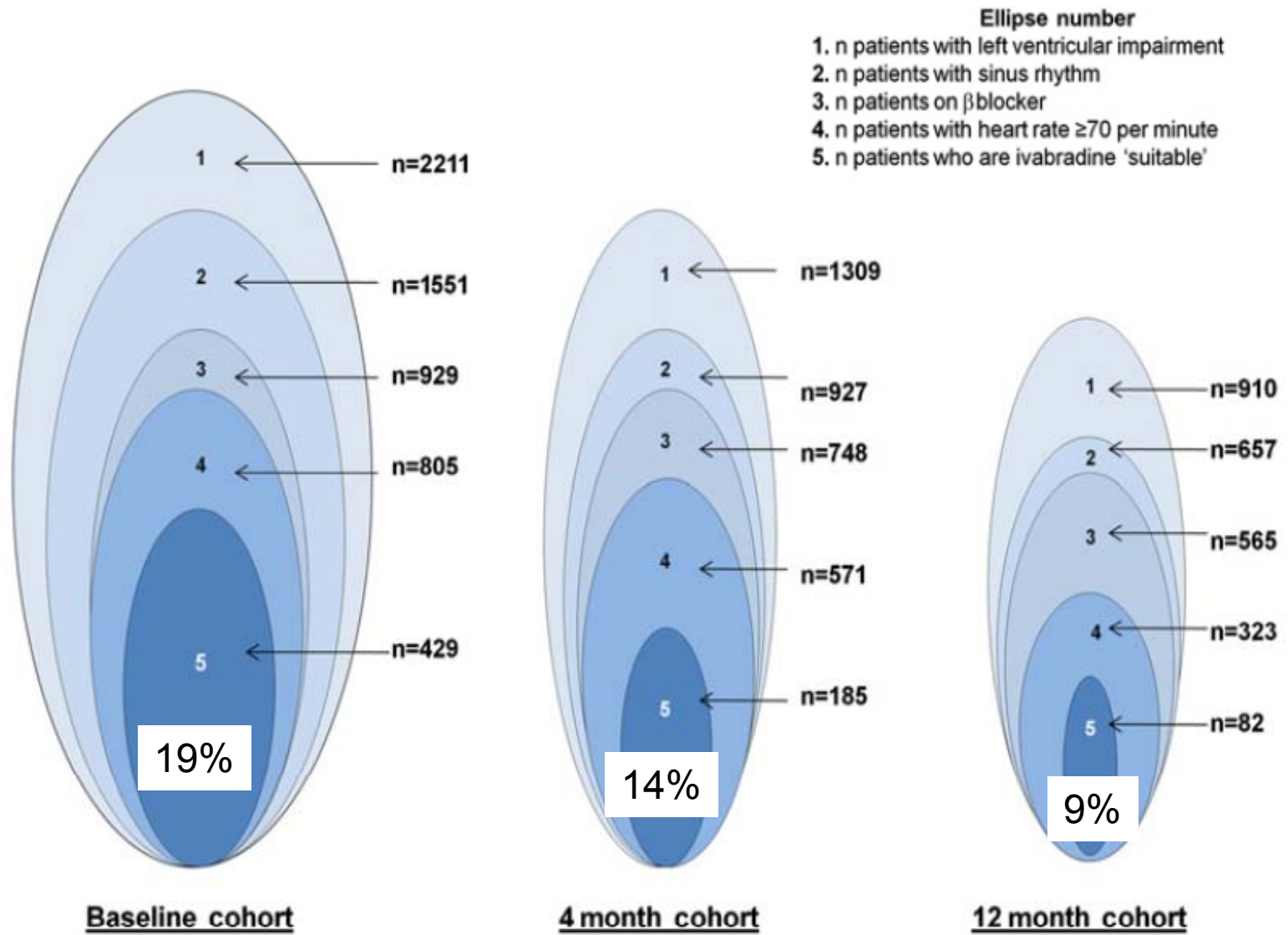
Ivabradina 7.5 mg x 2 , Diuretici, Valsartan 40 mg x 2 , Bisoprololo 2.5 mg

V.D. aa 54 AHF da miocardite

fc 52 bpm (sinusale) ; PA 120/70 mmHg; FEVS 46%



Ivabradina 5 mg x 2 , Diuretici, Valsartan 40 mg x 2 , Bisoprololo 5 mg



70^o Congresso Nazionale

Noi, orgogliosamente
Medici di Famiglia
fiducia innovazione
competenza organizzazione

6 - 11 ottobre 2014
Forto Village
Santa Margherita di Pula

Abbiamo altre opzioni ?

