

Les noves guies d'Insuficiència Cardíaca de la ESC-HFA 2016 a debat

*Recomanacions en el
Tractament Farmacològic
de la Insuficiència Cardíaca Crònica*

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| Classes of recommendations | Definition | Suggested wording to use |
|----------------------------|--|-----------------------------|
| Class I | Evidence and/or general agreement that a given treatment or procedure is beneficial, useful, effective. | Is recommended/is indicated |
| Class II | Conflicting evidence and/or a divergence of opinion about the usefulness/efficacy of the given treatment or procedure. | |
| <i>Class IIa</i> | <i>Weight of evidence/opinion is in favour of usefulness/efficacy.</i> | Should be considered |
| <i>Class IIb</i> | <i>Usefulness/efficacy is less well established by evidence/opinion.</i> | May be considered |
| Class III | Evidence or general agreement that the given treatment or procedure is not useful/effective; and in some cases may be harmful. | Is not recommended |

| | |
|----------------------------|---|
| Level of evidence A | Data derived from multiple randomized clinical trials or meta-analyses. |
| Level of evidence B | Data derived from a single randomized clinical trial or large non-randomized studies. |
| Level of evidence C | Consensus of opinion of the experts and/or small studies, retrospective studies, registries. |

Definicions d'Insuficiència cardíaca

(ESC Guidelines 2016)

Table 3.1 Definition of heart failure with preserved (HFpEF), mid-range (HFmrEF) and reduced ejection fraction (HFrEF)

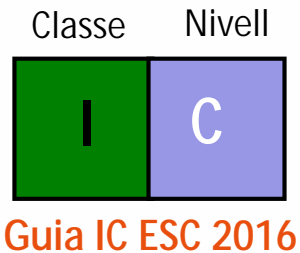
| Type of HF | HFrEF | HFmrEF | HFpEF |
|-----------------|--|---|---|
| CRITERIA | 1 Symptoms ± Signs ^a | Symptoms ± Signs ^a | Symptoms ± Signs ^a |
| | 2 LVEF <40% | LVEF 40–49% | LVEF ≥50% |
| | 3 – | 1. Elevated levels of natriuretic peptides ^b ; 2. At least one additional criterion: a. relevant structural heart disease (LVH and/or LAE), b. diastolic dysfunction (for details see Section 4.3.2). | 1. Elevated levels of natriuretic peptides ^b ; 2. At least one additional criterion: a. relevant structural heart disease (LVH and/or LAE), b. diastolic dysfunction (for details see Section 4.3.2). |

BNP = B-type natriuretic peptide; HF = heart failure; HFmrEF = heart failure with mid-range ejection fraction; HFpEF = heart failure with preserved ejection fraction; HFrEF = heart failure with reduced ejection fraction; LAE = left atrial enlargement; LVEF = left ventricular ejection fraction; LVH = left ventricular hypertrophy; NT-proBNP = N-terminal pro-B type natriuretic peptide.

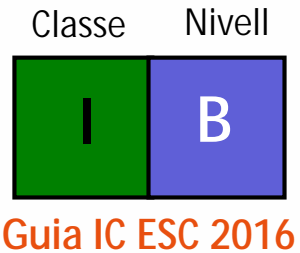
^aSigns may not be present in the early stages of HF (especially in HFpEF) and in patients treated with diuretics.

^bBNP > 35 pg/ml and/or NT-proBNP > 125 pg/mL.

Recomanacions pel tractament de pacients amb ICFEp i ICFErm



Es recomana avaluar la presència de **comorbiditats** d'origen CV i no CV, amb la finalitats de tractar-les amb intervencions segures i efectives per a millorar els símptomes, la qualitat de vida i/o el pronòstic



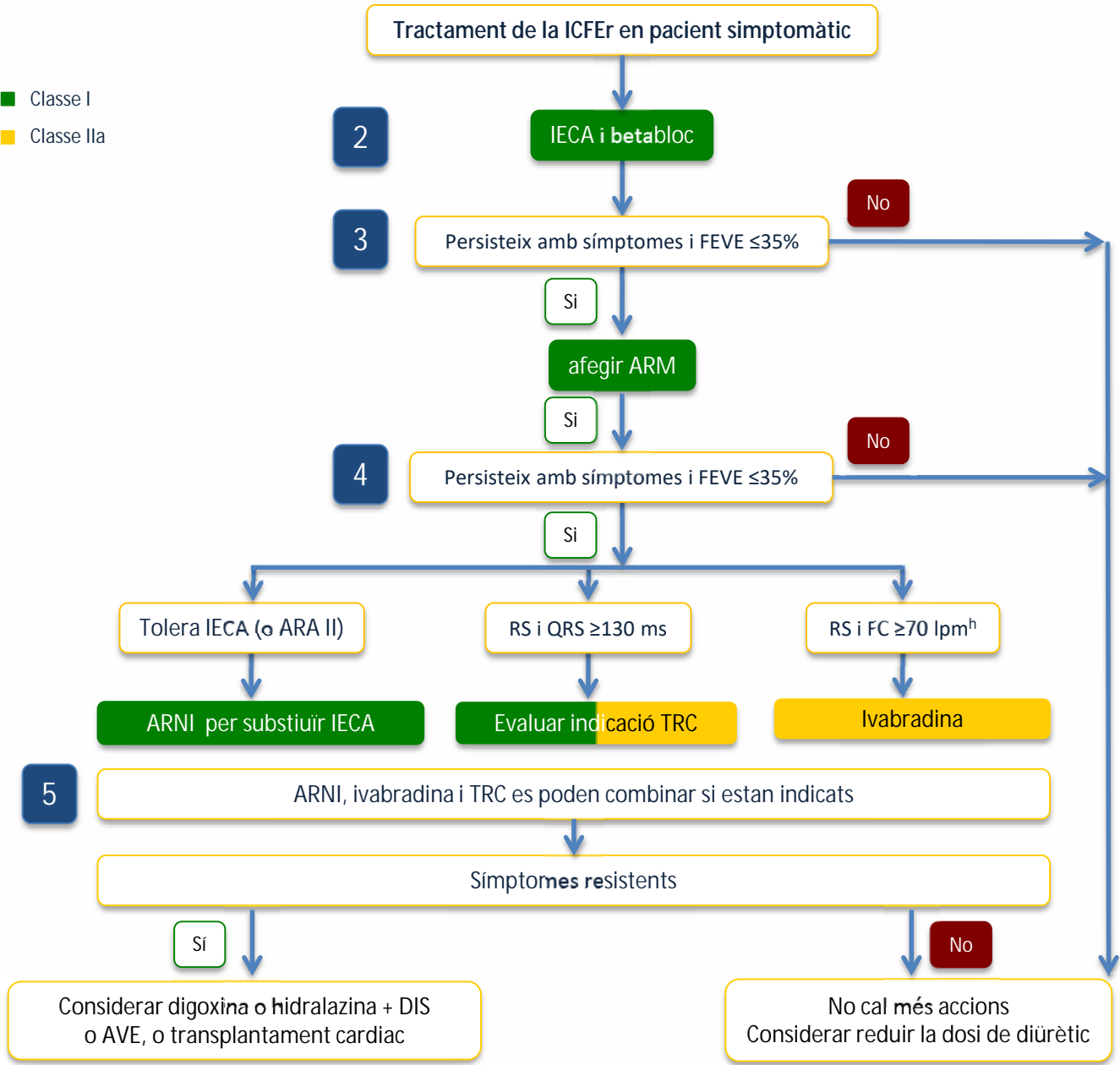
Els **diüètics** es recomanen en pacients congestius amb la finalitat de millorar signes i símptomes.

