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Cardio**Advanced**Forum

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Guías ESC 2024 para el tratamiento de la presión arterial elevada y la hipertensión

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2024 ESC Guidelines for the management of elevated blood pressure and hypertension

Developed by the task force on the management of elevated blood pressure and hypertension of the European Society of Cardiology (ESC) and endorsed by the European Society of Endocrinology (ESE) and the European Stroke Organisation (ESO)

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DEFINICIÓN

2018 ESC/ESH Guidelines for the management of arterial hypertension

The Task Force for the management of arterial hypertension of the European Society of Cardiology (ESC) and the European Society of Hypertension (ESH)

2024 ESC Guidelines for the management of elevated blood pressure and hypertension

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- ECV atribuible a la PA se basa en una **escala de exposición continua**, no en una escala binaria de normotensión frente a hipertensión.
- Beneficio de los tratamientos para reducir la PA entre las personas con alto riesgo de ECV y niveles de PA elevados pero que no cumplen los umbrales tradicionales de HTA

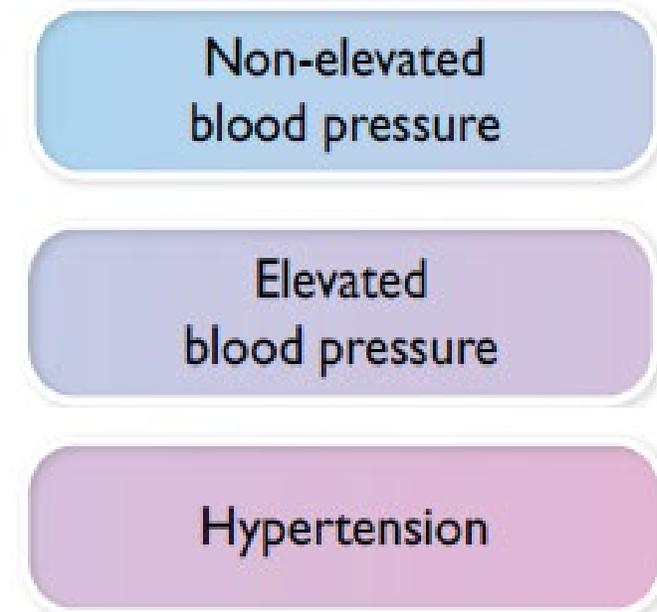
McEvoy JW, McCarthy CP, Bruno RM, Brouwers S, Canavan MD, Ceconi C, et al. 2024 ESC Guidelines for the management of elevated blood pressure and hypertension. Eur Heart J [Internet]. 2024; Disponible en: <http://dx.doi.org/10.1093/eurheartj/ehae178>

DEFINICIÓN

2018 ESC/ESH Guidelines for the management of arterial hypertension

	Category	Systolic (mmHg)	Diastolic (mmHg)
NormoTA	Optimal	<120	<80
	Normal	120–139	80–84
	High normal	140–159	85–89
HTA	Grade 1 hypertension	140–159	90–99
	Grade 2 hypertension	160–179	100–109
	Grade 3 hypertension	≥180	≥110
	Isolated systolic hypertension ^b	≥140	and <90

2024 ESC Guidelines for the management of elevated blood pressure and hypertension



DEFINICIÓN

Non-elevated blood pressure	Elevated blood pressure	Hypertension
Office BP SBP <120 mmHg and DBP <70 mmHg	Office BP SBP 120–139 mmHg or DBP 70–89 mmHg	Office BP SBP ≥140 mmHg or DBP ≥90 mmHg
HBPM SBP <120 mmHg and DBP <70 mmHg	HBPM SBP 120–134 mmHg or DBP 70–84 mmHg	HBPM SBP ≥135 mmHg or DBP ≥85 mmHg
ABPM Daytime SBP <120 mmHg and Daytime DBP <70 mmHg	ABPM Daytime SBP 120–134 mmHg or Daytime DBP 70–84 mmHg	ABPM Daytime SBP ≥135 mmHg or Daytime DBP ≥85 mmHg
Insufficient evidence confirming the efficacy and safety of BP pharmacological treatment	Risk stratify to identify individuals with high cardiovascular risk for BP pharmacological treatment	Cardiovascular risk is sufficiently high to merit BP pharmacological treatment initiation

DIAGNÓSTICO

Office blood pressure measurement

-  Measure after 5 min seated comfortably in a quiet environment
-  Use a validated device with an appropriate cuff size based on arm circumference
-  Place the BP cuff at the level of the heart with the patient's back and arm supported
-  Measure BP three times (1–2 min apart) and average the last 2 readings
-  Obtain further measurements if the readings differ by >10 mmHg
-  Record heart rate and exclude arrhythmia by pulse palpation
-  Measure BP in both arms at the 1st visit to detect between arm differences
-  Assess for orthostatic hypotension at 1st visit and thereafter by symptoms

Home-based blood pressure measurement

-  Use a validated BP device
 -  Measure BP in a quiet room after 5 min of rest with arm and back supported
 -  Obtain two readings on each occasion, 1–2 min apart
 -  Obtain readings twice a day (morning^a and evening) for at least 3 and ideally 7 days
 -  Record and average all readings and present results to clinician
- Hypertension:**
average HBPM $\geq 135/85$ mmHg

