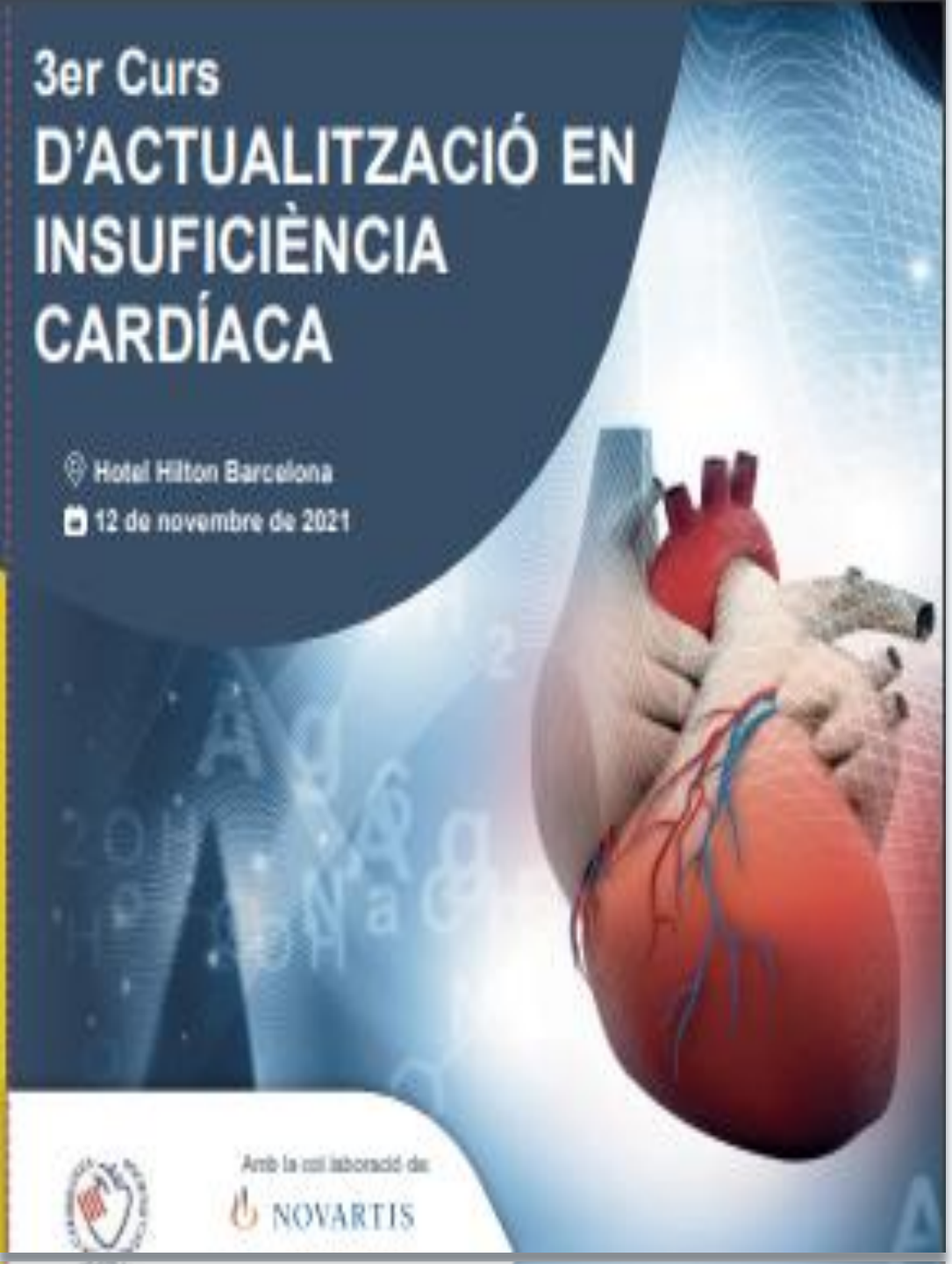

Nuevas guías de IC, ¿para un nuevo tiempo o no hemos progresado en el tratamiento?

Dr. Marco A. Paz

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Girona

ESC
European Society of Cardiology

European Heart Journal (2021) **42**, 3599–3726
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ESC GUIDELINES

2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure

Developed by the Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC)

With the special contribution of the Heart Failure Association (HFA) of the ESC

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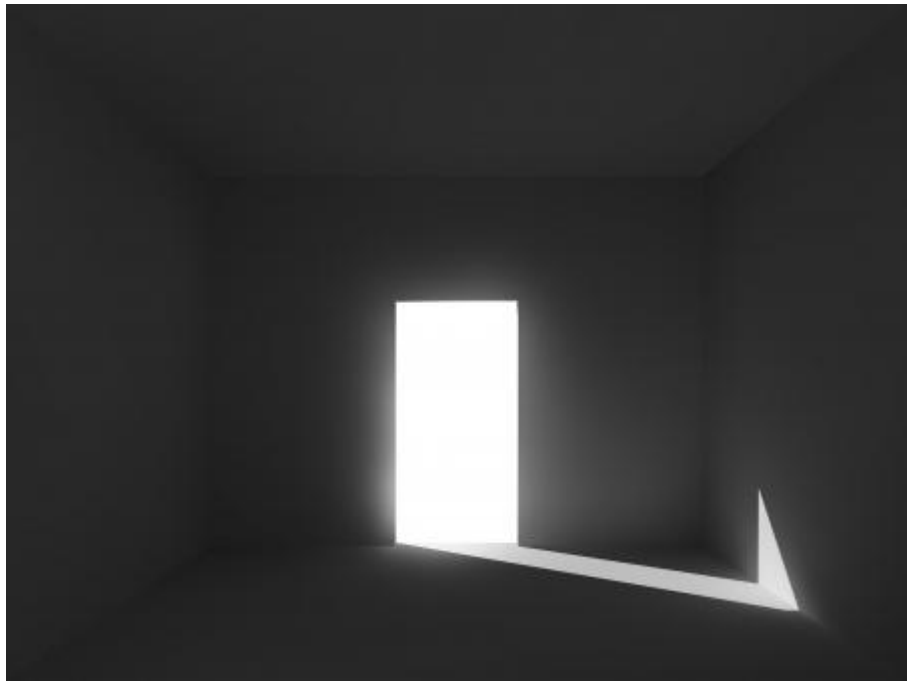
GUÍAS DE LA ESC PARA INSUFICIENCIA CARDIACA 2021

LUCES Y SOMBRAS



GUÍAS DE LA ESC PARA INSUFICIENCIA CARDIACA 2021

- *Definición*
- *Insuficiencia cardiaca con FEVI reducida*
- *Insuficiencia cardiaca con FEVI ligeramente reducida*
- *Insuficiencia cardiaca con FEVI preservada*
- *Insuficiencia cardiaca avanzada*
- *Insuficiencia cardiaca aguda*
- *Comorbilidades*

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CRITERIOS DIAGNÓSTICOS DE IC EN FUNCIÓN DE LA FEVI (ESC 2016)

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.

[a]Signs may not be present in the early stages of HF (especially in HFpEF) and in patients treated with diuretics.

[b]BNP >35 pg/ml and/or NT-proBNP >125 pg/mL

CRITERIOS DIAGNÓSTICOS DE IC EN FUNCIÓN DE LA FEVI

Type of HF		HFrEF	HFmrEF	HFpEF
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[a]Signs may not be present in the early stages of HF (especially in HFpEF) and in patients treated with diuretics.