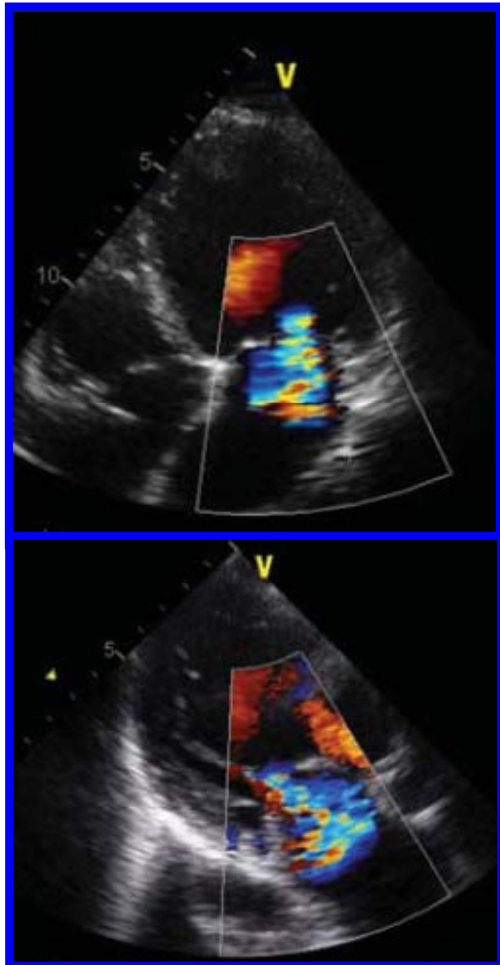
- VAD → bridge to transplant
→ bridge to recovery
→ destination therapy
- Correzione della IM (Surgery vs Mitraclip)
- Infusione periodica di inotropi in Palliative Therapy