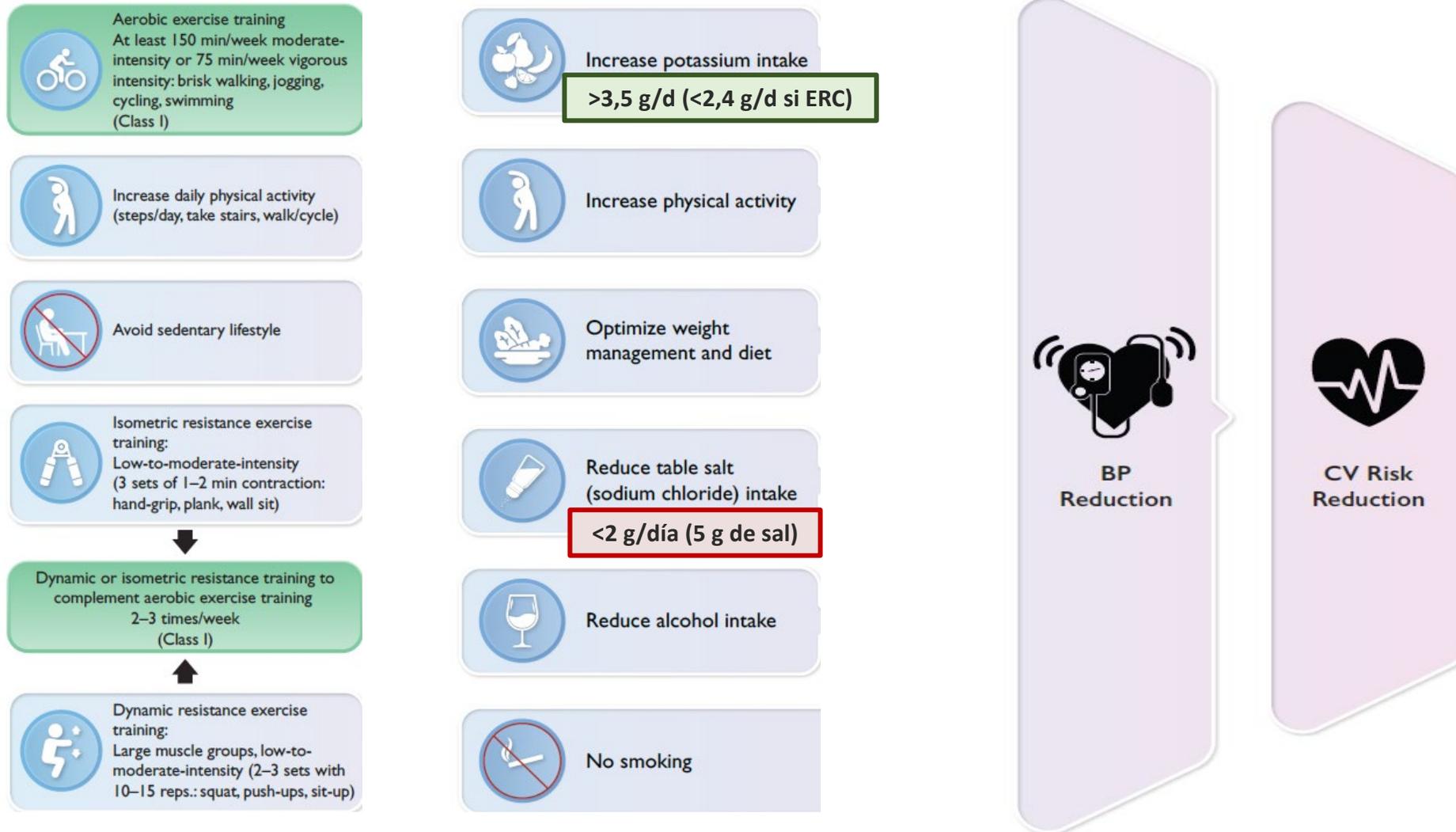
En definitiva:

- Dispositivos **validados** y **homologados**.
- Mediciones **repetidas**.
- Entorno **tranquilo**.