1 6

Diurètics en pacients amb signes i/o símptomes de congestió

DAI en prevenció primària (FEVE \leq 35% malgrat TMO) o secundària (TV/FV simptomàtiques)

■ Classe I
■ Classe IIa



DIÜRÈTICS

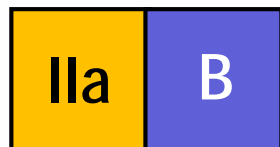
Classe Nivell



Guia IC ESC 2016

Es recomanen per a millorar els símptomes i la capacitat d'exercici en pacients amb signes i/o símptomes de congestió

Classe Nivell

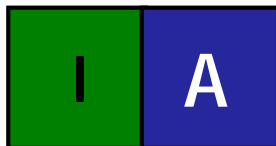


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S'haurien de considerar per a reduir el risc d'hospitalització per IC en pacients amb signes i/o símptomes de congestió

IECA i betabloc

Classe Nivell



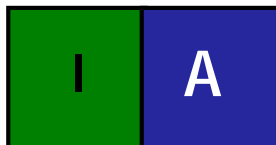
IECA afegit a betabloc en pacients simptomàtics amb ICFEr

Guia IC ESC 2016

| IECA | | | |
|--|--------------|---------------------------|---------------------------------------|
| Estudi | Fàrmac | Síntomes | Resultatats (RRR) |
| CONSENSUS N Engl J Med. 1987; 316(23): 1.429-1.435 | Enalapril | Severs | Mortalitat 27% |
| SOLVD N Engl J Med. 1991; 325(5): 293-302 | Enalapril | Lleus-moderats | Mortalitat 16% Hospitalització 26% |
| SOLVD Prevention Trial N Engl J Med. 1992; 327(10): 685-691 | Captopril | Assimptomàtics post-IM | Mortalitat/ hospitalització IC 20% |
| SAVE Pfeffer MA, et al. N Engl J Med. 1992 Sep 3; 327(10): 669-677 | Captopril | | Mortalitat 26% |
| AIRE Lancet. 1993; 342(8.875): 821-828 | Ramipril | | Mortalitat/ hospitalització IC 27% |
| TRACE Køber L, et al. N Engl J Med. 1995; 333(25): 1.670-1.676 | Trandolapril | | |

IECA i betabloc

Classe Nivell



Betabloc afegit a IECA en pacients simptomàtics amb ICFEr

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BETABLOCS

| Estudi | Fàrmac | Síntomes | Resultats (RRR – al primer any) |
|---|------------------|-----------------|------------------------------------|
| CIBIS II Lancet. 1999; 353(9.146): 9-13 | Bisoprolol | Lleus- moderats | Mortalitat 34% |
| MERIT-HF Lancet. 1999; 353(9.169):2.001-2.007 | Metoprolol CR/XL | | |
| COPERNICUS Packer M, et al. Circulation. 2002; 106(17): 2.194-2.199 | Carvedilol | Severs | Hospitalització IC 28-36% |

>90% pacients prenen IECA o ARA II.

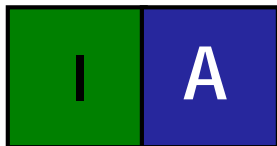
IECA i betabloc

persisteix amb símptomes i FEVE $\leq 35\%$

Si

afegir ARM

Classe Nivell



ARM en pacients simptomàtics amb ICFEr en tractament amb IECA i betablocs

Guia IC ESC 2016

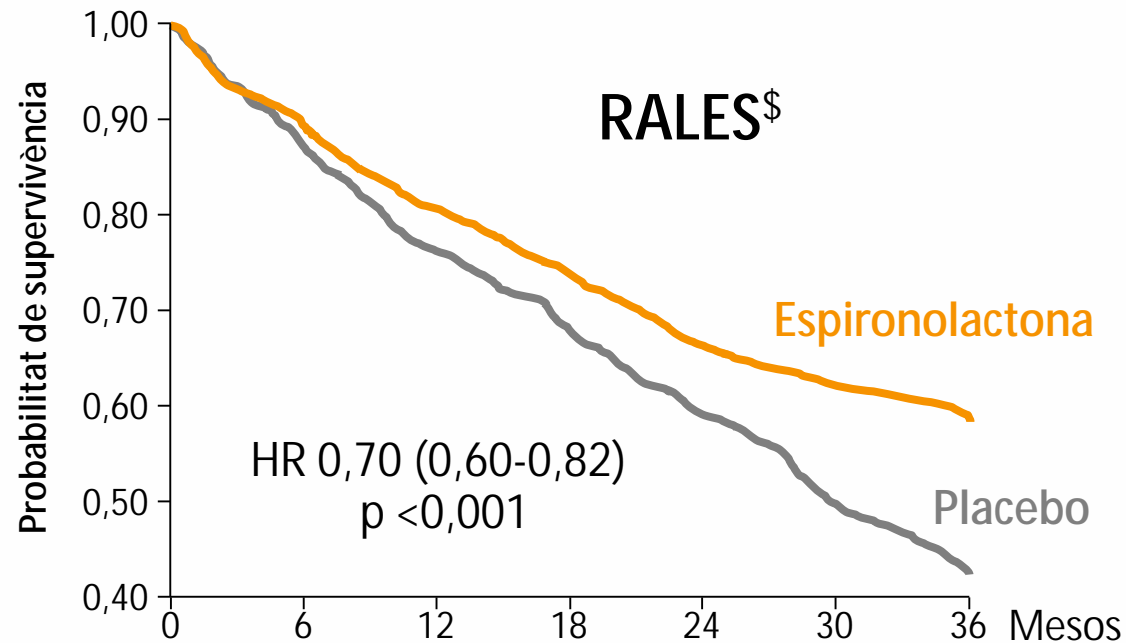
En cas d'ingrés hospitalari els darrers 6 mesos o nivells de PNs elevats (BNP > 250 pg/ml or NTproBNP > 500 pg/ml en homes i 750 pg/ml en dones).