[b]BNP >35 pg/ml and/or NT-proBNP >125 pg/mL

Table 3 **Definition of heart failure with reduced ejection fraction, mildly reduced ejection fraction and preserved ejection fraction**

Type of HF		HFrEF	HFmrEF	HFpEF
CRITERIA	1	Symptoms ± Signs[a]	Symptoms ± Signs[a]	Symptoms ± Signs[a]
	2	LVEF ≤40%	LVEF 41–49%[b]	LVEF ≥50%
	3	–	–	Objective evidence of cardiac structural and/or functional abnormalities consistent with the presence of LV diastolic dysfunction/raised LV filling pressures, including raised natriuretic peptides[c]

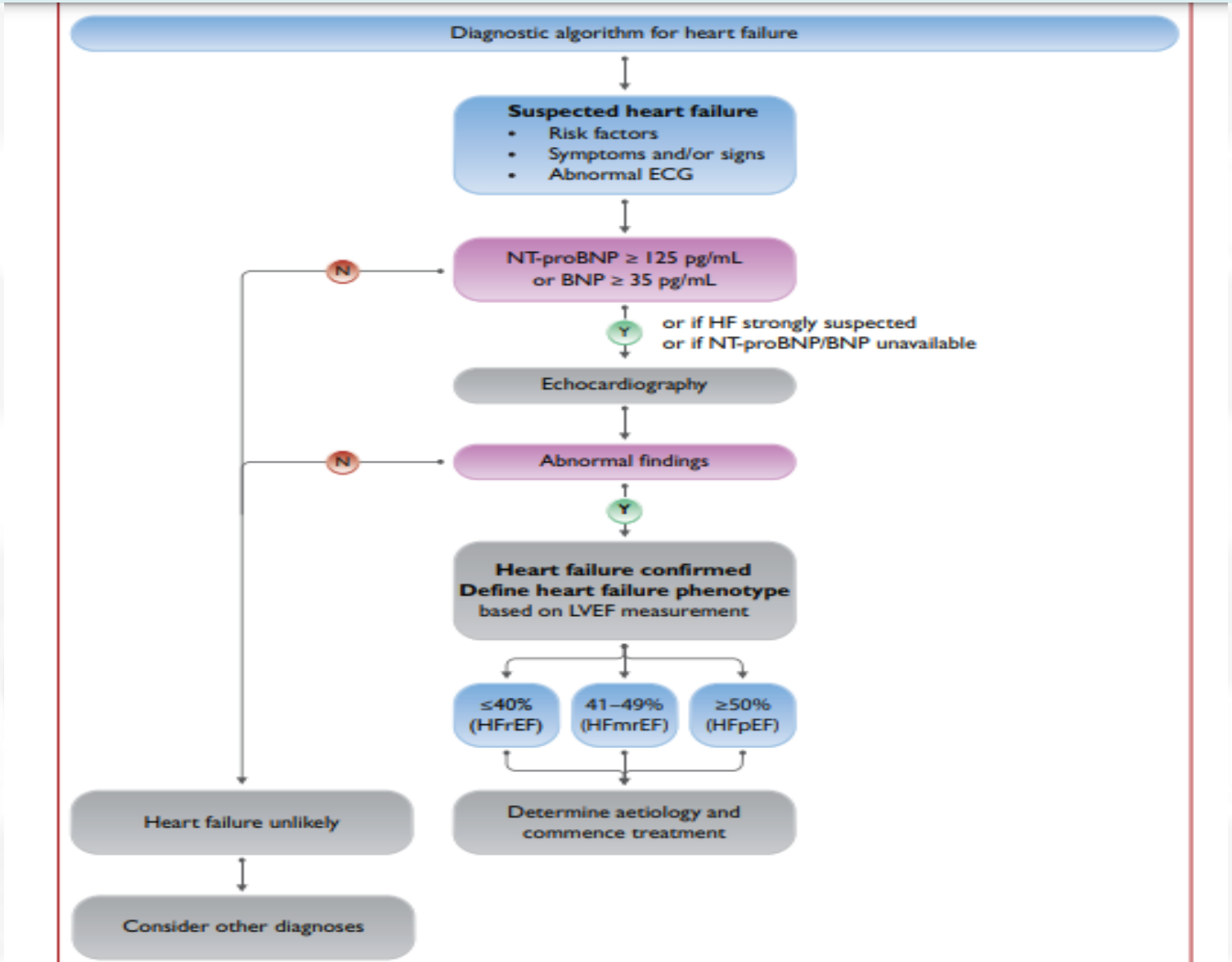
HF = heart failure; HFmrEF = heart failure with mildly reduced ejection fraction; HFpEF = heart failure with preserved ejection fraction; HFrEF = heart failure with reduced ejection fraction; LV = left ventricle; LVEF = left ventricular ejection fraction.

[a]Signs may not be present in the early stages of HF (especially in HFpEF) and in optimally treated patients.

[b]For the diagnosis of HFmrEF, the presence of other evidence of structural heart disease (e.g. increased left atrial size, LV hypertrophy or echocardiographic measures of impaired LV filling) makes the diagnosis more likely.

[c]For the diagnosis of HFpEF, the greater the number of abnormalities present, the higher the likelihood of HFpEF.

ALGORITMO DIAGNÓSTICO DE LA IC



PRUEBAS A REALIZAR ANTE LA SOSPECHA DE IC

Recommended diagnostic tests in all patients with suspected chronic heart failure

Recommendations	Class[a]	Level[b]
BNP/NT-proBNP[c]	I	B
12-lead ECG	I	C
Transthoracic echocardiography	I	C
Chest radiography (X-ray)	I	C
Routine blood tests for comorbidities, including full blood count, urea and electrolytes, thyroid function, fasting glucose and HbA1c, lipids, iron status (TSAT and ferritin)	I	C

BNP = B-type natriuretic peptide; ECG = electrocardiogram; HbA1c = glycated haemoglobin; NT-proBNP = N-terminal pro-B-type natriuretic peptide; TSAT = transferrin saturation.

[a]Class of recommendation.

[b]Level of evidence.

[c]References are listed in section 4.2 for this item.

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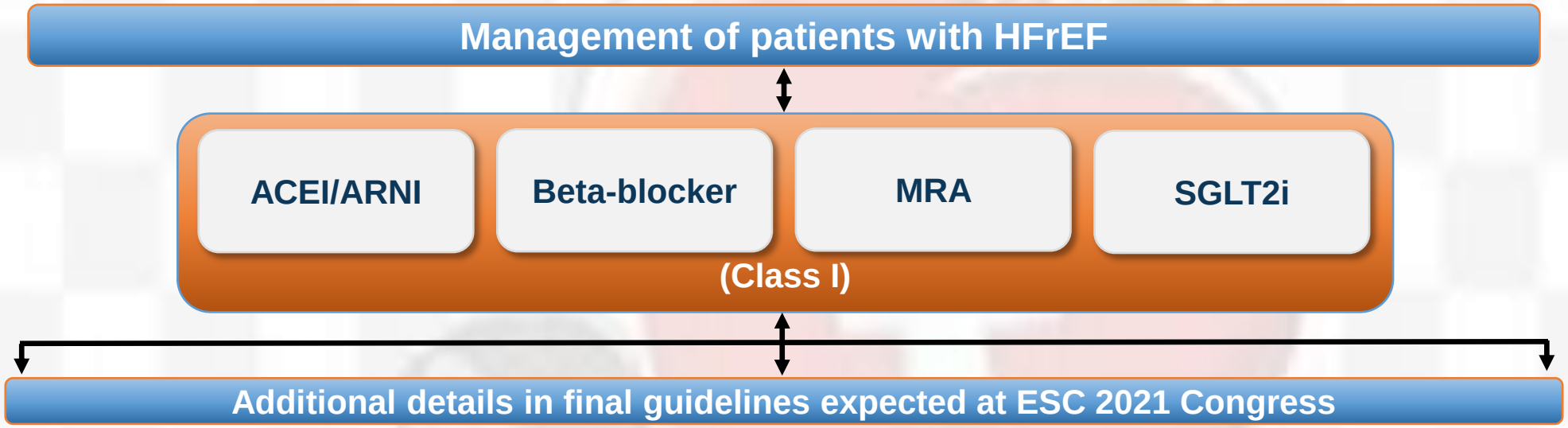
TRATAMIENTO DE LA IC CON FEVI REDUCIDA



