

Hypertension: a Chronic Condition

Definition of hypertension

The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7) classifies blood pressure as shown below.

Blood Pressure Categories for Adults¹

| | Systolic Blood Pressure | Diastolic Blood Pressure |
|-----------------------|-------------------------|--------------------------|
| Normal blood pressure | <120 mm Hg and | <80 mm Hg |
| Prehypertension | 120-139 mm Hg or | 80-89 mm Hg |
| Stage 1 hypertension | 140-159 mm Hg or | 90-99 mm Hg |
| Stage 2 hypertension | >160 mm Hg or | >100 mm Hg |

Prevalence, awareness, treatment, and control of high blood pressure in the United States^{2*}

Nearly 40% of treated patients with hypertension do not have their blood pressure controlled

| Prevalence | Awareness | Treatment With Antihypertensive Medication | Control (treated) |
|------------|-----------|--|-------------------|
| 29% | 78% | 68% | 64% |

*Data from US adults aged ≥ 18 years. Hypertension was defined as blood pressure $\geq 140/90$ mm Hg or taking prescribed antihypertensive medication. Control was defined as blood pressure $< 140/90$ mm Hg among those currently taking medication to lower blood pressure.

Potential Risks Associated With Hypertension

High blood pressure can damage arteries and make the heart work harder. Consequently, there is a risk for serious health problems, such as heart attack or stroke.³

Prevalence of Hypertension in Patients Who Had First Heart Attack, First Stroke, or Congestive Heart Failure (CHF)^{4†}

| First Heart Attack | First Stroke | CHF |
|--------------------|--------------|-----|
| 69% | 77% | 74% |

[†]Blood pressure $\geq 140/90$ mm Hg.

It is important that patients be made aware of the potential results of uncontrolled high blood pressure.

No Novartis antihypertensive product is indicated for the prevention of heart attack, stroke, or CHF.

Managing Hypertension

Treatment goals

The JNC 7 blood pressure goal for individuals with hypertension is <140/90 mm Hg.¹ The JNC 7 recommends a blood pressure goal of <130/80 mm Hg for people with hypertension who have diabetes or kidney disease.¹

Lifestyle alterations

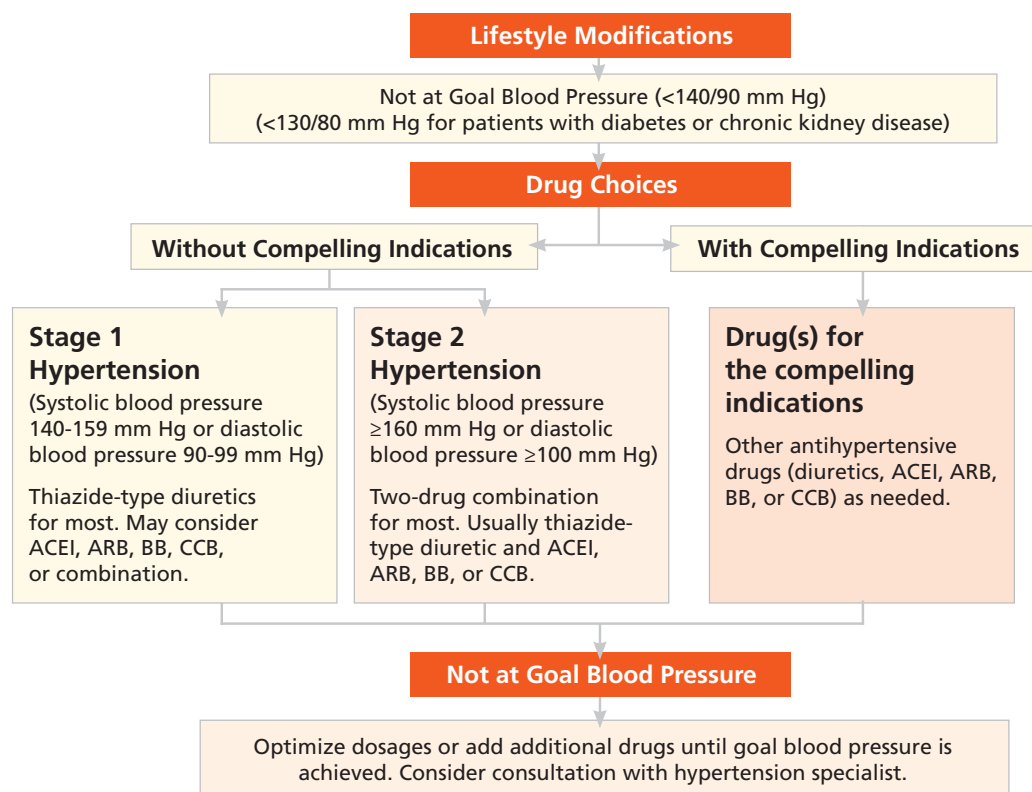
Adopting a healthier lifestyle is recommended to help prevent high blood pressure and to help manage blood pressure in patients with hypertension.¹

Pharmaceutical treatment

Control of high blood pressure often requires lifelong medication therapy, in addition to lifestyle modifications, which includes frequent monitoring and escalating the intensity of treatment when blood pressure goals are not reached or maintained.¹ More than 66% of patients with hypertension will require 2 or more antihypertensive agents selected from different drug classes.¹ For patients with substantially elevated blood pressure, 3 or more antihypertensive drugs may be required.¹

The decision to use a combination as initial therapy should be individualized and should be shaped by considerations such as baseline blood pressure, target goal, and the incremental likelihood of achieving goal with a combination product compared to monotherapy.

Algorithm for Treatment of Hypertension¹



ACEI=angiotensin-converting enzyme inhibitor; ARB=angiotensin-receptor blocker; BB=beta-blocker; CCB=calcium-channel blocker. Adapted from Chobanian AV et al. *Hypertension*. 2003;42:1206-1252.

References: 1. Chobanian AV, Bakris GL, Black HR, et al. Seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. *Hypertension*. 2003;42:1206-1252. 2. Ostchega Y, Yoon SS, Hughes J, Louis T. Hypertension awareness, treatment, and control—continued disparities in adults: United States, 2005-2006. NCHS data brief. No. 3. Hyattsville, MD: National Center for Health Statistics; 2008. 3. American Heart Association. What causes high blood pressure? <http://www.americanheart.org/presenter.jhtml?identifier=2152>. Accessed March 5, 2009. 4. Lloyd-Jones D, Adams R, Carnethon M, et al. Heart disease and stroke statistics 2009 update. A report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. *Circulation*. 2009;119:e1-e161.