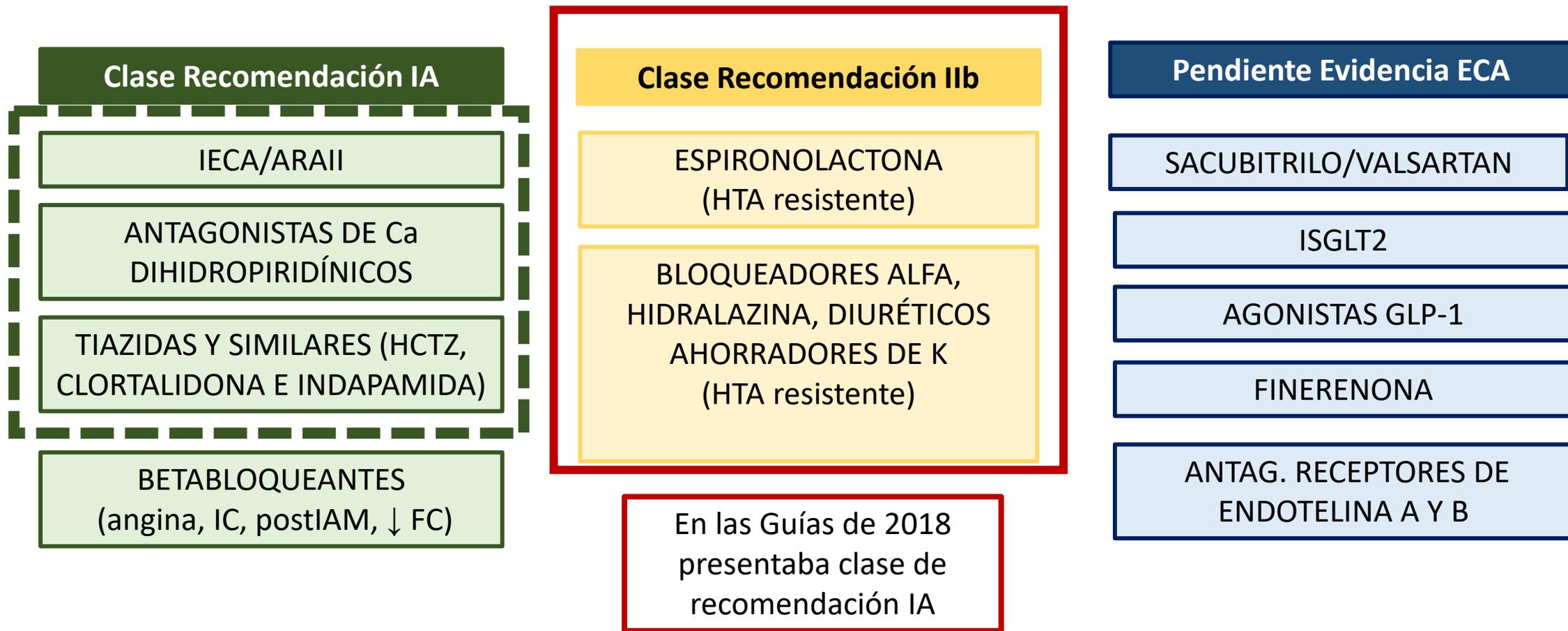
Ambulatory blood pressure measurement

-  Use a validated BP device
 -  Device usually records BP at 15–30 min intervals during the day and 30–60 min at night
 -  A minimum of 70% usable BP recordings is required
 -  A diary of the patient's activities, intake of medications and sleep time should be completed
- Hypertension:**
ABPM $\geq 130/80$ mmHg over 24 h
or
 $\geq 135/85$ mmHg for the daytime average
or
 $\geq 120/70$ mmHg for the night-time average

TRATAMIENTO NO FARMACOLÓGICO



TRATAMIENTO FARMACOLÓGICO



TRATAMIENTO FARMACOLÓGICO

MONOTERAPIA

COMBINACIÓN DE
FÁRMACOS

Given trial evidence for more effective BP control vs. monotherapy, combination BP-lowering treatment is recommended for most patients with confirmed hypertension (BP $\geq 140/90$ mmHg) as initial therapy. Preferred combinations are a RAS blocker (either an ACE inhibitor or an ARB) with a dihydropyridine CCB or diuretic. Exceptions to consider include patients aged ≥ 85 years, those with symptomatic orthostatic hypotension, moderate-to-severe frailty, or elevated BP (systolic BP 120–139 mmHg or diastolic BP 70–89 mmHg) with a concomitant indication for treatment. ^{131,480,483,484,489}