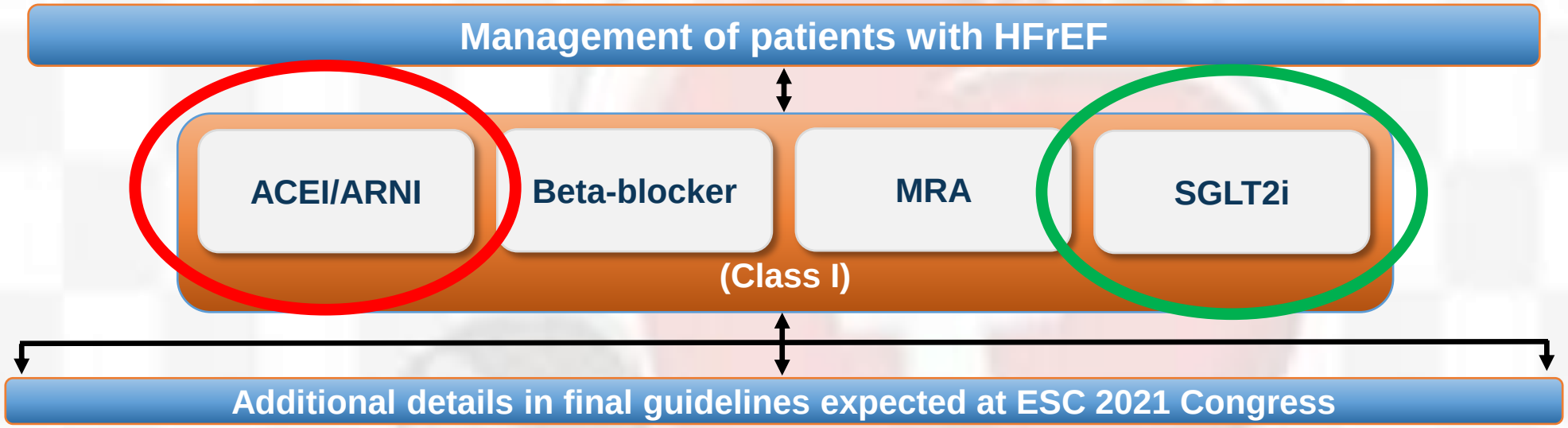
Drugs recommended in all patients with HFrEF	Class[a]	Level[b]
ACEI is recommended for patients with HFrEF to reduce the risk of HF hospitalization and death.	I	A
Beta-blocker is recommended for patients with stable HFrEF to reduce the risk of HF hospitalization and death.	I	A
MRA is recommended for patients with HFrEF to reduce the risk of HF hospitalization and death.	I	A
Dapagliflozin or empagliflozin are recommended for patients with HFrEF to reduce the risk of HF hospitalization and death.	I	A
Sacubitril/valsartan is recommended as a replacement for an ACEI in patients with HFrEF to reduce the risk of HF hospitalization and death.	I	B

[a]Class of recommendation; [b]Level of evidence.

ACEI = angiotensin-converting enzyme inhibitor; ARNI = angiotensin-receptor neprilysin inhibitor; ESC = European Society of Cardiology; HF = heart failure; HFrEF = heart failure with reduced ejection fraction; MRA = mineralocorticoid-receptor antagonist; SGLT2 = sodium-glucose cotransporter 2.

Metra M. Presented at ESC-HF 2021 Online Congress; June 29-July 1, 2021.

TRATAMIENTO DE LA IC CON FEVI REDUCIDA



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Dapagliflozin or empagliflozin are recommended for patients with HFrEF to reduce the risk of HF hospitalization and death.	I	A
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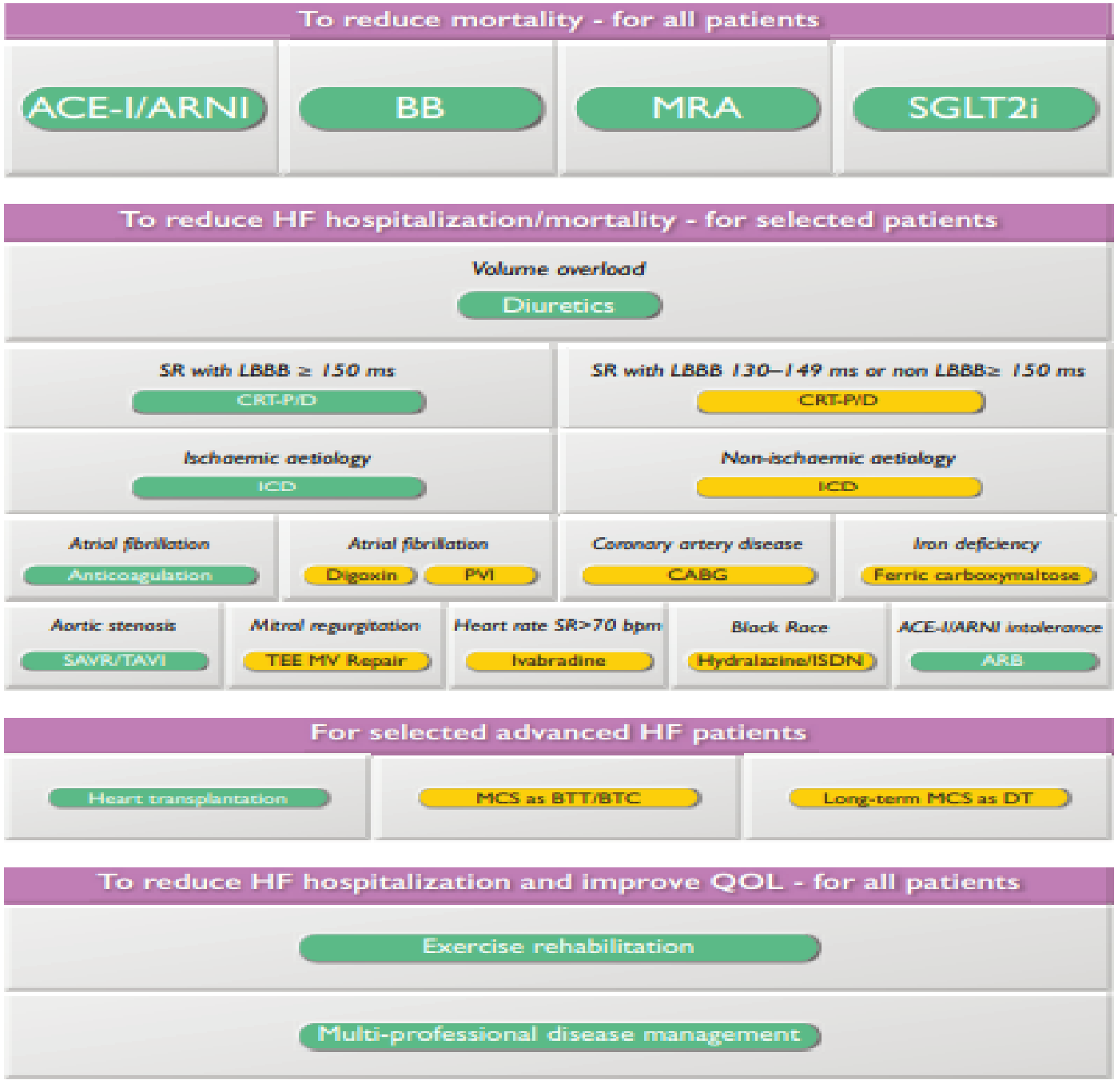
[a]Class of recommendation; [b]Level of evidence.

ACEI = angiotensin-converting enzyme inhibitor; ARNI = angiotensin-receptor neprilysin inhibitor; ESC = European Society of Cardiology; HF = heart failure; HFrEF = heart failure with reduced ejection fraction; MRA = mineralocorticoid-receptor antagonist; SGLT2 = sodium-glucose cotransporter 2.

Metra M. Presented at ESC-HF 2021 Online Congress; June 29-July 1, 2021.