IECA i betabloc

persisteix amb símptomes i FEVE $\leq 35\%$

Si

afegir ARM

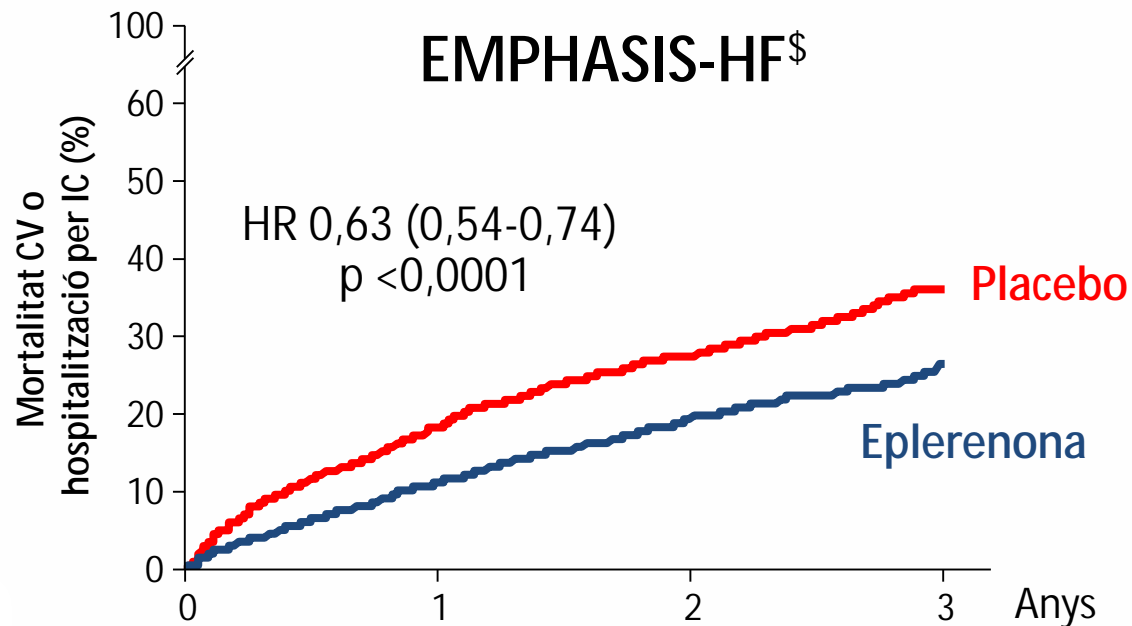


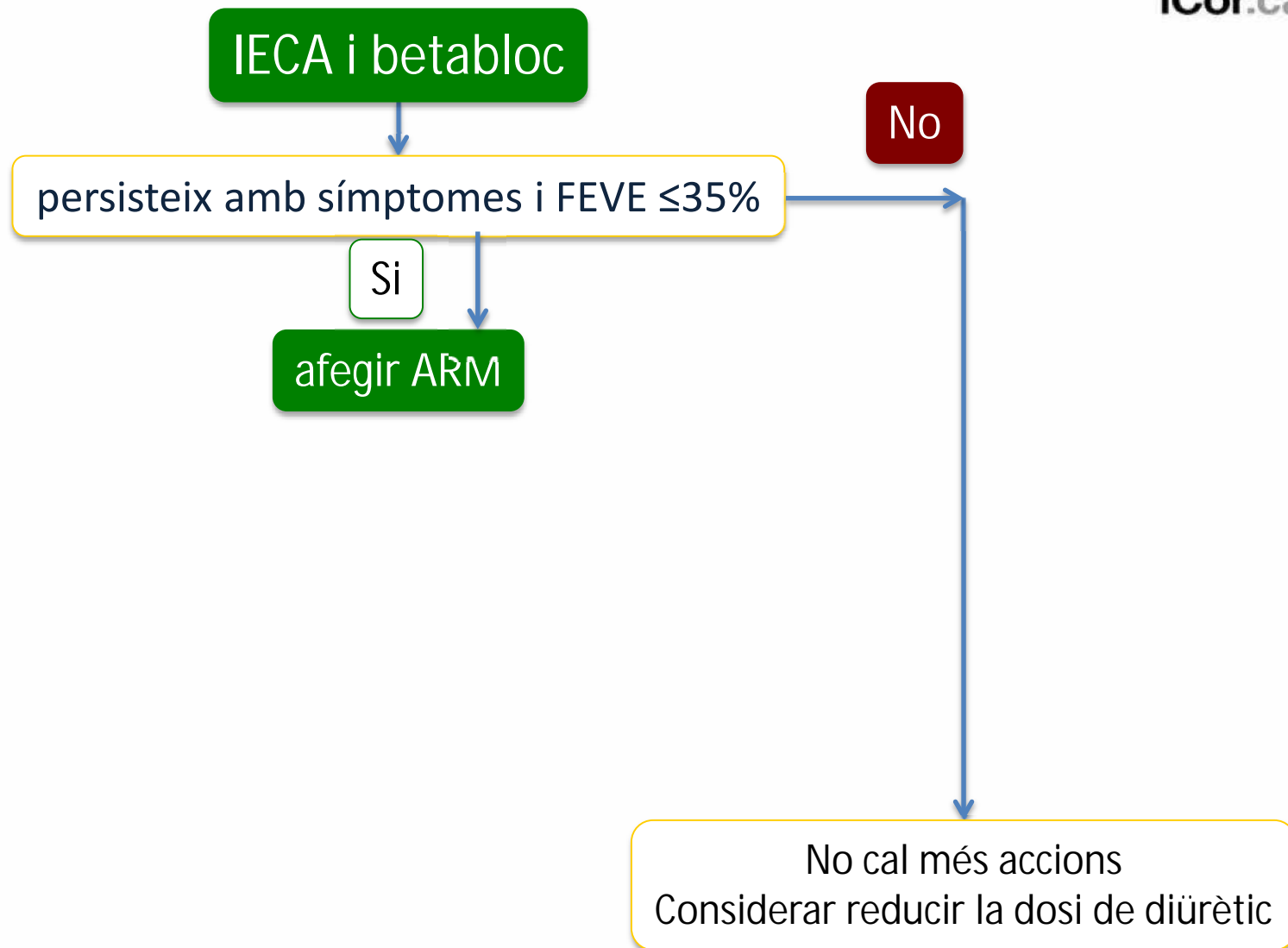
IECA i betabloc

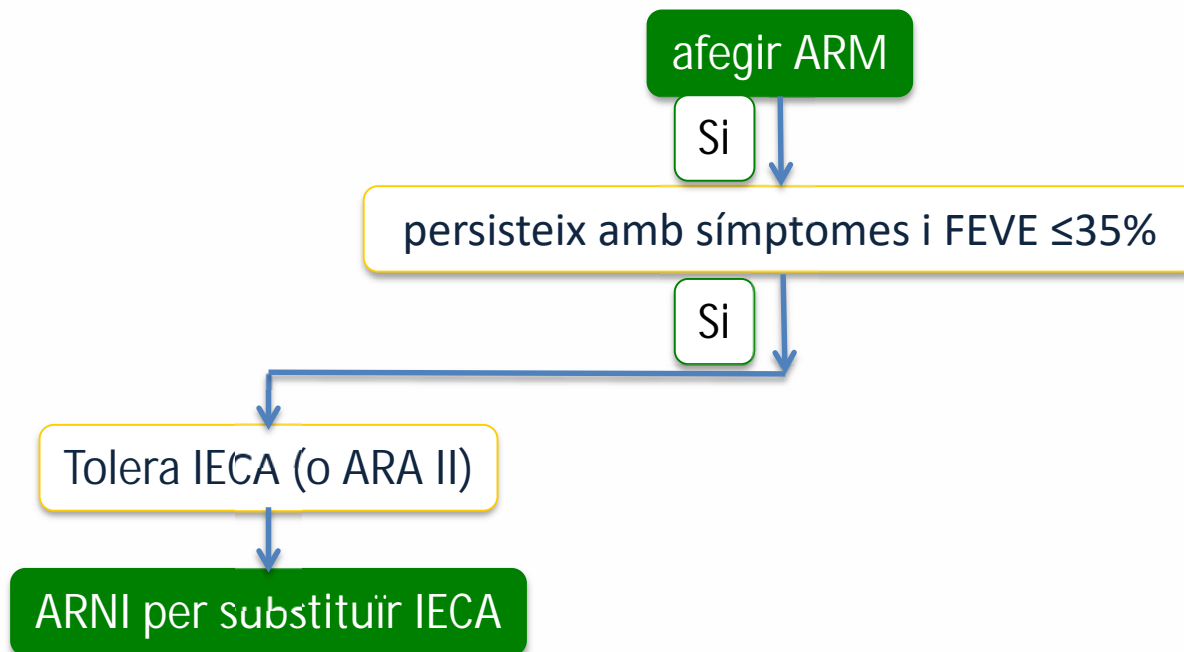
persisteix amb símptomes i FEVE $\leq 35\%$