I

B

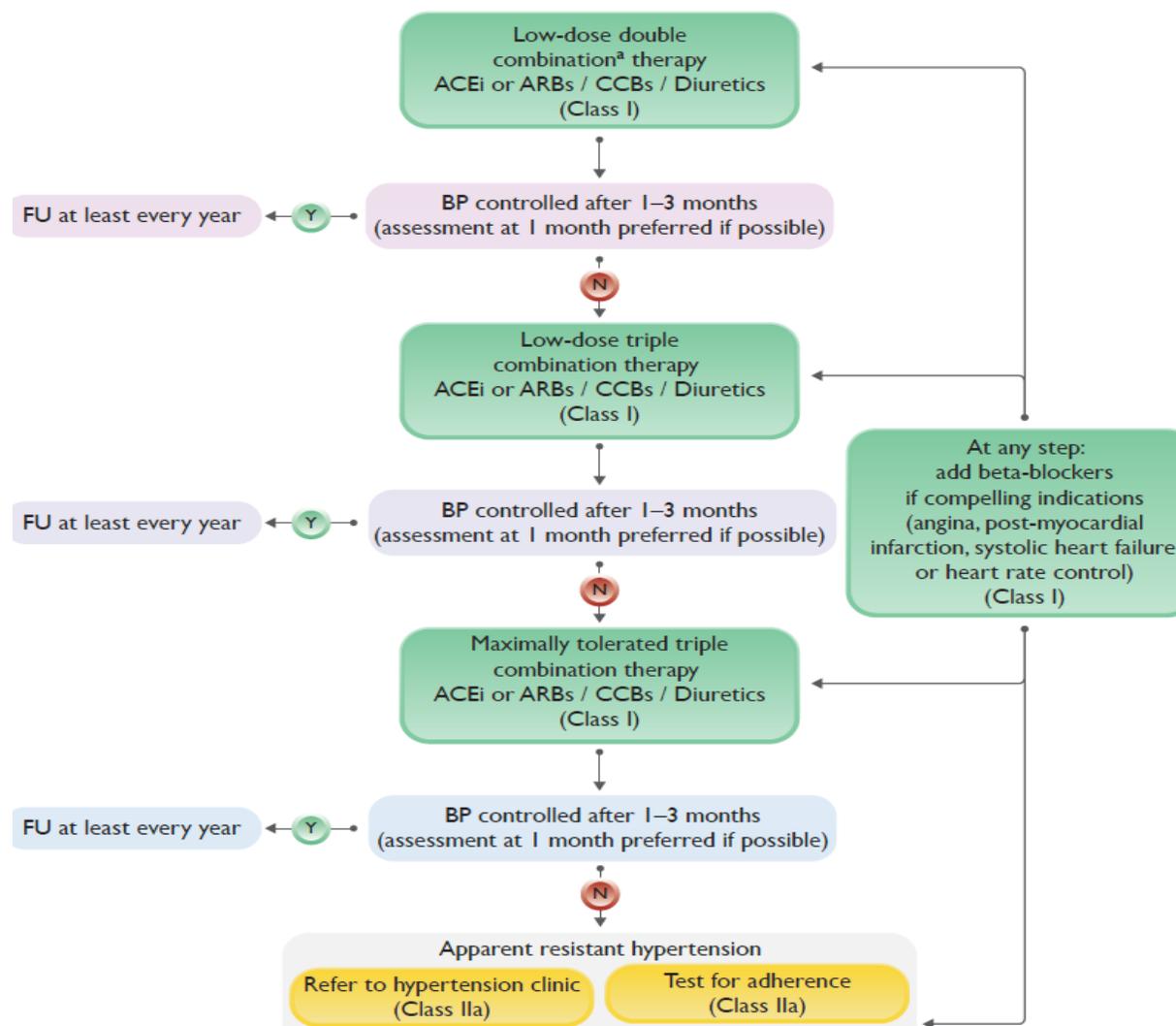
TRATAMIENTO FARMACOLÓGICO

MONOTERAPIA

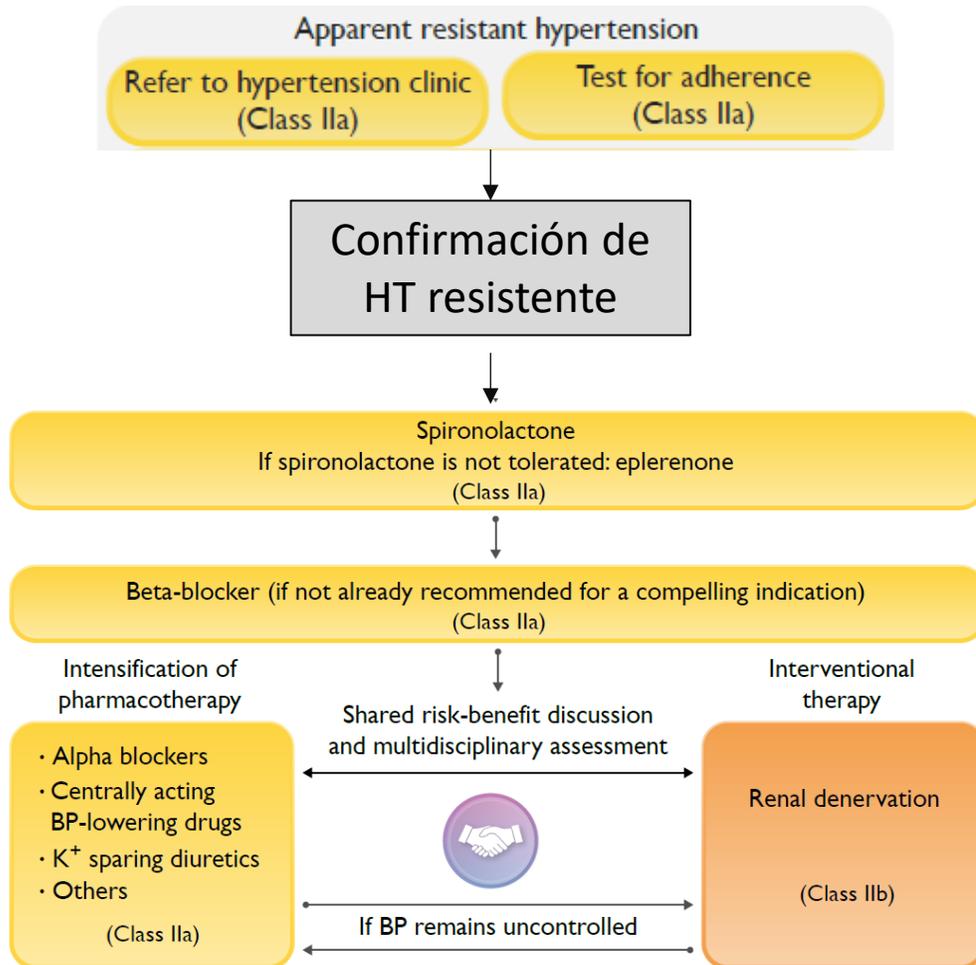
^aInitial monotherapy preferred

- Elevated BP category (120/70–139/89 mmHg)
- Moderate-to-severe frailty
- Symptomatic orthostatic hypotension
- Age ≥ 85 years

TRATAMIENTO FARMACOLÓGICO



HIPERTENSIÓN RESISTENTE



PA ≥ 140/90 mmHg pese a:

- **Medidas higiénico-dietéticas adecuadas.**
- **Dosis máximas o máximas toleradas de diurético tiazídico (diurético de asa si TFG <30 ml/min/1,73m²), IECA/ARAII y Antagonistas de Ca.**

TERAPIAS CON DISPOSITIVOS



ESC

European Society
of Cardiology

European Heart Journal (2024) 00, 1–107
<https://doi.org/10.1093/eurheartj/ehae178>