Management of HFrEF



TRATAMIENTO DE LA IC CON FEVI REDUCIDA CONTROVERSIAS

- **¿Cómo lo hacemos? ¿Todos a la vez? ¿Escalonadamente? ¿En qué orden?**
- **¿Es lógico, en base a los estudios realizados que, en la IC “de novo”, sacubitril/valsartán tenga una indicación IIb?**
- **¿Está ivabradina en el lugar que le corresponde?**
- **¿Es suficiente la evidencia científica para que los iSLGT2 ocupen un lugar de privilegio?**

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IC CON FEVI LIGERAMENTE REDUCIDA

GUÍAS 2016

Recommendations for treatment of patients with heart failure with preserved ejection fraction and heart failure with mid-range ejection fraction

Recommendations	Class [a]	Level [b]	Ref [c]
it is recommended to screen patients with HFpEF or HFmrEF for both cardiovascular and non-cardiovascular comorbidities, which, if present, should be treated provided safe and effective interventions exist to improve symptoms, well-being and/or prognosis.	I	C	
Diuretics are recommended in congested patients with HFpEF or HFmrEF in order to alleviate symptoms and signs.	I	B	178, 179

HFmrEF = heart failure with mid-range ejection fraction; HFpEF = heart failure with preserved ejection fraction.
[a]Class of recommendation.
[b]Level of evidence.
[c]Reference(s) supporting recommendations.

GUÍAS 2021

Pharmacological treatments to be considered in patients with (NYHA class II–IV) heart failure with mildly reduced ejection fraction

Recommendations	Class[a]	Level[b]
Diuretics are recommended in patients with congestion and HFmrEF in order to alleviate symptoms and signs.[137]	I	C
An ACE-I may be considered for patients with HFmrEF to reduce the risk of HF hospitalization and death.[11]	IIb	C
An ARB may be considered for patients with HFmrEF to reduce the risk of HF hospitalization and death.[245]	IIb	C
A beta-blocker may be considered for patients with HFmrEF to reduce the risk of HF hospitalization and death.[12,119]	IIb	C
An MRA may be considered for patients with HFmrEF to reduce the risk of HF hospitalization and death.[246]	IIb	C
Sacubitril/valsartan may be considered for patients with HFmrEF to reduce the risk of HF hospitalization and death.[13,247]	IIb	C

ACE-I = angiotensin-converting enzyme inhibitor; ARB = angiotensin-receptor blocker; HF = heart failure; HFmrEF = heart failure with mildly reduced ejection fraction; MRA = mineralocorticoid receptor antagonist; NYHA = New York Heart Association.
[a]Class of recommendation.
[b]Level of evidence.

IC CON FEVI LIGERAMENTE REDUCIDA

7 Heart failure with mildly reduced ejection fraction

Supplementary Table 10 **Heart failure with mildly reduced ejection fraction – demographics, aetiological factors, and comorbidities in registries and trials**

Clinical characteristics	GWTG -HF[61] *n* = 5626	OPTIMIZE-HF[62] *n* = 7321	SwedeHF[63] *n* = 9019	ESC -HF-LT[64] *n* = 2212	TIME -CHF[65] *n* = 108	CHART-2[66] *n* = 596
Age, years	81	74	74	64	79	69
Females, %	50	52	39	32	46	28
BMI, kg/m^2	27	–	27	29	–	23
Hypertension, %	78	74	64	60	82	90
Diabetes, %	42	44	27	31	–	–
CAD, %	57	–	53	42	80	80
AF, %	40	33	58	22	40	44
Hyperlipidaemia, %	48	35	–	–	48	80

AF = atrial fibrillation; BMI = body mass index; CAD = coronary artery disease; CHART-2 = Congestive Heart Failure Cardiopoietic Regenerative Therapy (trial); ESC-HF-LT = European Society of Cardiology Heart Failure Long-Term (registry); GWTG-HF = Get With the Guidelines – Heart Failure (registry); *n* = number of patients; OPTIMIZE-HF = Organized Program to Initiate Lifesaving Treatment in Hospitalized Patients with Heart Failure (registry); SwedeHF = Swedish Heart Failure Registry; TIME-CHF = Trial of Intensified versus standard Medical therapy in Elderly patients with Congestive Heart Failure.

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TRATAMIENTO DE LA IC CON FEVI PRESERVADA

Recommendations for the treatment of patients with heart failure with preserved ejection fraction

Recommendations	Class[a]	Level[b]
Screening for, and treatment of, aetiologies, and cardiovascular and non-cardiovascular comorbidities is recommended in patients with HFpEF (see relevant sections of this document).	I	C
Diuretics are recommended in congested patients with HFpEF in order to alleviate symptoms and signs.[137]	I	C

HFpEF = heart failure with preserved ejection fraction.
[a]Class of recommendation.
[b]Level of evidence.

TRATAMIENTO DE LA IC CON FEVI PRESERVADA

- ¿CUÁL ES LA IMPORTANCIA Y QUÉ APORTA EL ESTUDIO EMPEROR PRESERVED?
- ¿CUÁL ES LA IMPORTANCIA Y QUÉ APORTA EL ESTUDIO SOLOIST-CHF?

GUÍAS DE LA ESC PARA INSUFICIENCIA CARDIACA 2021

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DEFINICIÓN DE IC AVANZADA

Table 13 Criteria for definition of advanced heart failure

All the following criteria must be present despite optimal medical treatment:
1. Severe and persistent symptoms of heart failure [NYHA class III (advanced) or IV].
2. Severe cardiac dysfunction defined by at least one of the following: • LVEF ≤30% • Isolated RV failure (e.g., ARVC) • Non-operable severe valve abnormalities • Non-operable severe congenital abnormalities • Persistently high (or increasing) BNP or NT-proBNP values and severe LV diastolic dysfunction or structural abnormalities (according to the definitions of HFpEF).
3. Episodes of pulmonary or systemic congestion requiring high-dose i.v. diuretics (or diuretic combinations) or episodes of low output requiring inotropes or vasoactive drugs or malignant arrhythmias causing >1 unplanned visit or hospitalization in the last 12 months.
4. Severe impairment of exercise capacity with inability to exercise or low 6MWT distance (<300 m) or pVO_2 <12 mL/kg/min or <50% predicted value, estimated to be of cardiac origin.

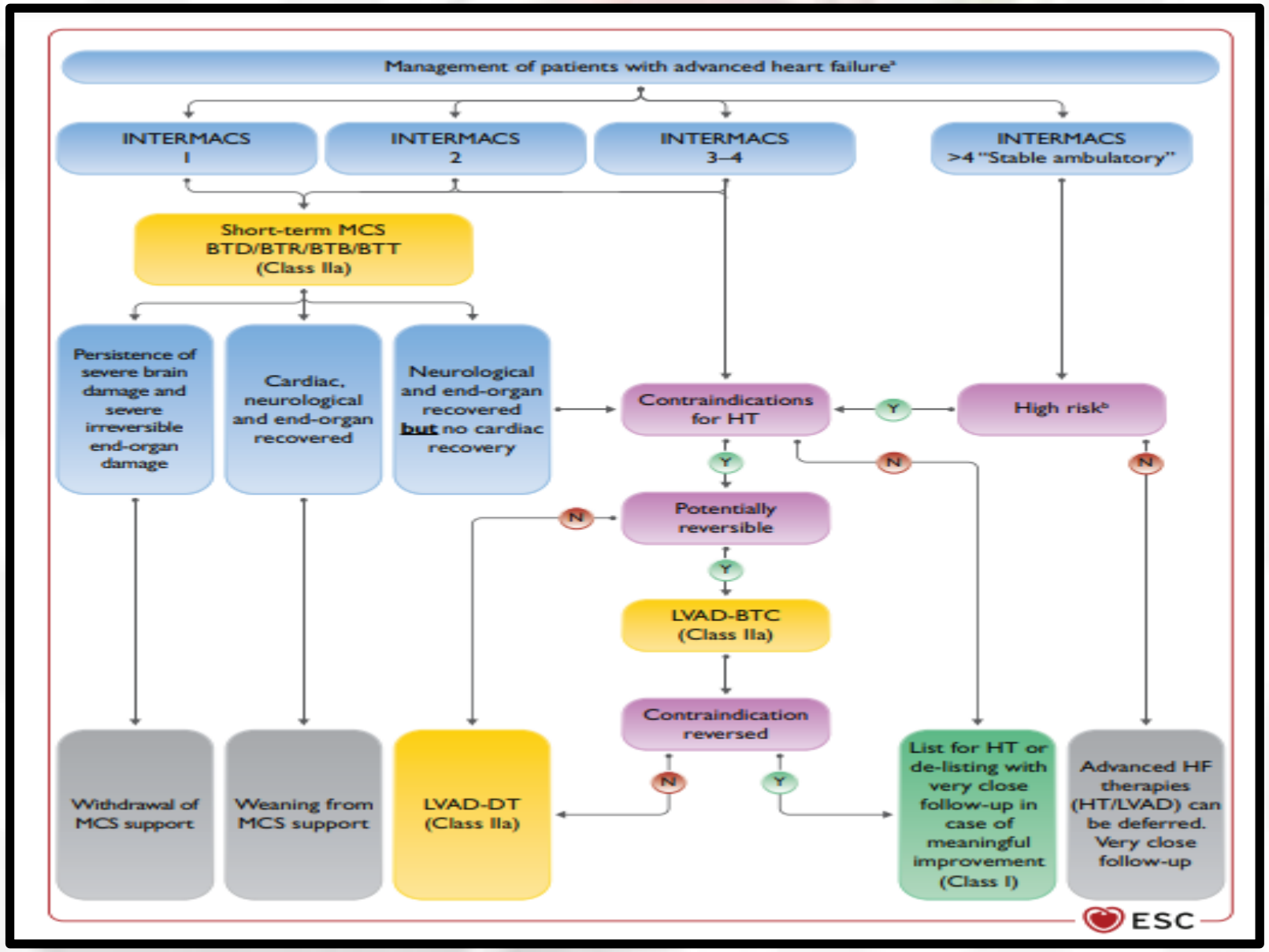
6MWT = 6-minute walk test; ARVC = arrhythmogenic right ventricular cardiomyopathy; BNP = B-type natriuretic peptide; HFpEF = heart failure with preserved ejection fraction; i.v. = intravenous; LV = left ventricular; LVEF = left ventricular ejection fraction; NT-proBNP = N-terminal pro-B-type natriuretic peptide; NYHA = New York Heart Association; pVO_2 = peak oxygen consumption; RV = right ventricular. Modified from [376].