Si

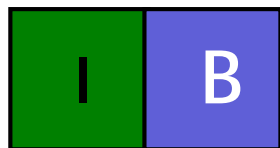
afegir ARM







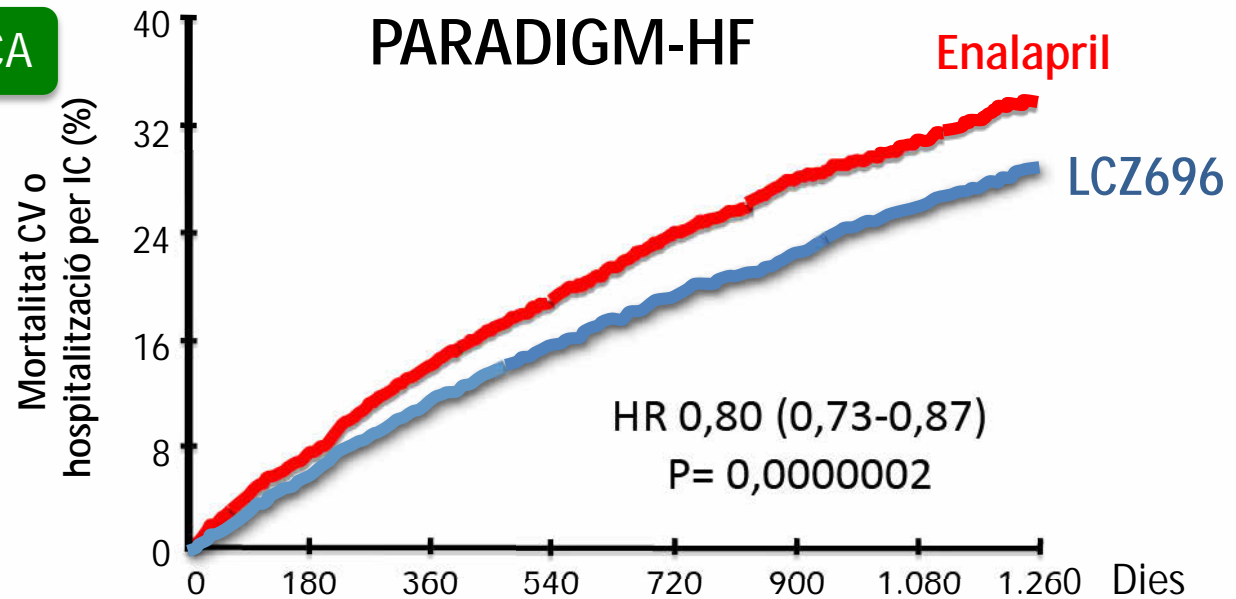
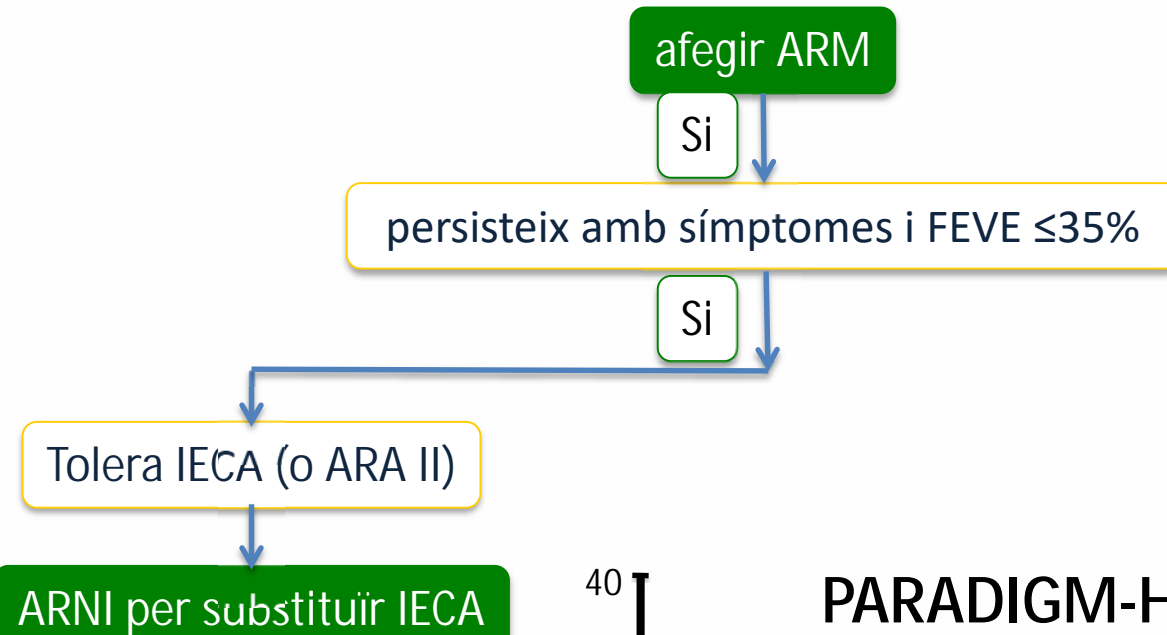
| Classe | Nivell |
|--------|--------|
| I | B |



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Sacubitril/valsartan per substituir l'IECA en pacients ambulatoris amb símptomes (NYHA \geq II) i ICFEr malgrat TMO amb IECA, betablocs i ARM