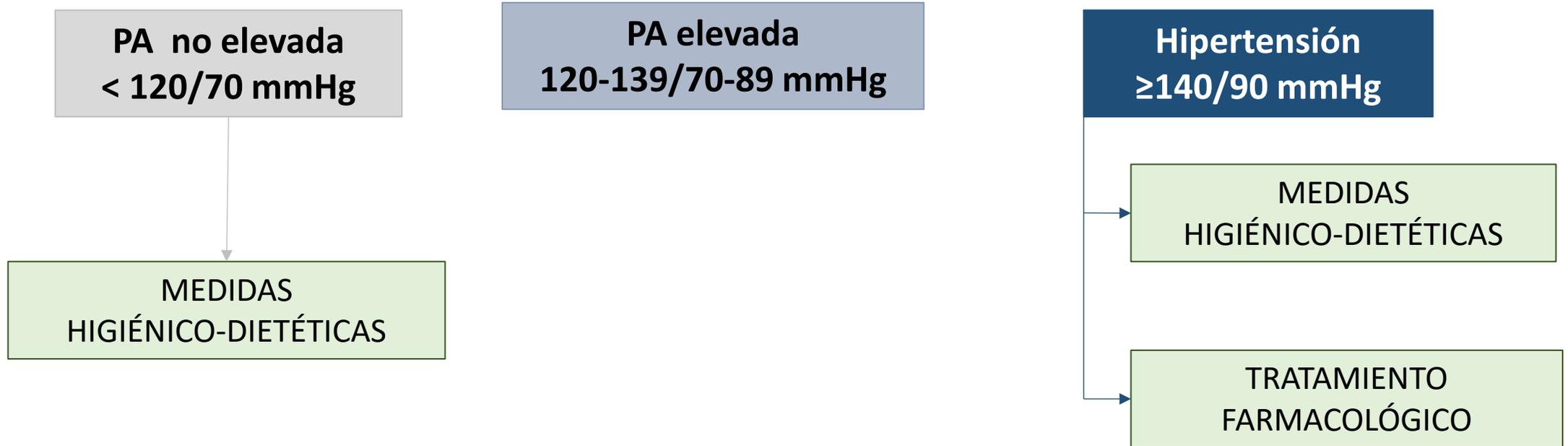
ESC GUIDELINES

2024 ESC Guidelines for the management of elevated blood pressure and hypertension

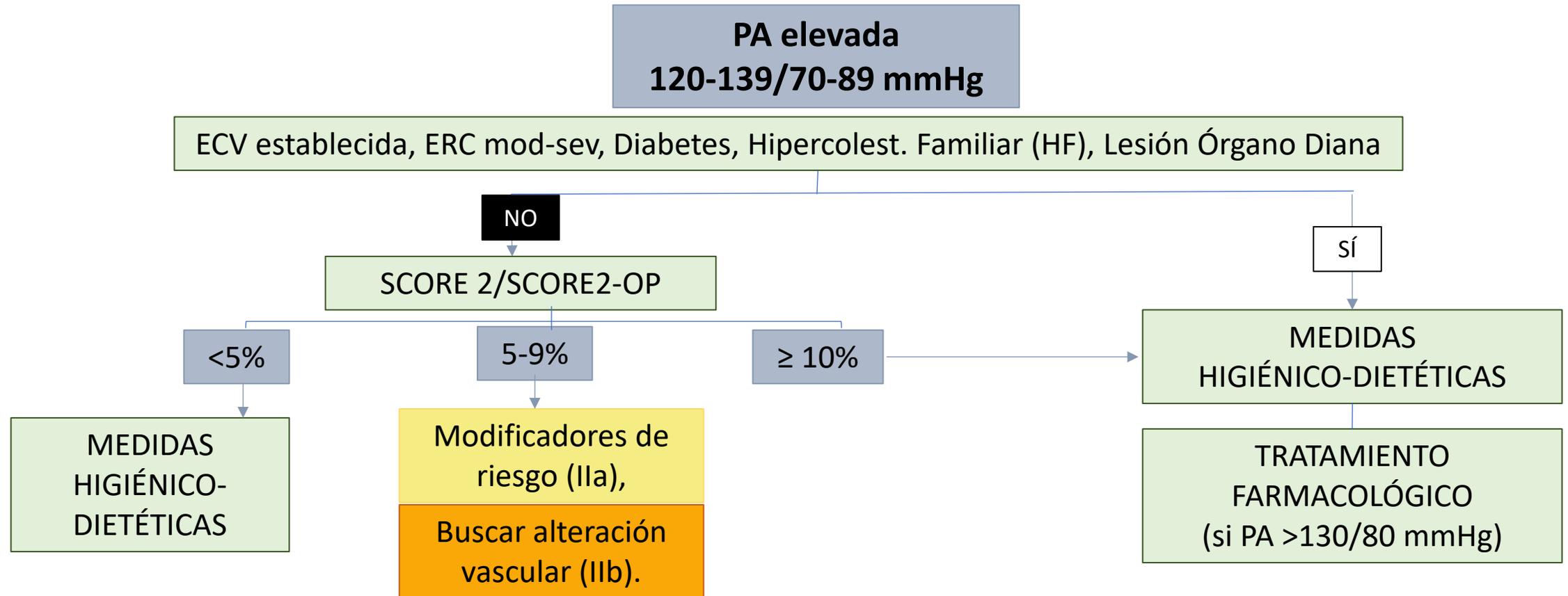
Recommendations	Class ^a	Level ^b
To reduce BP, and if performed at a medium-to-high volume centre, catheter-based renal denervation may be considered for resistant hypertension patients who have BP that is uncontrolled despite a three BP-lowering drug combination (including a thiazide or thiazide-like diuretic), and who express a preference to undergo renal denervation after a shared risk-benefit discussion and multidisciplinary assessment. ^{564,566–568,586–590}	IIb	B