CLASIFICACIÓN DE LOS PACIENTES CON IC AVANZADA

- Clasificación en función del Interagency Registry for Mechanically Assisted Circulatory Support (INTERMACS).

- Define 7 perfiles que determinan la necesidad de terapias avanzadas, estiman el pronóstico de los pacientes y la urgencia para realizar trasplante cardiaco o usar dispositivos de asistencia ventricular.

MANEJO DE LA IC AVANZADA



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DIAGNÓSTICO DE IC AGUDA

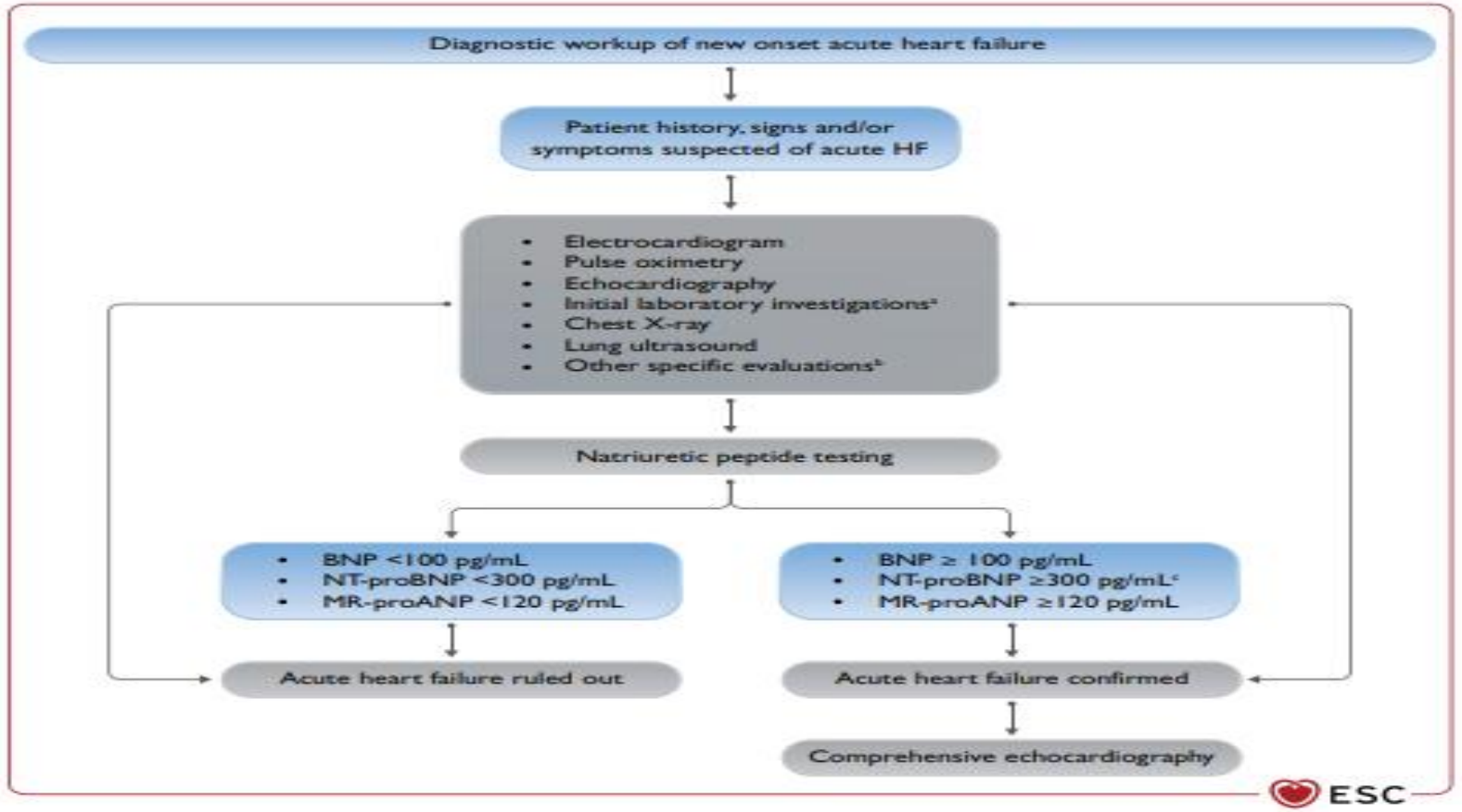

Figure 6 Diagnostic workup of new onset acute heart failure. ACS = acute coronary syndrome; BNP = B-type natriuretic peptide; CT = com tomography; HF = heart failure; MR-proANP = mid-regional pro-atrial natriuretic peptide; NT-proBNP = N-terminal pro-B-type natriuretic peptide = thyroid-stimulating hormone. [a]Initial laboratory exams include troponin, serum creatinine, electrolytes, blood urea nitrogen or urea, TSH, liver fu tests as well as D-dimer and procalcitonin when pulmonary embolism or infection are suspected, arterial blood gas analysis in case of respiratory di and lactate in case of hypoperfusion. [b]Specific evaluation includes coronary angiography, in case of suspected ACS, and CT in case of suspected pulm embolism. [c]Rule-in values for the diagnosis of acute HF: >450 pg/mL if aged <55 years, >900 pg/mL if aged between 55 and 75 years and >1800 pg aged >75 years.[433,434]

ESCENARIOS CLÍNICOS DE IC AGUDA

Table 21 Clinical presentations of acute heart failure

	Acute decompensated heart failure	Acute pulmonary oedema	Isolated right ventricular failure	Cardiogenic shock
Main mechanisms	LV dysfunction Sodium and water renal retention	Increased afterload and/or predominant LV diastolic dysfunction Valvular heart disease	RV dysfunction and/or pre-capillary pulmonary hypertension	Severe cardiac dysfunction
Main cause of symptoms	Fluid accumulation, increased intraventricular pressure	Fluid redistribution to the lungs and acute respiratory failure	Increased central venous pressure and often systemic hypoperfusion	Systemic hypoperfusion
Onset	Gradual (days)	Rapid (hours)	Gradual or rapid	Gradual or rapid
Main haemodynamic abnormalities	Increased LVEDP and PCWP[a] Low or normal cardiac output Normal to low SBP	Increased LVEDP and PCWP[a] Normal cardiac output Normal to high SBP	Increased RVEDP Low cardiac output Low SBP	Increased LVEDP and PCWP[a] Low cardiac output Low SBP
Main clinical presentations[1,446]	Wet and warm OR Dry and cold	Wet and warm[b]	Dry and cold OR Wet and cold	Wet and cold
Main treatment	Diuretics Inotropic agents/vasopressors (if peripheral hypoperfusion/hypotension) Short-term MCS or RRT if needed	Diuretics Vasodilators[b]	Diuretics for peripheral congestion Inotropic agents/vasopressors (if peripheral hypoperfusion/hypotension) Short-term MCS or RRT if needed	Inotropic agents/vasopressors Short-term MCS RRT

LV = left ventricular; LVEDP = left ventricular end-diastolic pressure; MCS = mechanical circulatory support; PCWP = pulmonary capillary wedge pressure; RV = right ventricular; RVEDP = right ventricular end-diastolic pressure; RRT = renal replacement therapy; SBP = systolic blood pressure.