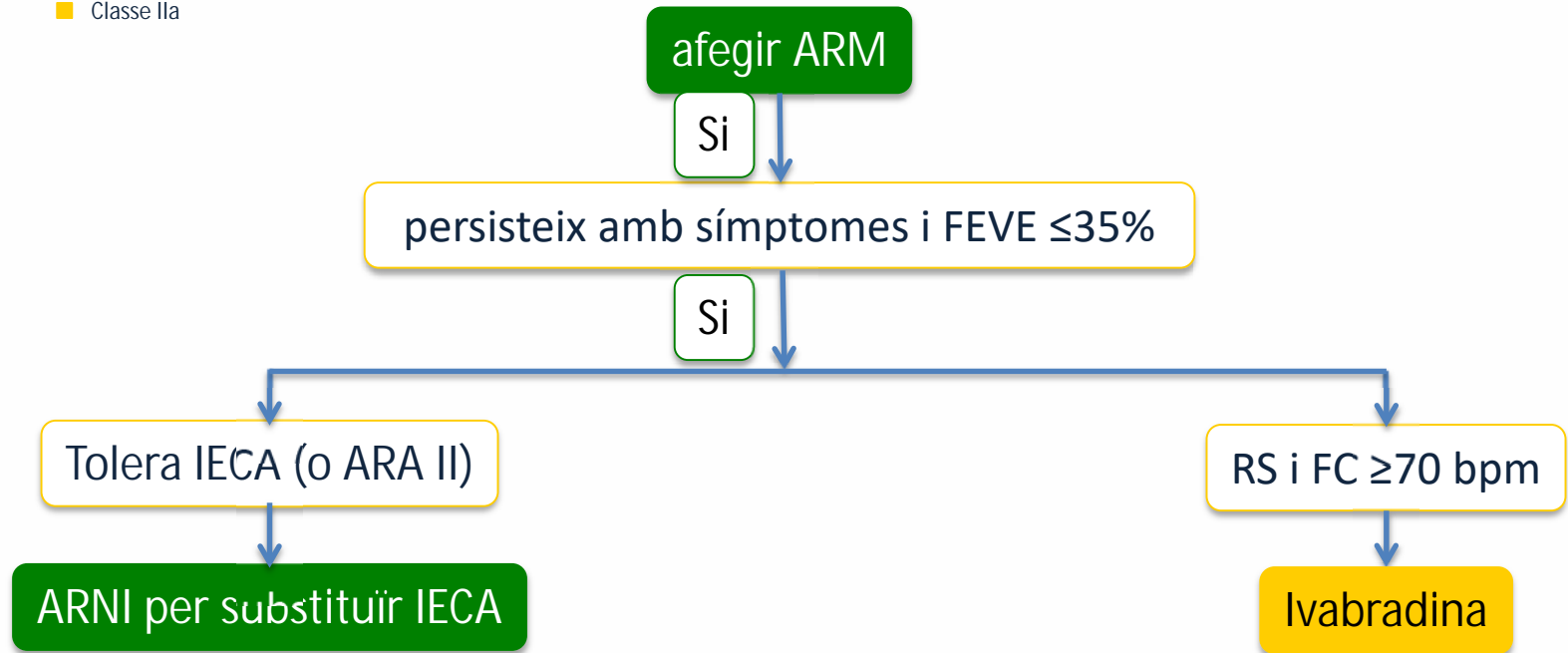
Amb nivells elevats de PNs (BNP ≥ 150 pg/mL o NT-proBNP ≥ 600 pg/mL, o en cas d'ingrés per IC els darrers 12 mesos BNP ≥ 100 pg/mL o NT-proBNP ≥ 400 pg/mL)



| Recommendations | Class ^a | Level ^b |
|---|--------------------|--------------------|
| Potential aggravating/precipitating factors (e.g. low serum potassium/magnesium, ongoing ischaemia) should be sought and corrected in patients with ventricular arrhythmias. | IIa | C |
| Treatment with beta-blocker, MRA and sacubitril/valsartan reduces the risk of sudden death and is recommended for patients with HFrEF and ventricular arrhythmias (as for other patients)(see Section 7). | I | A |
| Implantation of an ICD or CRT-D device is recommended for selected patients with HFrEF (see Section 8). | I | A |
| Several strategies should be considered to reduce recurrent symptomatic arrhythmias in patients with an ICD (or in those who are not eligible for ICD), including attention to risk factors and optimal pharmacological treatment of HF, amiodarone, catheter ablation and CRT. | IIa | C |
| Routine use of antiarrhythmic agents is not recommended in patients with HF and asymptomatic ventricular arrhythmias because of safety concerns (worsening HF, proarrhythmia, and death). | III | A |

Recomanacions en el maneig de les taquiarrítmies ventriculars a la IC

- Classe I
- Classe IIa



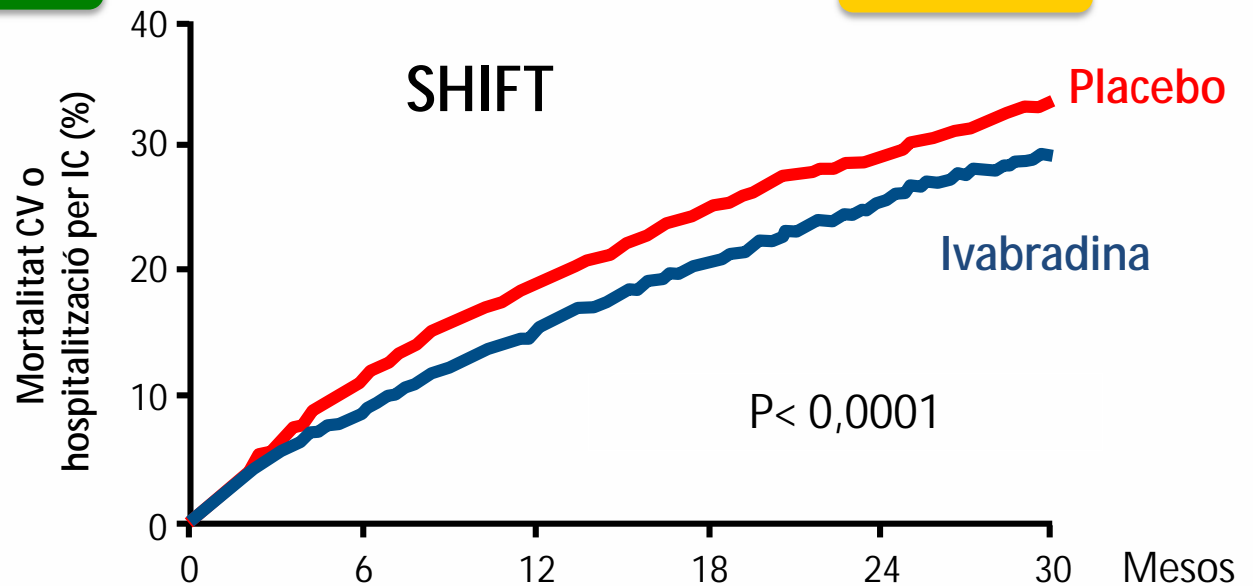
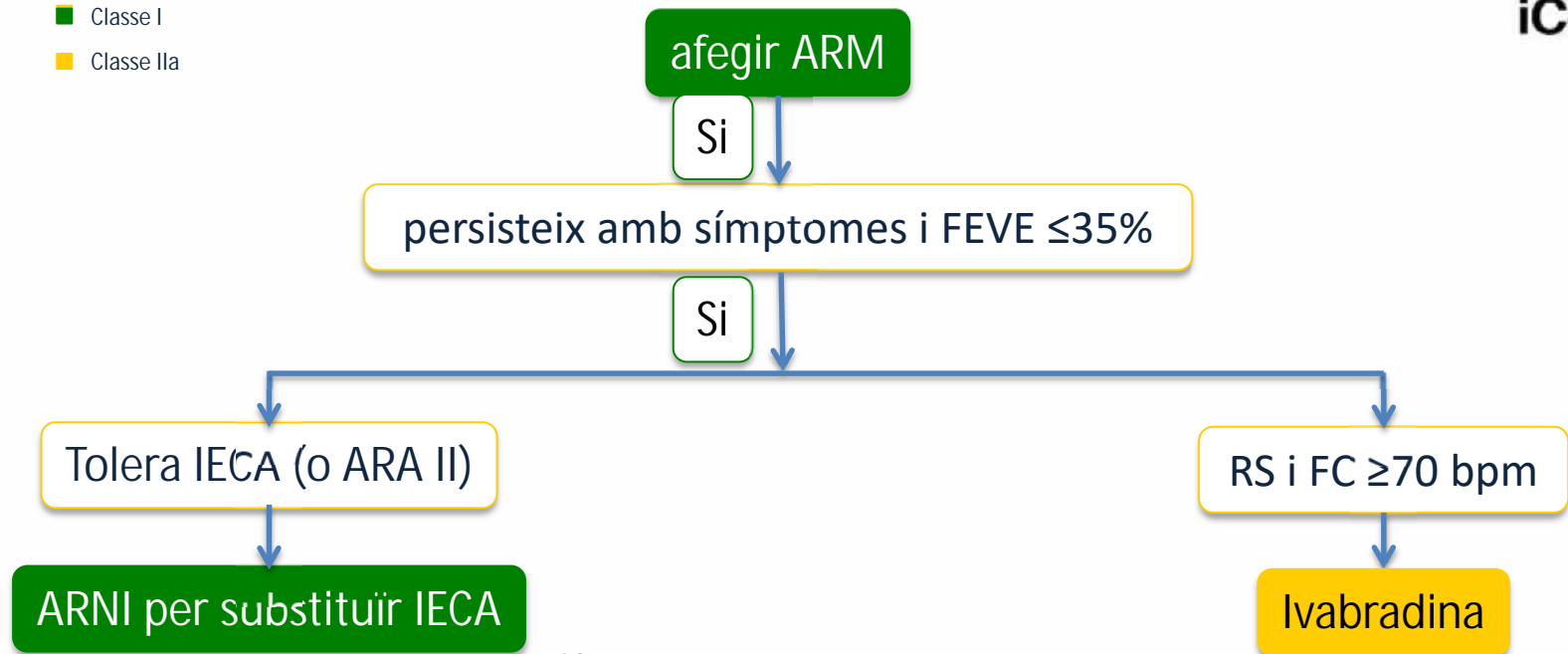
Classe Nivell