Symptoms

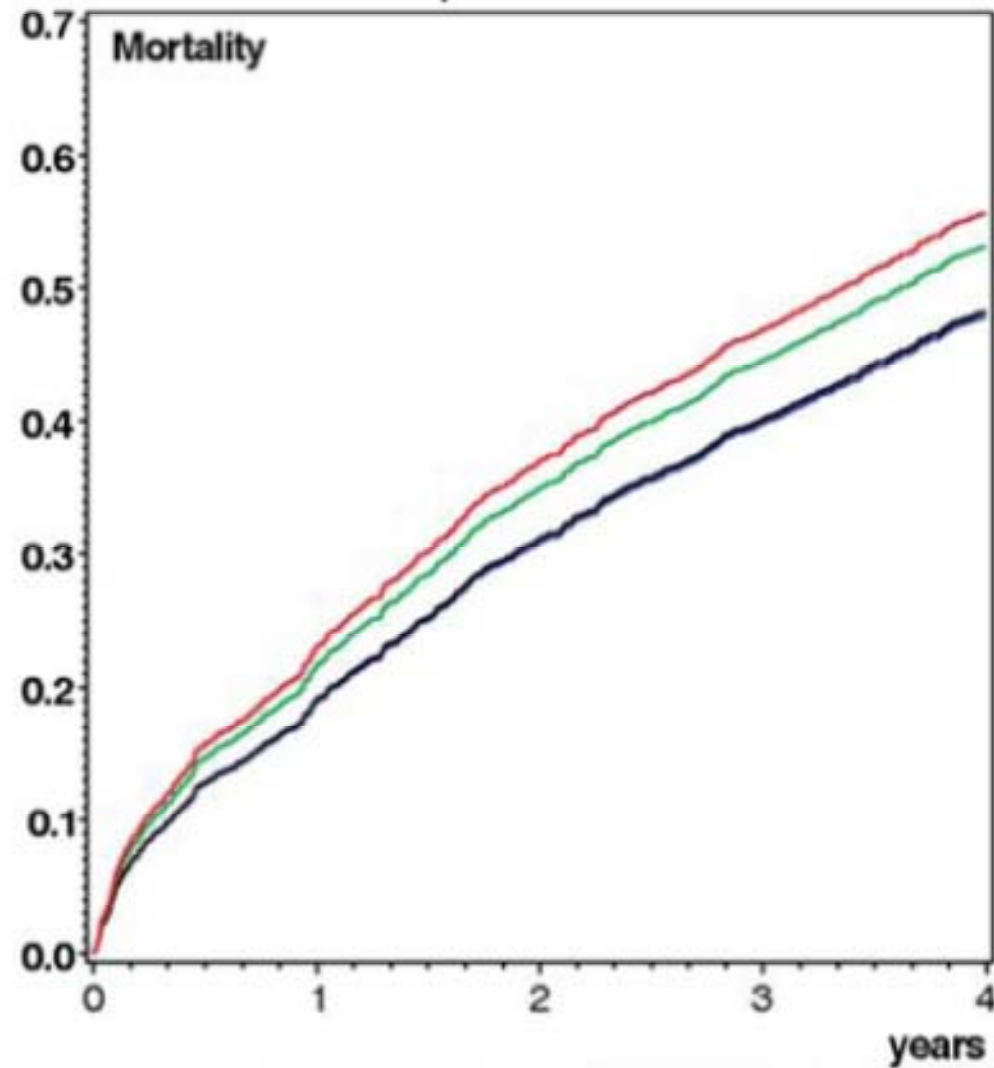
Remodeling

R. Pecini et al.

European J Heart Failure August 2011



All patients



No/trace MR Mild MR Moderate MR Severe MR

Potenziali benefici Assistenza Meccanica

- Miglioramento sopravvivenza
- Miglioramento emodinamica e QOL
- Miglioramento capacità funzionale
- Miglioramento funzione epatica e renale
- Riduzione eventi avversi con i nuovi LVAD
- Miglioramento costo/efficacia (75% a 3 aa)
nell' Heartmate II - 2009