To reduce BP, and if performed at a medium-to-high volume centre, catheter-based renal denervation may be considered for patients with both increased CVD risk and uncontrolled hypertension on fewer than three drugs, if they express a preference to undergo renal denervation after a shared risk-benefit discussion and multidisciplinary assessment. ^{564,566–568,586–590}	IIb	A

Due to a lack of adequately powered outcomes trials demonstrating its safety and CVD benefits, renal denervation is not recommended as a first-line BP-lowering intervention for hypertension.	III	C
Renal denervation is not recommended for treating hypertension in patients with moderate-to-severely impaired renal function (eGFR <40 mL/min/1.73 m ²) or secondary causes of hypertension, until further evidence becomes available.	III	C

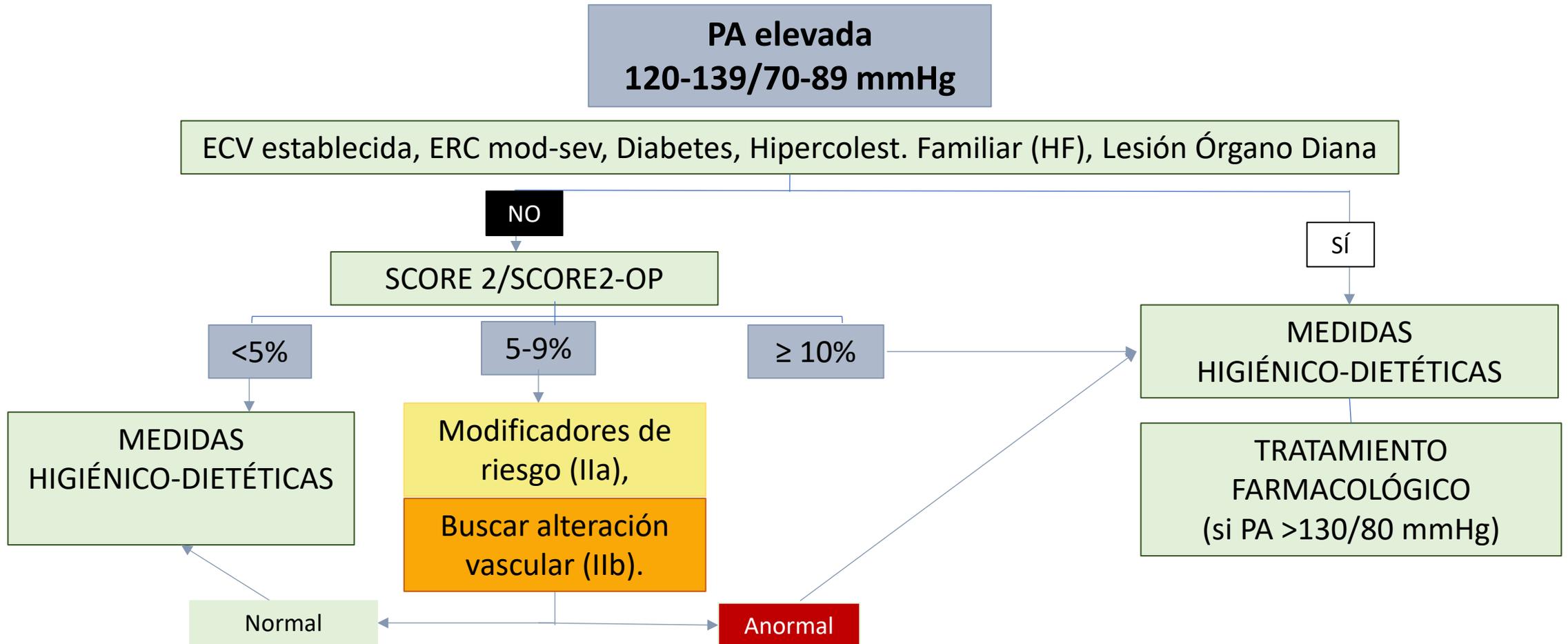
¿A QUIÉN TRATAR?