| | |
|-----|---|
| IIa | B |
|-----|---|

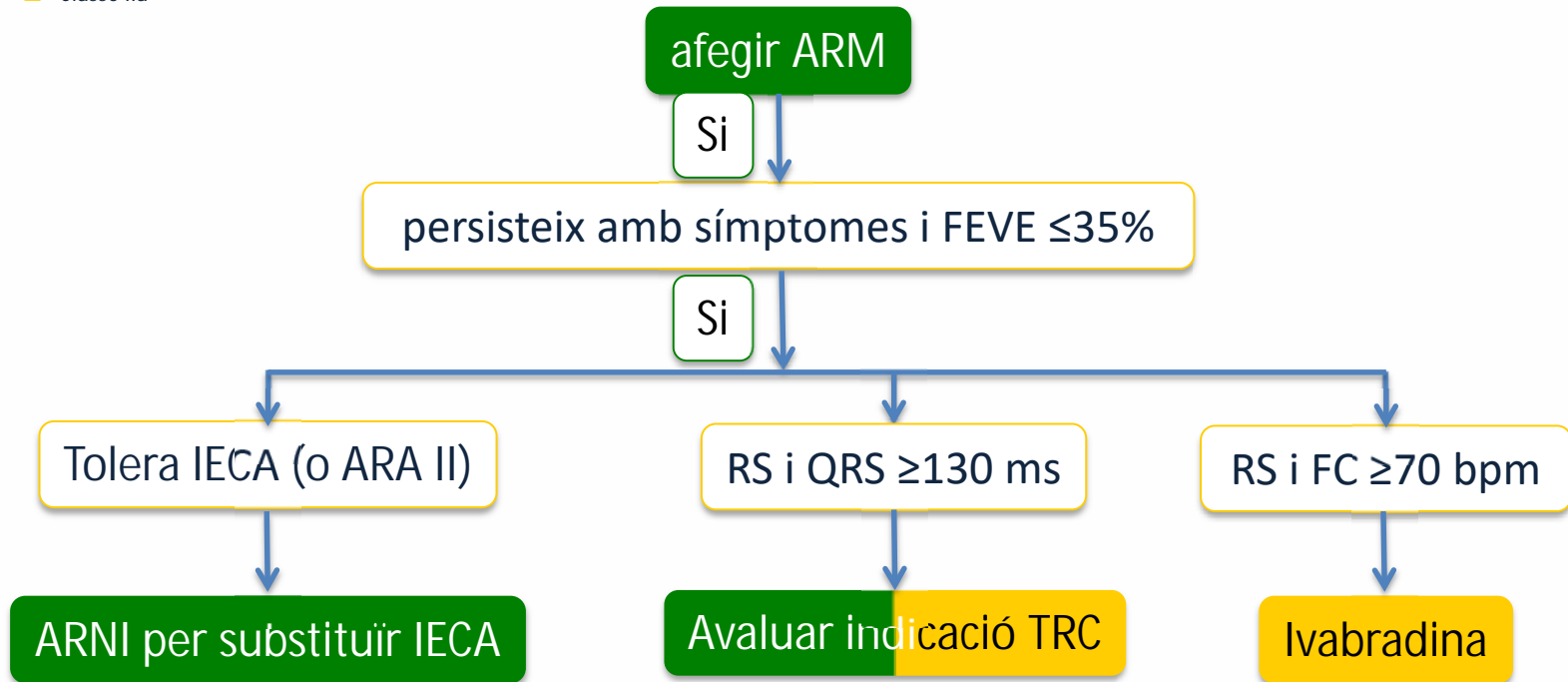
Guia IC ESC 2016

Ivabradina en pacients amb símptomes i FEVE $\leq 35\%$ en RS amb FC en repos ≥ 70 bpm malgrat betablocs, IECA (o ARA II) i ARM (o ARA II)

