

## ESC News

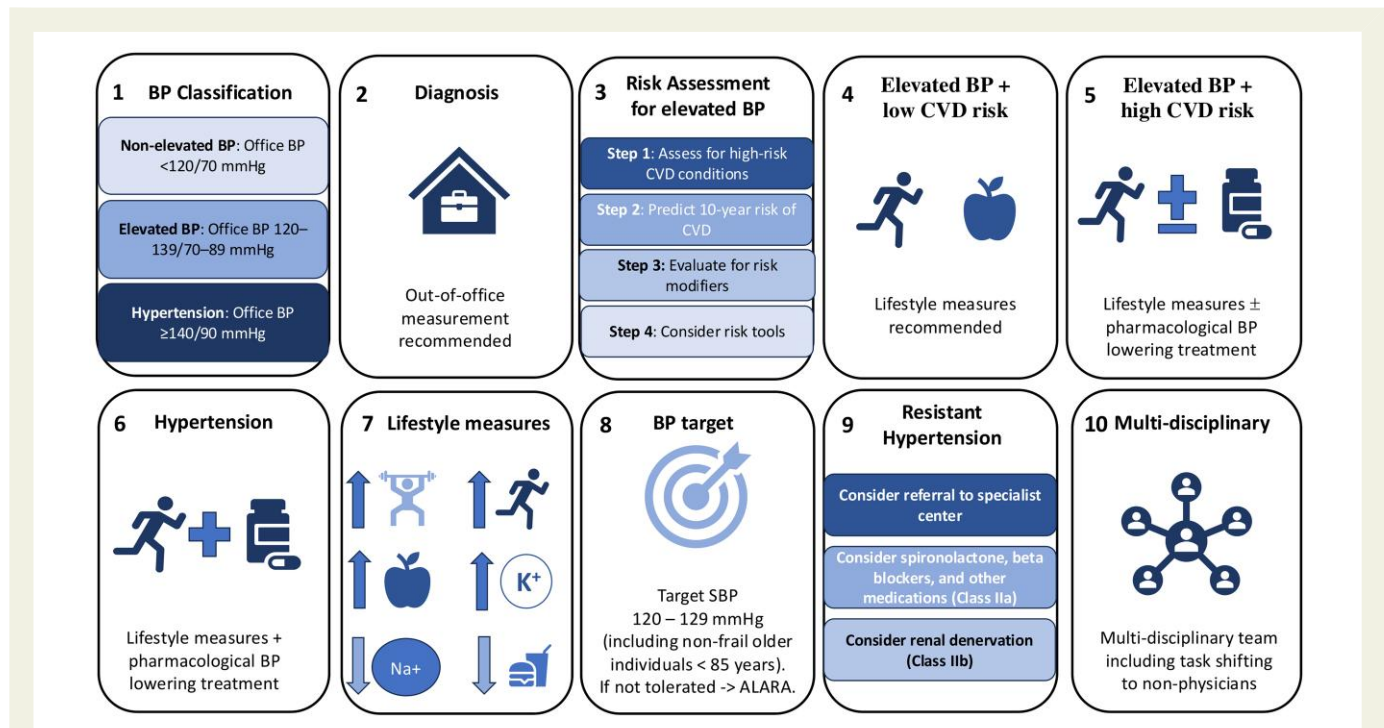
# The ‘ten commandments’ for the 2024 European Society of Cardiology guidelines on elevated blood pressure and hypertension

Cian P. McCarthy <sup>1</sup>, Rhian M. Touyz<sup>2,3,\*</sup>, and John W. McEvoy<sup>4,5,6,\*</sup>

<sup>1</sup>Division of Cardiology, Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA; <sup>2</sup>Department of Medicine, McGill University, 1001 Decarie Boulevard, Montreal, Quebec H4A 3J1, Canada; <sup>3</sup>Research Institute of the McGill University Health Centre, McGill University, 2155 Guy Street, Montreal, Quebec H3H 2R9, Canada; <sup>4</sup>Cardiology Department, Galway University Hospital and University of Galway School of Medicine, Newcastle Road, Galway H91 YR71, Ireland; <sup>5</sup>National Institute for Prevention and Cardiovascular Health, Croi House, Moyola Ln, Newcastle, Galway H91FF68, Ireland; and <sup>6</sup>Johns Hopkins Ciccarone Centre for the Prevention of Cardiovascular Disease, Johns Hopkins School of Medicine, 601 North Caroline Street, Baltimore, MD 21287, USA

The 2024 European Society of Cardiology (ESC) guidelines for the management of elevated blood pressure (BP) and hypertension were

developed by a multidisciplinary team including patient representatives.<sup>1</sup> These ‘ten commandments’ summarize the guideline (Figure 1).