[a]May be normal with low cardiac output.

[b]Wet and cold profile with need of inotropes and/or vasopressors may rarely occur.

IC AGUDA. EXPLORACIONES COMPLEMENTARIAS

Table 20 Diagnostic tests in patients with acute heart failure

Exam	Time of measurement	Possible findings	Diagnostic value for AHF	Indication
ECG	Admission, during hospitalization,[a,b] pre-discharge	Arrhythmias, myocardial ischaemia	Exclusion of ACS or arrhythmias	Recommended
Chest-X ray	Admission, during hospitalization[a]	Congestion, lung infection	Confirmatory	May be considered
LUS	Admission, during hospitalization,[a] pre-discharge	Congestion	Confirmatory	May be considered
Echocardiography	Admission, during hospitalization,[a] pre-discharge	Congestion, cardiac dysfunction, mechanical causes	Major	Recommended
Natriuretic peptides (BNP, NT-proBNP, MR-proANP)	Admission, pre-discharge	Congestion	High negative predictive value	Recommended
Serum troponin	Admission	Myocardial injury	Exclusion of ACS	Recommended
Serum creatinine	Admission, during hospitalization,[a] pre-discharge	Renal dysfunction	None	Recommended for prognostic assessment
Serum electrolytes (sodium, potassium, chloride)	Admission, during hospitalization,[a] pre-discharge	Electrolyte disorders	None	Recommended for prognostic assessment and treatment
Iron status (transferrin, ferritin)	Pre-discharge	Iron depletion	None	Recommended for prognostic assessment and treatment
TSH	Admission	Hypo- hyperthyroidism	None	Recommended when hypo-hyperthyroidism is suspected
D-dimer	Admission	Pulmonary embolism	Useful to exclude pulmonary embolism	Recommended when pulmonary embolism is suspected
Procalcitonin	Admission	Pneumonia	Useful for diagnosis of pneumonia	May be done when pneumonia is suspected
Lactate	Admission, during hospitalization[a]	Lactic acidosis	Useful to assess perfusion status	Recommended when peripheral hypoperfusion is suspected
Pulse oximetry and arterial blood gas analysis	Admission, during hospitalization[a]	Respiratory failure	Useful to assess respiratory function	Recommended when respiratory failure is suspected

ACS = acute coronary syndrome; AHF = acute heart failure; BNP = B-type natriuretic peptide; ECG = electrocardiogram; LUS = lung ultrasound; MR-proANP = mid-regional pro-atrial natriuretic peptide; NT-proBNP = N-terminal pro-B-type natriuretic peptide; TSH = thyroid-stimulating hormone.
[a]Based on clinical conditions.
[b]Continuous ECG monitoring can be considered based on clinical conditions.

AJUSTE DIURÉTICOS EN IC AGUDA

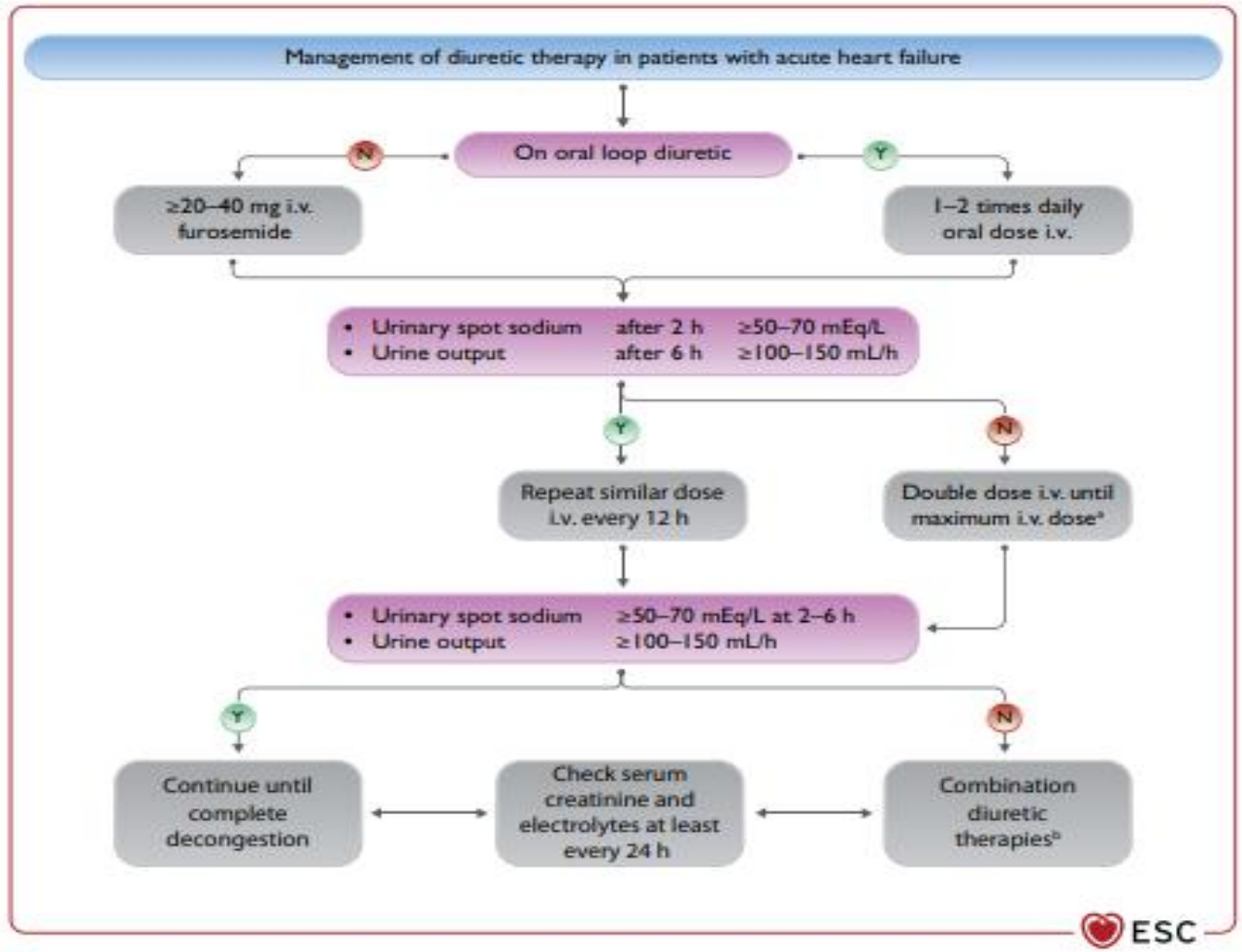

Figure 13 Diuretic therapy (furosemide) in acute heart failure. i.v. = intravenous. [a]The maximal daily dose for i.v. loop diuretics is generally cor furosemide 400–600 mg though up to 1000 mg may be considered in patients with severely impaired kidney function. [b]Combination therapy is t tion to the loop diuretic of a diuretic with a different site of action, e.g. thiazides or metolazone or acetazolamide. Modified from [145].