Corretta selezione dei pazienti da trattare



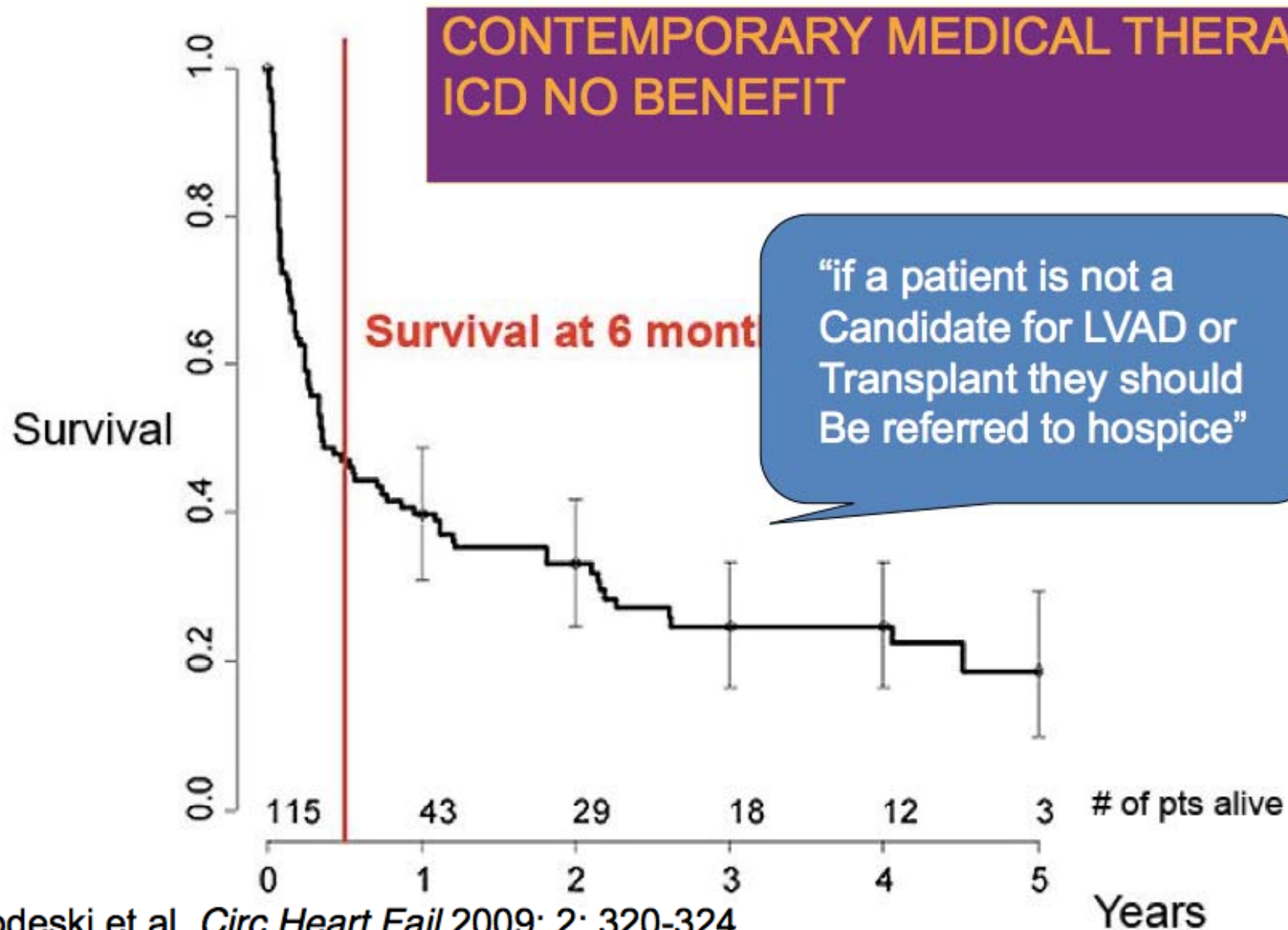
Complicazioni VAD

| | CF LVAD (n=133) [211 pt-years] | PF LVAD (n=59) [41 pt-years] | | |
|----------------------------|-----------------------------------|---------------------------------|--------------------------------------|---------|
| | Events/pt yr | Events/pt yr | Risk Ratio [95% Confidence Interval] | p-value |
| Pump Replacements | 0.06 | 0.51 | | <0.001 |
| Stroke | 0.13 | 0.22 | | 0.21 |
| Ischemic | 0.06 | 0.10 | | 0.38 |
| Hemorrhagic | 0.07 | 0.12 | | 0.33 |
| Device-related infection | 0.48 | 0.90 | | 0.01 |
| Local non-device infection | 0.76 | 1.33 | | 0.02 |
| Sepsis | 0.39 | 1.11 | | <0.001 |
| Bleeding | | | | |
| Bleeding requiring PRBC | 1.66 | 2.45 | | 0.06 |
| Bleeding requiring surgery | 0.24 | 0.29 | | 0.57 |
| Other Neurological | 0.17 | 0.29 | | 0.14 |
| Right Heart Failure | | | | |
| Extended Inotropes | 0.14 | 0.46 | | <0.001 |
| RVAD | 0.02 | 0.07 | | 0.12 |
| Cardiac Arrhythmias | 0.69 | 1.31 | | 0.006 |
| Respiratory Failure | 0.31 | 0.80 | | <0.001 |
| Renal Failure | 0.10 | 0.34 | | <0.001 |
| Hepatic Dysfunction | 0.01 | 0.00 | | |
| Device Thrombosis | 0.02 | 0.00 | | |
| Re-hospitalizations | 2.64 | 4.25 | | 0.02 |