- Classe I
- Classe IIa

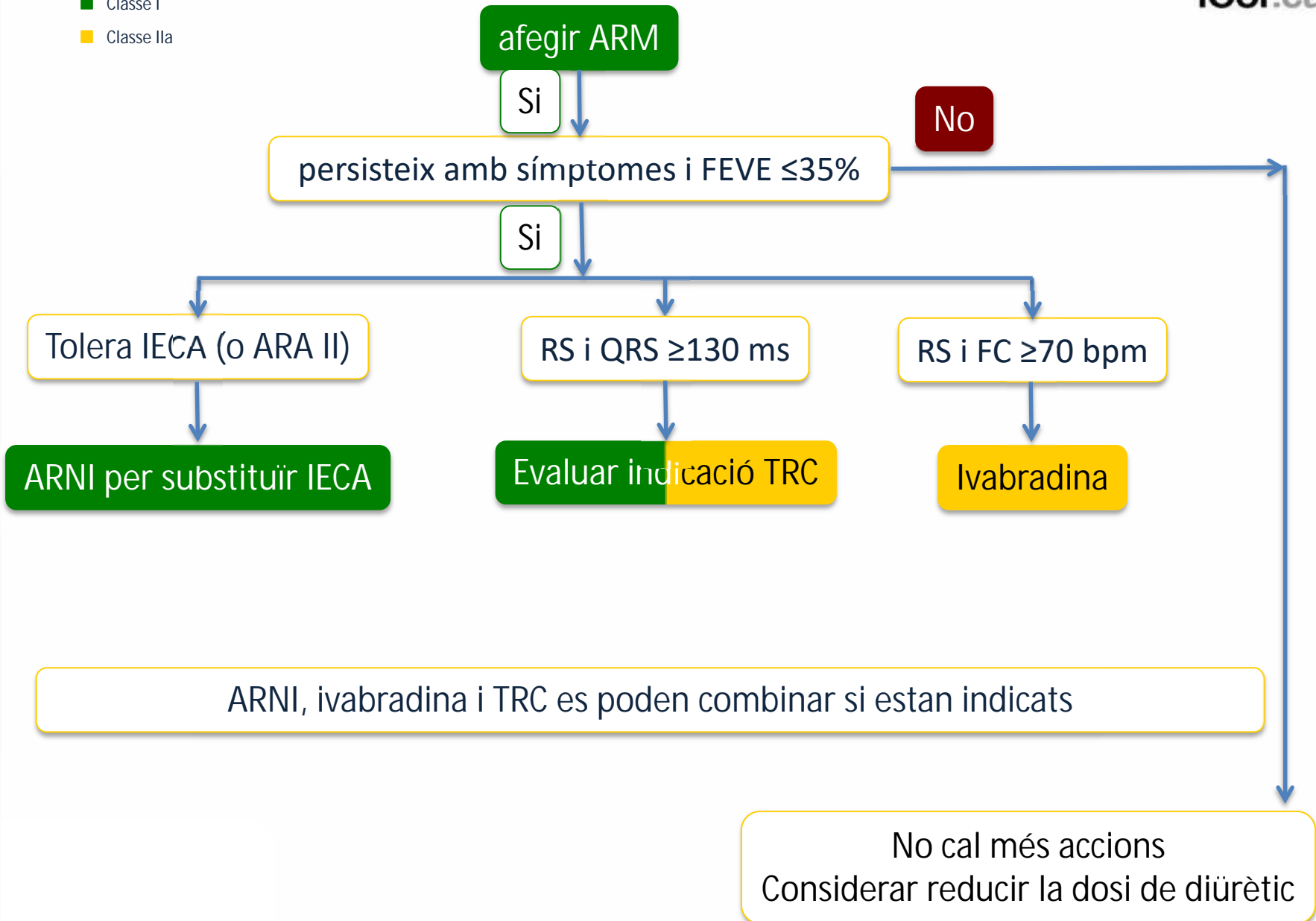


- Classe I
- Classe IIa



ARNI, ivabradina i TRC es poden combinar si estan indicats

- Classe I
- Classe IIa



ARNI , ivabradina i TRC es poden combinar si estan indicats

Síntomes resistents

Si

Considerar digoxina o hidralazina + DIS
o AVE, o transplantament cardíac

No

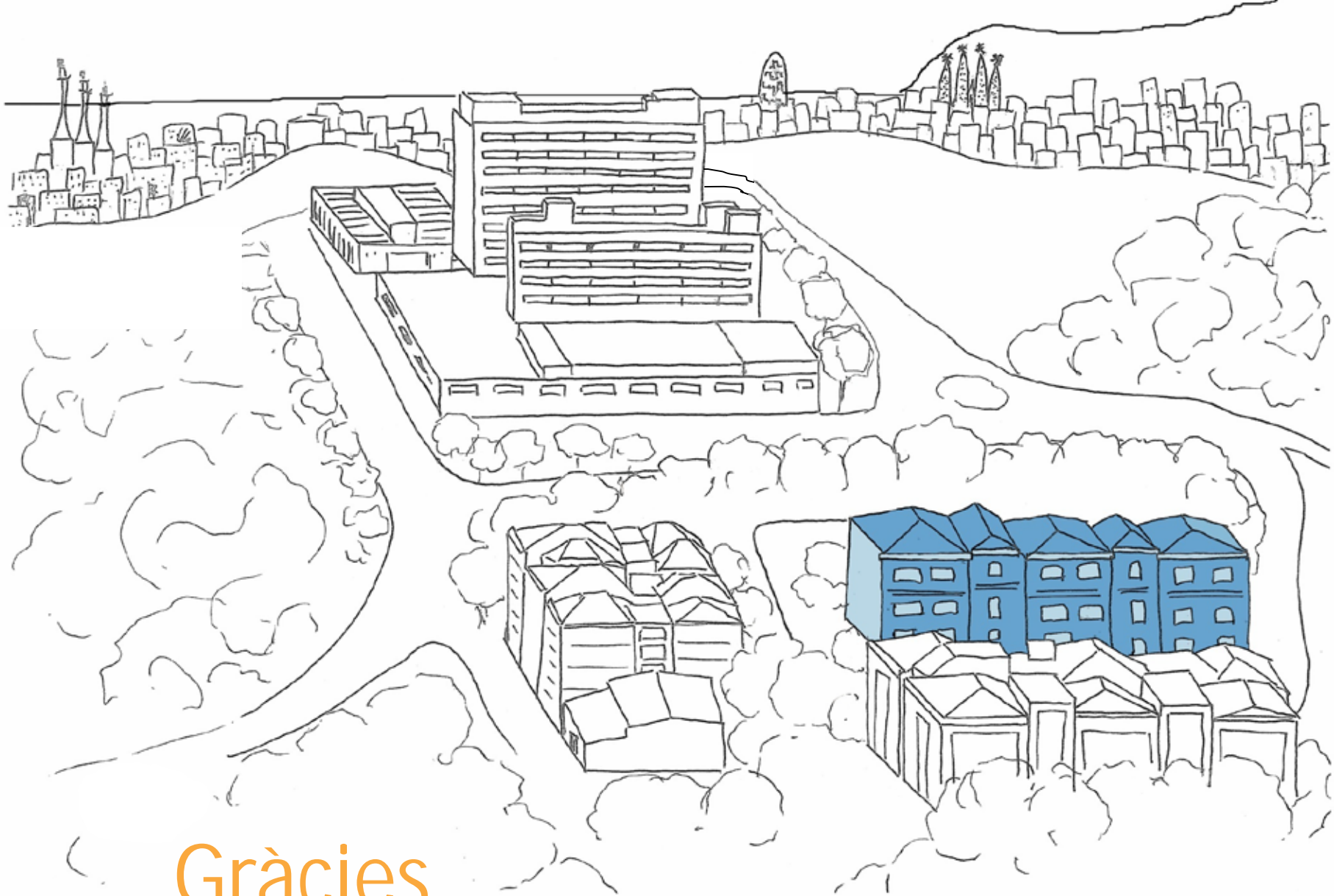
No cal més accions
Considerar reduir la dosi de diürètic

Recomanacions per el tractament de les co-morbiditats en IC

| Recommendations | Class ^a | Level ^b |
|--|--------------------|--------------------|
| Iron deficiency | | |
| Intravenous FCM should be considered in symptomatic patients with HFrEF and iron deficiency (serum ferritin <100 µg/L, or ferritin between 100–299 µg/L and transferrin saturation <20%) in order to alleviate HF symptoms, and improve exercise capacity and quality of life. | Ila | A |
| Diabetes | | |
| Metformin should be considered as a first-line treatment of glycaemic control in patients with diabetes and HF, unless contra-indicated. | Ila | C |