ACTITUD PREVIA AL ALTA EN IC AGUDA

Recommendations for pre-discharge and early post-discharge follow-up of patients hospitalized for acute heart failure

Recommendations	Class[a]	Level[b]
It is recommended that patients hospitalized for HF be carefully evaluated to exclude persistent signs of congestion before discharge and to optimize oral treatment.[427,472]	I	C
It is recommended that evidence-based oral medical treatment be administered before discharge.[103,513]	I	C
An early follow-up visit is recommended at 1—2 weeks after discharge to assess signs of congestion, drug tolerance and [illegible] evidence-based therapy.[517,518]	I	C
Ferric carboxymaltose should be considered for iron deficiency, defined as serum ferritin <100 ng/mL or serum ferritin 100—299 ng/mL with TSAT <20%, to improve symptoms and reduce rehospitalizations.[513]	IIa	B

HR = heart failure; TSAT = [illegible].
[a]Class of recommendation.
[b]Level of evidence.

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ANGOR E IC CON FEVI REDUCIDA

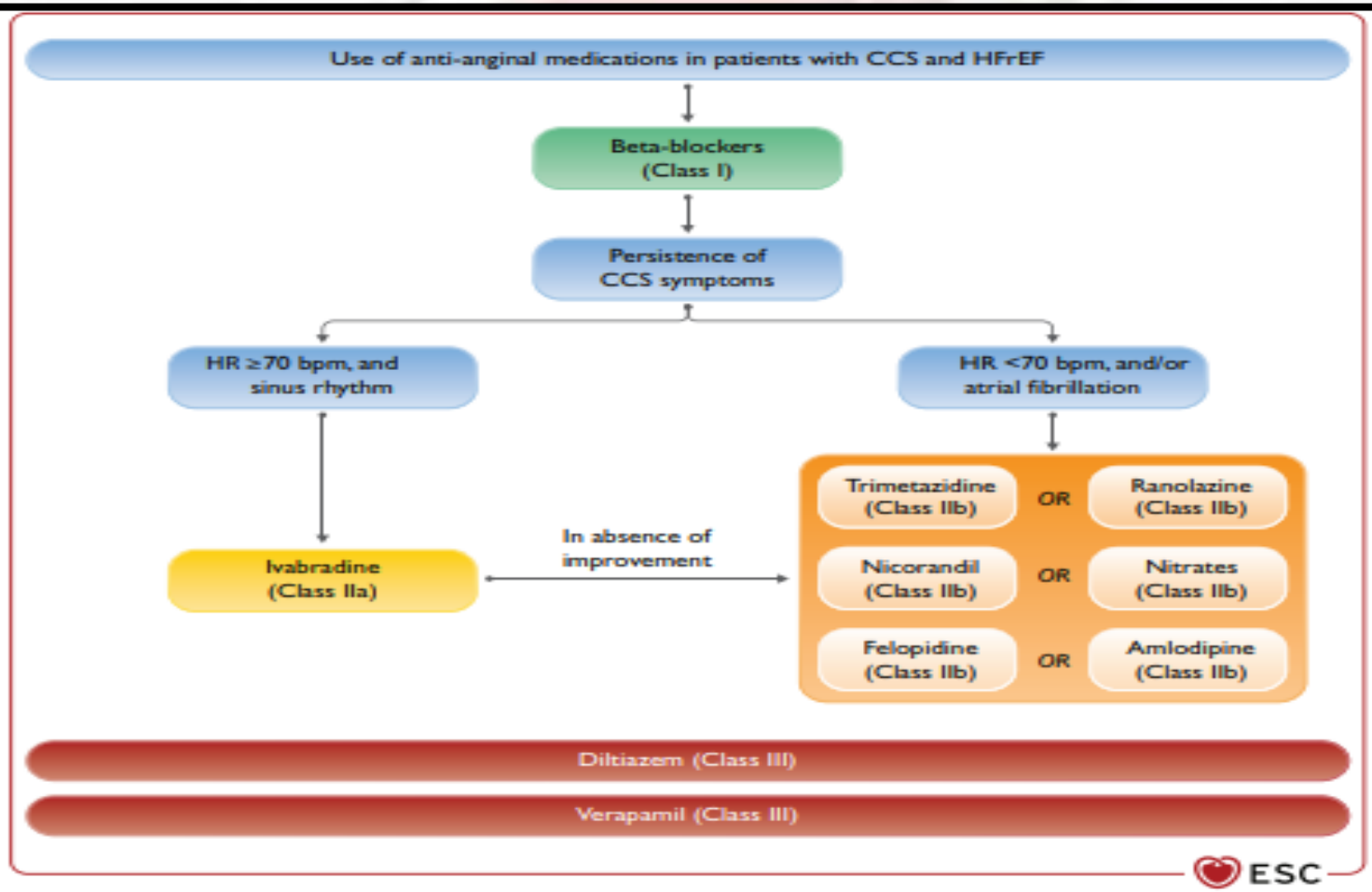


Figure 15 Algorithm for the medical treatment of chronic coronary syndrome in patients with heart failure with reduced ejection fract
chronic coronary syndrome; HFrEF = heart failure with reduced ejection fraction; HR = heart rate. Colour code for classes of recommendatio
Class of recommendation I; Yellow for Class of recommendation IIa; Orange for Class of recommendation IIb; Red for Class of recommenda
Table 1 for further details on classes of recommendation).

DIABETES E INSUFICIENCIA CARDIACA

Recommendations for the treatment of diabetes in heart failure

Recommendation	Class[a]	Level[b]
SGLT2 inhibitors (canagliflozin, dapagliflozin, empagliflozin, ertugliflozin, sotagliflozin) are recommended in patients with T2DM at risk of CV events to reduce hospitalizations for HF, major CV events, end-stage renal dysfunction, and CV death.[293–297]	I	A
SGLT2 inhibitors (dapagliflozin, empagliflozin, and sotagliflozin) are recommended in patients with T2DM and HFrEF to reduce hospitalizations for HF and CV death.[108,109,136]	I	A

CV = cardiovascular; HF = heart failure; HFrEF = heart failure with reduced ejection fraction; SGLT2 = sodium-glucose co-transporter 2; T2DM = type 2 diabetes mellitus.

[a]Class of recommendation.

[b]Level of evidence.

Estudios de seguridad CV: tasas de eventos CV

iSGLT2

Estudio	EMPA-REG[1]	CANVAS[2]	DECLARE[3]	VERTIS
	Empagliflozina	Canagliflozina	Depagliflozina	Ertugliflozina
3pt MACE	**0,86** 0,74-0,99	**0,86** 0,75-0,97	**0,93** 0,84-1,03	**0,97** 0,85-1,11
Muerte CV	**0,62** 0,49-0,77	**0,87** 0,72-1,06	**0,98** 0,82-1,17	**0,92** 0,77-1,11
IAM no fatal	**0,87** 0,70-1,09	**0,85** 0,69-1,05	**0,89** 0,77-1,01	**1,00** 0,86-1,27
Ictus no fatal	**1,24** 0,92-1,67	**0,90** 0,71-1,15	**1,01** 0,84-1,21	**1,00** 0,76-1,32
Hospitalización por IC	**0,65** 0,50-0,85	**0,67** 0,52-0,87	**0,73** 0,61-0,88	**0,70** 0,54-0,90
Muerte por cualquier causa	**0.68** 0,57-0,82	**0,87** 0,74-1,01	**0,93** 0,82-1,04	
Muerte CV o Hospitalización por IC			**0,83** *objetivo primario 0,73-0,95	**0,88** 0,75-1,03
Objetivo renal	**0,54** 0,40-0,75	**0,60** 0,47-0,77	**0,53** 0,43-0,66	**0,81** 0,64-1,03

1.Zinman B et al.N Engl J Med 2015;373:2117-2128 2. Neal B et al.N Engl J Med 2017;377:644-657
3. Wiviott SD et al.N Engl J Med 2019;380:347-357 4. Perkovic V et al.N Engl J Med 2019;380:2295-306