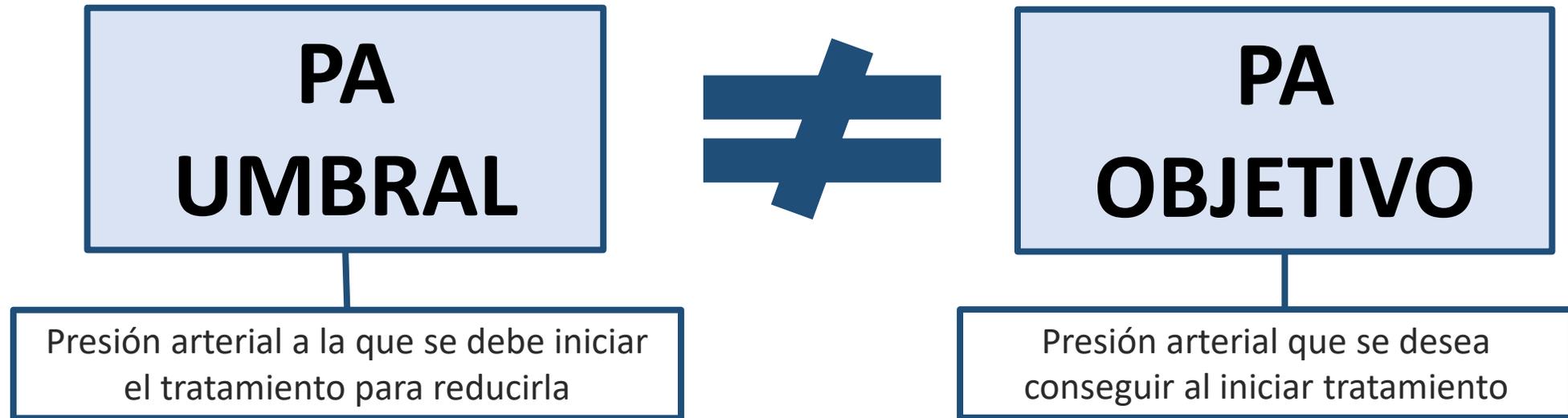
¿A QUIÉN TRATAR?



¿A QUIÉN TRATAR?



OBJETIVO



OBJETIVO

120-129/70-79 mmHg

**ÓPTIMO:
TAS < 120 mmHg**

ALARA
“as low as reasonably
achievable”

**EXCEPCIONES:
PAS < 140 mmHg**

- **> 85 años.**
- **HipoTA ortostática**
- **Fragilidad.**
- **Baja esperanza de vida.**

GRUPOS ESPECÍFICOS

Adultos jóvenes

- 18-40 años.
- Buscar HTA secundaria.
- No válidos SCORE2 → buscar lesión orgánica.

Recommendations	Class ^a	Level ^b
Comprehensive screening for the main causes of secondary hypertension is recommended in adults diagnosed with hypertension before the age of 40 years, except for obese young adults where it is recommended to start with an obstructive sleep apnoea evaluation. ^{316,626}	I	B
Since SCORE2 has not been validated for individuals <40 years, screening for HMOD may be considered in such young individuals with elevated BP without other increased CVD risk conditions to identify additional individuals for possible medical treatment. ^{28,215}	IIb	B

Embarazo *(Similar a las guías de 2018)*

- Objetivos más laxos que en población standard (<140/90 mmHg, pero evitar PAS<80 mmHg).
- Antagonistas de Ca dihidropiridínicos (nifedipino), labetalol y metildopa.