Tractaments NO recomanats en co-morbilitats en IC

| Recommendations | Class ^a | Level ^b | Ref ^c |
|---|--------------------|--------------------|------------------|
| Sleep apnoea | | | |
| Adaptive servo-ventilation is not recommended in patients with HFrEF and a predominant central sleep apnoea because of an increased all-cause and cardiovascular mortality. | III | B | 473 |
| Diabetes | | | |
| Thiazolidinediones (glitazones) are not recommended in patients with HF, as they increase the risk of HF worsening and HF hospitalization. | III | A | 209, 210 |
| Arthritis | | | |
| NSAIDs or COX-2 inhibitors are not recommended in patients with HF, as they increase the risk of HF worsening and HF hospitalization. | III | B | 211–213 |



Gràcies

DAI

| Classe | Nivell |
|--------|--------|
| I | A |

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Prevenció secundària en pacient recuperat d'una arrítmia ventricular (TV/FV) que causa inestabilitat hemodinàmica

| Classe | Nivell |
|--------|--------|
| I | A |

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Prevenció primària en pacients amb cardiopatia isquèmica, símptomes de IC (CF II-III de la NYHA) i FEVE $\leq 35\%$ malgrat ≥ 3 mesos de TMO

| Classe | Nivell |
|--------|--------|
| I | B |

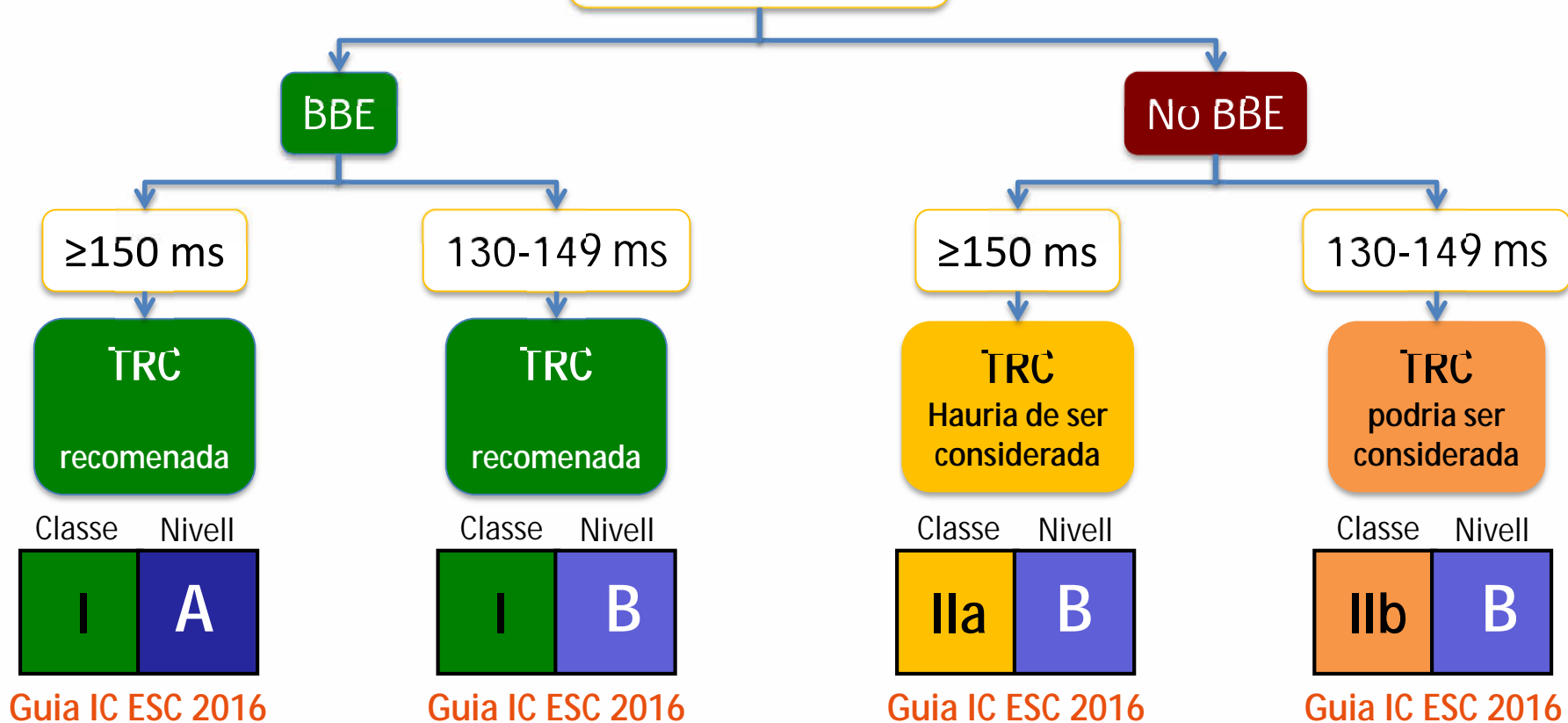
Guia IC ESC 2016

Prevenció primària en pacients amb miocardiopatia dilatada, símptomes de IC (CF II-III de la NYHA) i FEVE $\leq 35\%$ malgrat ≥ 3 mesos de TMO

Terapia de resincronització cardíaca en pacients amb IC crònica

- Classe I
- Classe Iia
- Classe IIb

- TMO
- FEVE $\leq 35\%$
- Simptomàtic
- Ritme sinusal



Otros fármacos recomendados en pacientes seleccionados con HFrEF y NYHA II-IV

| Recommendations | Class ^a | Level ^b |
|--|--------------------|--------------------|
| Diuretics | | |
| Diuretics are recommended in order to improve symptoms and exercise capacity in patients with signs and/or symptoms of congestion. | I | B |
| Diuretics should be considered to reduce the risk of HF hospitalization in patients with signs and/or symptoms of congestion. | IIa | B |
| Angiotensin receptor neprilysin inhibitor | | |
| Sacubitril/valsartan is recommended as a replacement for an ACE-I to further reduce the risk of HF hospitalization and death in ambulatory patients with HFrEF who remain symptomatic despite optimal treatment with an ACE-I, a beta-blocker and an MRA ^d | I | B |
| I_f-channel inhibitor | | |
| Ivabradine should be considered to reduce the risk of HF hospitalization and cardiovascular death in symptomatic patients with LVEF ≤35%, in sinus rhythm and a resting heart rate ≥70 bpm despite treatment with an evidence-based dose of beta-blocker (or maximum tolerated dose below that), ACE-I (or ARB), and an MRA (or ARB). | IIa | B |
| Ivabradine should be considered to reduce the risk of HF hospitalization and cardiovascular death in symptomatic patients with LVEF ≤35%, in sinus rhythm and a resting heart rate ≥70 bpm who are unable to tolerate or have contra-indications for a beta-blocker. Patients should also receive an ACE-I (or ARB) and an MRA (or ARB). | IIa | C |
| ARB | | |
| An ARB is recommended to reduce the risk of HF hospitalization and cardiovascular death in symptomatic patients unable to tolerate an ACE-I (patients should also receive a beta-blocker and an MRA). | I | B |
| An ARB may be considered to reduce the risk of HF hospitalization and death in patients who are symptomatic despite treatment with a beta-blocker who are unable to tolerate an MRA. | IIb | C |