ESTUDIOS iSGLT2 y FEVI REDUCIDA

- **ESTUDIO DAPA-HF**

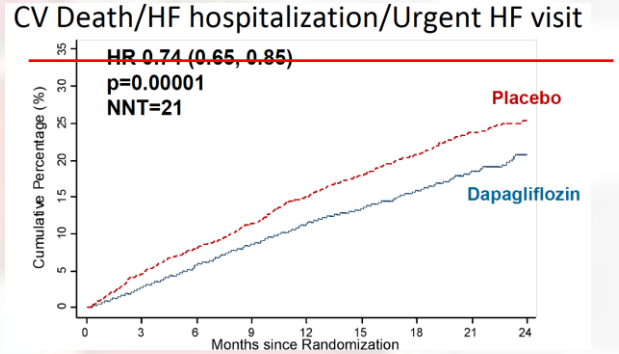
(Dapagliflozina)

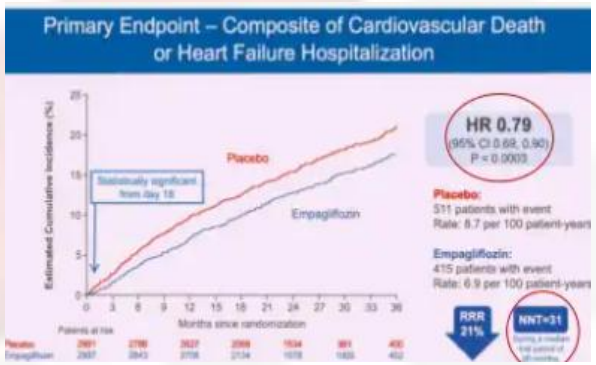
- **ESTUDIO EMPEROR-REDUCED**

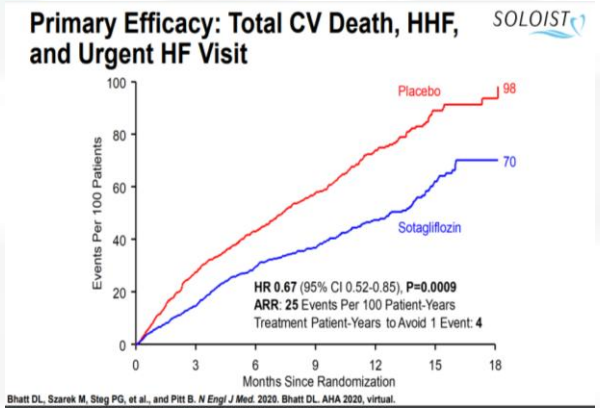
(Empagliflozina)

- **ESTUDIO SOLOIST**

(Sotagliflozina)







RECOMENDACIONES EN AC POR FA E IC

Recommendations for the treatment of atrial fibrillation in patients with heart failure

Recommendations	Class[a]	Level[b]
Anticoagulation		
Long-term treatment with an oral anticoagulant is recommended in all patients with AF, HF, and CHA_2DS_2-VASc score ≥2 in men or ≥3 in women.[7]	I	A
DOACs are recommended in preference to VKAs in patients with HF, except in those with moderate or severe mitral stenosis or mechanical prosthetic heart valves.[528,558]	I	A
Long-term treatment with an oral anticoagulant should be considered for stroke prevention in AF patients with a CHA_2DS_2-VASc score of 1 in men or 2 in women.[7,559]	IIa	B

CONCLUSIONES

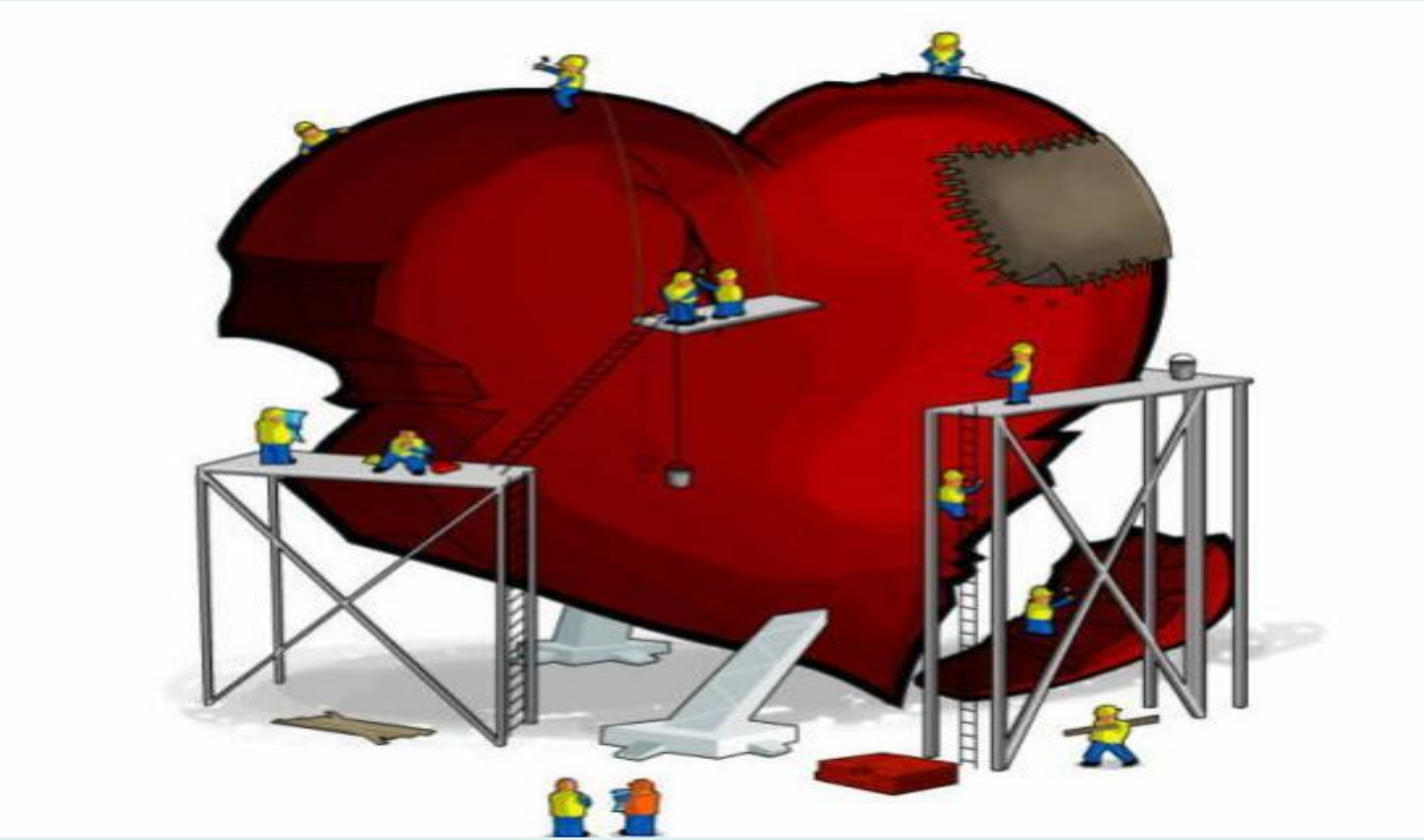
- Contemplan el uso concomitante de la mayoría de fármacos que han demostrado mejorar la morbi-mortalidad, de manera conjunta, en el menor tiempo posible.
- Reconocen el papel de los iSGLT2 en el tratamiento de la IC con FEVI reducida, en base a los datos publicados.
- Consideran la FEVI 41-49% como ligeramente reducida y se aplican criterios más cercanos a los de FEVI reducida.
- Mejoran algunos aspectos específicos como el tratamiento de la diabetes, uso de hierro en el ámbito hospitalario o uso de ACODS.

CONCLUSIONES

SOMBRAS

- Establece el uso de 4 grupos farmacológicos concomitantes, sin especificar recomendaciones en cuanto a la forma de inicio.
- Sigue estableciendo prioridad al IECA frente a sacubitril/valsartán en pacientes con IC y FEVI reducida.
- Indica el uso de IECA en IC y FEVI preservada, con nivel IIb, sin ningún apoyo científico, a diferencia del resto de fármacos.
- No contempla las evidencias de los iSGLT2 en IC con FEVI preservada.

GRACIAS……



DE TODO CORAZÓN.