

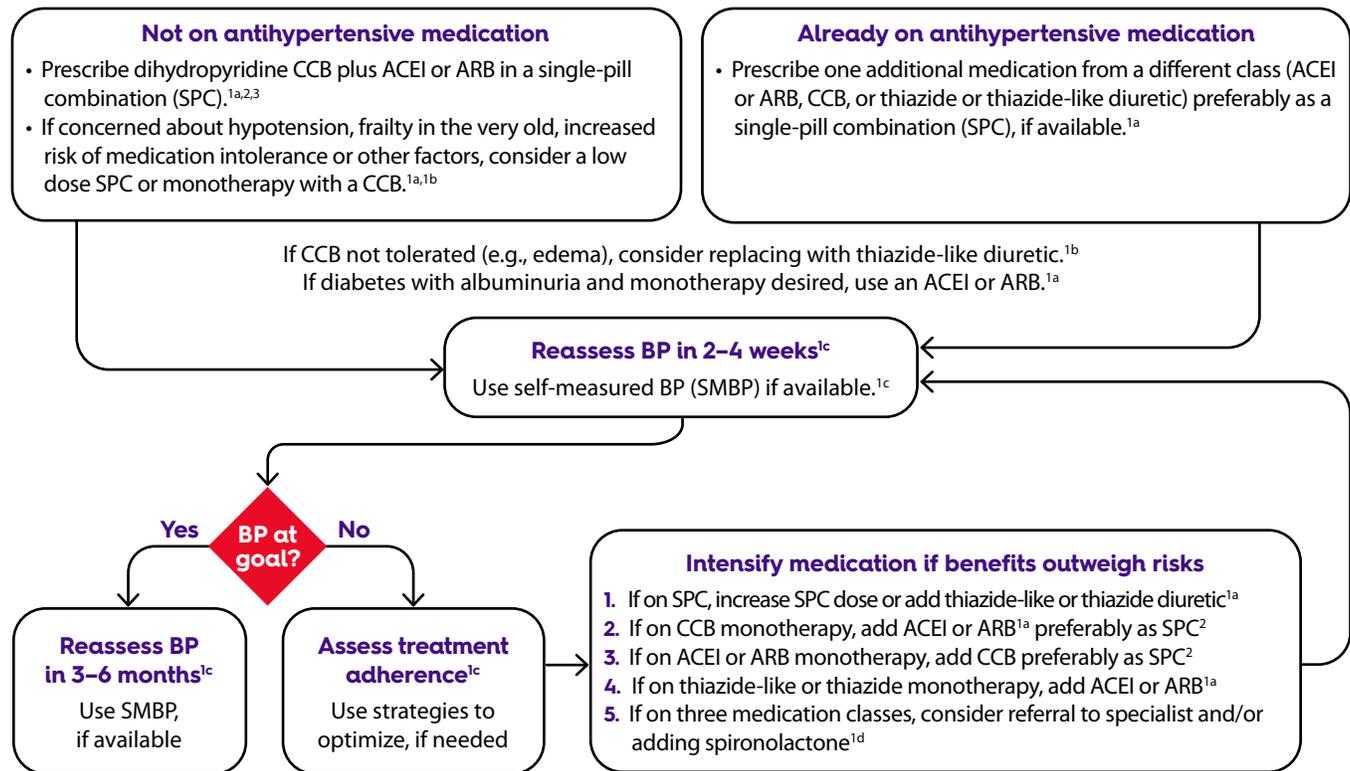
Hypertension medication treatment protocol¹

For adults without CHF, CAD, pregnancy, CKD stage 3 or albuminuria ≥ 300 mg/d or ≥ 300 mg/g albumin-to-creatinine ratio*



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Check labs at clinician's discretion.