Recommendations	Class ^a	Level ^b
In women with gestational hypertension, starting drug treatment is recommended for those with confirmed office systolic BP ≥140 mmHg or diastolic BP ≥90 mmHg. ⁶⁶¹	I	B
In pregnant women with chronic hypertension, starting drug treatment is recommended for those with confirmed office systolic BP ≥140 mmHg or diastolic BP ≥90 mmHg. ^{88,660,661,678}	I	B
In women with chronic and gestational hypertension, it is recommended to lower BP below 140/90 mmHg but not below 80 mmHg for diastolic BP.	I	C
Dihydropyridine CCBs (preferably extended-release nifedipine), labetalol, and methyldopa are recommended first-line BP-lowering medications for treating hypertension in pregnancy.	I	C

GRUPOS ESPECÍFICOS

Edad muy avanzada (≥ 85 años) y fragilidad

- Excluidos de la mayoría de ECA.
- Más laxos en PA umbral y objetivo.
- Monoterapia (antagonista de Ca dihidropiridínico, IECA/ARAII).

Because the benefit in reducing CVD outcomes is uncertain in these settings, and noting that close monitoring of treatment tolerance is advised, BP-lowering treatment should only be considered from $\geq 140/90$ mmHg among persons meeting the following criteria: pre-treatment symptomatic orthostatic hypotension, age ≥ 85 years, clinically significant moderate-to-severe frailty, and/or limited predicted lifespan (< 3 years).^{131,524,526,527}

Ila

B

When initiating BP-lowering treatment for patients aged ≥ 85 years, and/or with moderate-to-severe frailty (at any age), long-acting dihydropyridine CCBs or RAS inhibitors should be considered, followed if necessary by low-dose diuretic if tolerated, but preferably not a beta-blocker (unless compelling indications exist) or an alpha-blocker.⁷¹¹

Ila

B

GRUPOS ESPECÍFICOS

Enfermedad renal crónica

- Inicio de tratamiento con PA \geq 130/80 mmHg.
- Mismos objetivos.
- IECA (o ARAII) + Ca-antagonista o diurético.
- Si TFG < 30, es necesario un diurético de asa para definir la hipertensión resistente.

Recommendations	Class ^a	Level ^b
In adults with moderate-to-severe CKD who are receiving BP-lowering drugs and who have eGFR >30 mL/min/1.73 m ² , it is recommended to target systolic BP to 120–129 mmHg, if tolerated. Individualized BP targets are recommended for those with lower eGFR or renal transplantation. ^{274,779}	I	A
In hypertensive patients with CKD and eGFR >20 mL/min/1.73 m ² , SGLT2 inhibitors are recommended to improve outcomes in the context of their modest BP-lowering properties. ^{776,777}	I	A

Diabetes

- Inicio de tratamiento con PA \geq 130/80 mmHg.
- Mismos objetivos.

HT nocturna

- PAS >120 mmHg sistólica y/o PAD >70 mmHg MAPA de 24 h.
- > RCV.
- Buscar HT secundaria.
- **Lagunas en el tratamiento.**
- **Fármacos antihipertensivos por la noche no han demostrado mejoría.**

GRUPOS ESPECÍFICOS

Enfermedad cardiaca

- Inicio de tratamiento con PA \geq 130/80 mmHg.
- Mismos objetivos.
- Si angina o IAM \rightarrow betabloqueante de primera línea.
- **Priorizar el tratamiento de la enfermedad cardiaca al de la HT.**

Recommendations	Class ^a	Level ^b
In patients with symptomatic angina who require BP-lowering treatment, beta-blockers and/or CCBs are recommended as part of that treatment. ⁵³⁸	I	A
In patients with symptomatic HFrEF/HFmrEF, the following treatments with BP-lowering effects are recommended to improve outcomes: ACE inhibitors (or ARBs if ACE inhibitors are not tolerated) or ARNi, beta-blockers, MRAs, and SGLT2 inhibitors. ⁷⁹⁵	I	A
In hypertensive patients with symptomatic HFpEF, SGLT2 inhibitors are recommended to improve outcomes in addition to their modest BP-lowering properties. ⁷⁹⁵	I	A
In patients with a history of aortic valve stenosis and/or regurgitation who require BP-lowering treatment, RAS blockers should be considered as part of that treatment. ^{794,796}	IIa	C
In patients with a history of moderate-to-severe mitral valve regurgitation who require BP-lowering treatment, RAS blockers should be considered as part of that treatment. ⁷⁹⁴	IIa	C

ATENCIÓN CENTRADA EN EL PACIENTE



CONCLUSIONES

- Se introduce una nueva categoría: “**presión arterial elevada**” (120-139/70-89 mmHg).
- Se incide en intentar conseguir mediciones ambulatorias para establecer el diagnóstico.
- Se recomienda **inicio de tratamiento** (medidas no farmacológicas y farmacológicas) a **todos los pacientes con HTA**.
- Es necesario **valorar enfermedades concomitantes o RCV** para iniciar tratamiento a los **pacientes con presión arterial elevada**.
- **IECA / ARAII, Ca-antagonistas y tiazídicos** siguen siendo el tratamiento de primera línea.
- Se prefiere **terapia combinada** a monoterapia.
- En general, los **objetivos de PA son <129/79 mmHg** (con excepciones como fragilidad, hipoTA ortostática) y si no se consigue, se persiguen alcanzar los valores más bajos posibles (“**ALARA**”).
- **Hace hincapié en la medicina personalizada y centrada en el paciente.**



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