**Figure 1** Summarizing the ‘ten commandments’ of the 2024 ESC Clinical Practice Guidelines for the Management of Elevated Blood Pressure and Hypertension. N.B., for the 5th commandment, drug treatment is only for persons with high CVD risk and a repeat confirmed BP of 130/80 mmHg or more after 3 months of lifestyle measures. N.B., For the 5th commandment, drug treatment is only for persons with high CVD risk and a repeat confirmed BP of 130/80 mmHg or more after 3 months of lifestyle measures. ALARA, as low as reasonably achievable; CVD, cardiovascular disease; SBP, systolic blood pressure

- (1) Blood pressure classification: A new BP classification is introduced: non-elevated (office BP < 120/70 mmHg), elevated BP (office BP 120–139/70–89 mmHg), and hypertension (office BP  $\geq$  140/90 mmHg).
- (2) Diagnosis: Out-of-office BP measurement is recommended for the diagnosis and management of elevated BP and hypertension when logistically and economically feasible (preferred over office BP).
- (3) Risk assessment: Risk assessment is recommended for persons with elevated BP to identify high cardiovascular disease (CVD) risk individuals. Risk assessment follows a step-wise approach: (i) assess for high CVD risk conditions (e.g. established CVD), (ii) predict 10-year risk of CVD, (iii) evaluate for sex-specific and shared risk modifiers, and (iv) consider additional testing with risk tools.
- (4) Elevated BP with low CVD risk: Lifestyle measures are recommended for elevated BP and low CVD risk (no high CVD risk conditions and 10-year predicted CVD risk < 5% or borderline risk of 5–<10% without risk modifiers or abnormal risk tests).
- (5) Elevated BP with high CVD risk: For elevated BP and high CVD risk (high risk CVD conditions or 10-year risk  $\geq$  10% or borderline risk of 5–<10% with risk modifiers or abnormal risk tests), lifestyle measures are recommended initially and after 3 months, if BP remains  $\geq$  130/80 mmHg, pharmacological BP-lowering treatment is recommended.
- (6) Hypertension: Lifestyle and pharmacological BP-lowering treatment are recommended for hypertension. Single-pill double combination treatment is recommended initially for most patients.
- (7) Lifestyle management: Updated lifestyle recommendations include aerobic and resistance training, increasing potassium intake, reducing sodium intake (<2 g/day), healthy diet, maintain normal body-mass index, smoking cessation, and limiting alcohol intake.
- (8) Blood pressure target: For patients on treatment, a systolic BP target of 120–129 mmHg [including for non-frail older individuals (<85 years)] is recommended. If not possible/tolerated—or in persons  $\geq$  85 years or with symptomatic orthostasis, moderate-to-severe frailty, or limited lifespan—target a BP that is as low as reasonably achievable (ALARA).
- (9) Resistant hypertension: For resistant hypertension, spironolactone (eplerenone if not tolerated), followed by beta blockers and subsequently, additional medications (e.g. alpha blockers) should be considered. Renal denervation may also be considered.
- (10) Multidisciplinary team: Multidisciplinary approaches are strongly recommended to improve BP control, including task-shifting away from physicians.

## Declarations

### Disclosure of Interest

C.P.M. is supported by a National Heart, Lung, and Blood Institute Career Development Award (K23HL167659) and has received consulting fees/honorarium from Roche Diagnostic, Abbott Laboratories, New Amsterdam Pharma, and HeartFlow, Inc. The remaining authors have nothing to disclose.

### Reference

1. 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*. 2024;ehae178. <https://doi.org/10.1093/eurheartj/ehae178>