N Engl J Med 2009; 361:2241-2251

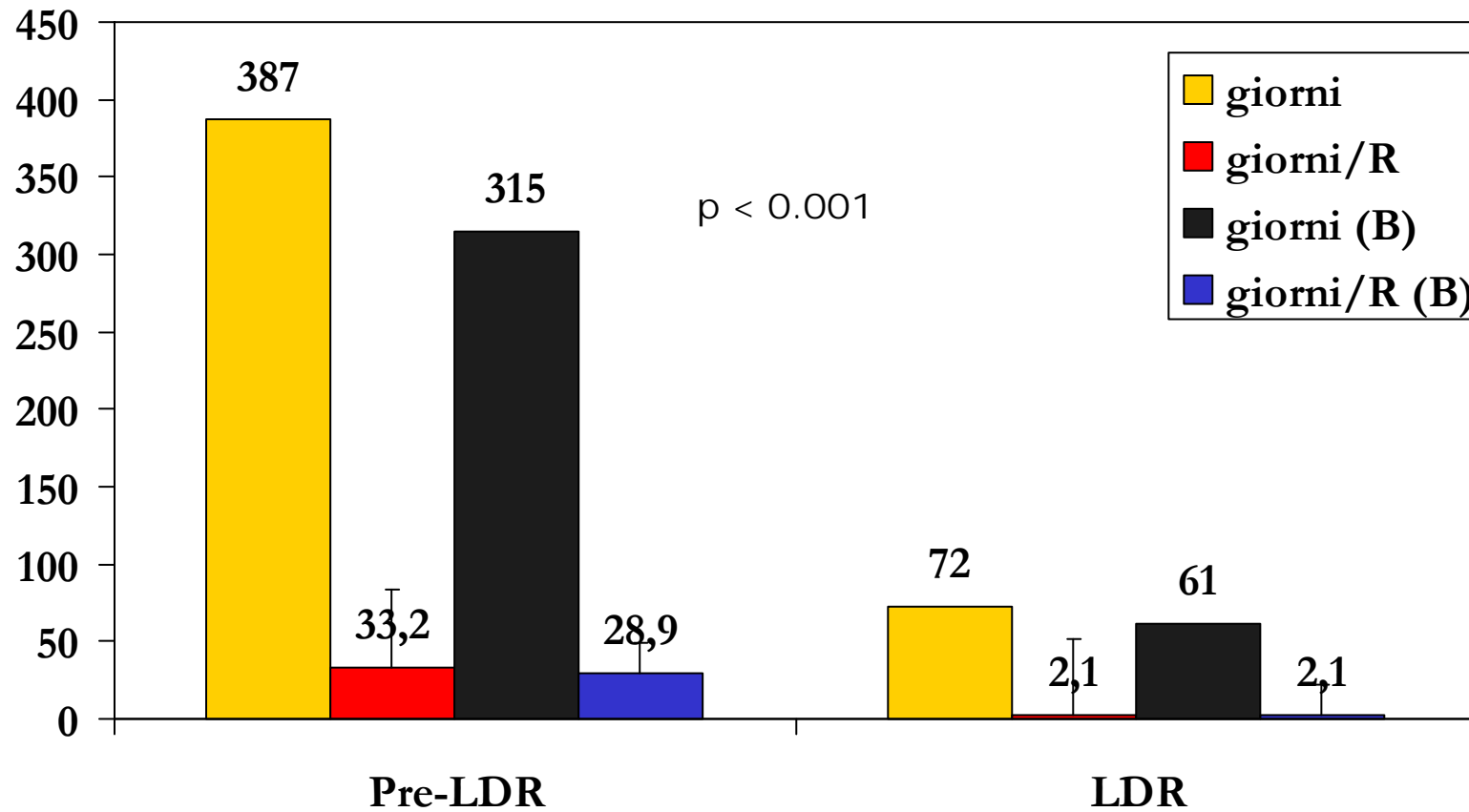
0.0 0.5 1.0 1.5 2.0
Favors CF LVAD Favors PF LVAD

Survival Among End-Stage Heart Failure Patients Discharged on Continuous Inotropes



Ospedalizzazioni a 6 mesi

Mortalità a 6 mesi < 10% , a 12 mesi : 13%



Ospedalizzazioni "cliniche"

Ospedalizzazioni "programmate"