Generic medication summary

Antihypertensive medication	Sample generic options	Dose once daily (initial) ⁴	Dose once daily (intensified) ⁴	Estimated Cost (30-day supply) ⁵
CCB and ACEI (SPC) (if ACEI not tolerated due to cough, go to next row)	amlodipine/benazepril	(a) 2.5/10 mg (b) 5/10 mg (c) 5/20 mg	(a) 5/10 mg or 5/20 mg (b) 5/20 mg or 10/20 mg (c) 10/20 mg or 10/40 mg	\$15–20
CCB and ARB (SPC) (if cost an issue, use CCB monotherapy (amlodipine) and go to next row)	(a) amlodipine/olmesartan (b) amlodipine/telmisartan	(a) 5/20 mg (b) 5/40 mg or 5/80 mg	(a) 5/40 mg or 10/20 mg or 10/40 mg (b) 5/80 mg or 10/80 mg	(a) \$29–40 (b) \$50–60
Add thiazide-like or thiazide diuretic	(a) indapamide (preferred) (b) chlorthalidone (preferred) (c) hydrochlorothiazide	(a) 1.25 mg (b) 12.5 mg = ½ 25 mg tab (c) 12.5 mg	(a) 2.5 mg (b) 25 mg (c) 25 mg	(a) \$4 (b) \$8–16 (c) \$4
Add spironolactone (optional)	spironolactone	12.5 mg = ½ 25 mg tab	25 mg	\$3–\$12

*This protocol should not be used in patients with CHF, CAD, pregnancy, CKD stage 3 or albuminuria or ≥ 300 mg/g albumin-to-creatinine ratio or the equivalent in first morning void. Simultaneous use of an ACEI, ARB, and/or renin inhibitor is not recommended.^{1c}

Disclaimer

Adherence to this protocol may not achieve goal blood pressure in every situation. Furthermore, this information should not be interpreted as setting a standard of care, or be deemed inclusive of all proper methods of care, nor exclusive of other methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the appropriateness of any specific therapy must be made by the physician and the patient in light of all the clinical factors, including labs, presented by the individual patient. This protocol reflects the best available evidence at the time that it was prepared. The results of future studies may require revisions to the recommendations in this protocol to reflect new evidence, and it is the clinician's responsibility to be aware of such changes.

References

1. Whelton PK, Carey RM, Aronow WS, Casey DE Jr, Collins KJ, Dennison Himmelfarb C, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *J Am Coll Cardiol*. 2018;71(19).
 - 1a. See page e168, evidence statement, and e189, evidence statement plus supporting text.
 - 1b. See page e210, "In the very old..." and page e169, "However, caution is advised in initiating antihypertensive pharmacotherapy with 2 drugs in older patients because hypotension or orthostatic hypotension may develop in some patients ..."
 - 1c. See page e162, Figure 4, including text within figure.
 - 1d. See page e194, "Treatment of resistant hypertension ..."
 - 1e. See page e164, for evidence statement.
2. Jamerson K, Weber MA, Bakris GL, et al. Benazepril plus amlodipine or hydrochlorothiazide for hypertension in high-risk patients. *N Engl J Med*. 2008;359(23):2417-28.
3. Feldman RD, Zou GY, Vandervoort MK, Wong CJ, Nelson SA, Feagan BG. A simplified approach to the treatment of uncomplicated hypertension: a cluster randomized, controlled trial. *Hypertension*. 2009;53:646–653. doi:10.1161/HYPERTENSIONAHA.108.123455.
4. Online.epocrates.com (2019). Epocrates Online Drugs. Available at: <https://online.epocrates.com/drugs> (accessed March 25, 2019).
5. Cost is approximation only for patients without insurance coverage based on available U.S. retail pharmacy information and GoodRx as of March 28, 2019.

This resource is part of AMA MAP BP™, a quality improvement program. Using a single or subset of AMA MAP BP tools or resources does not constitute implementing this program. AMA MAP BP includes guidance from AMA hypertension experts and has been shown to improve BP control rates by 10 percentage points and sustain results.