

Figure 16. Algorithm for treatment of hypertension

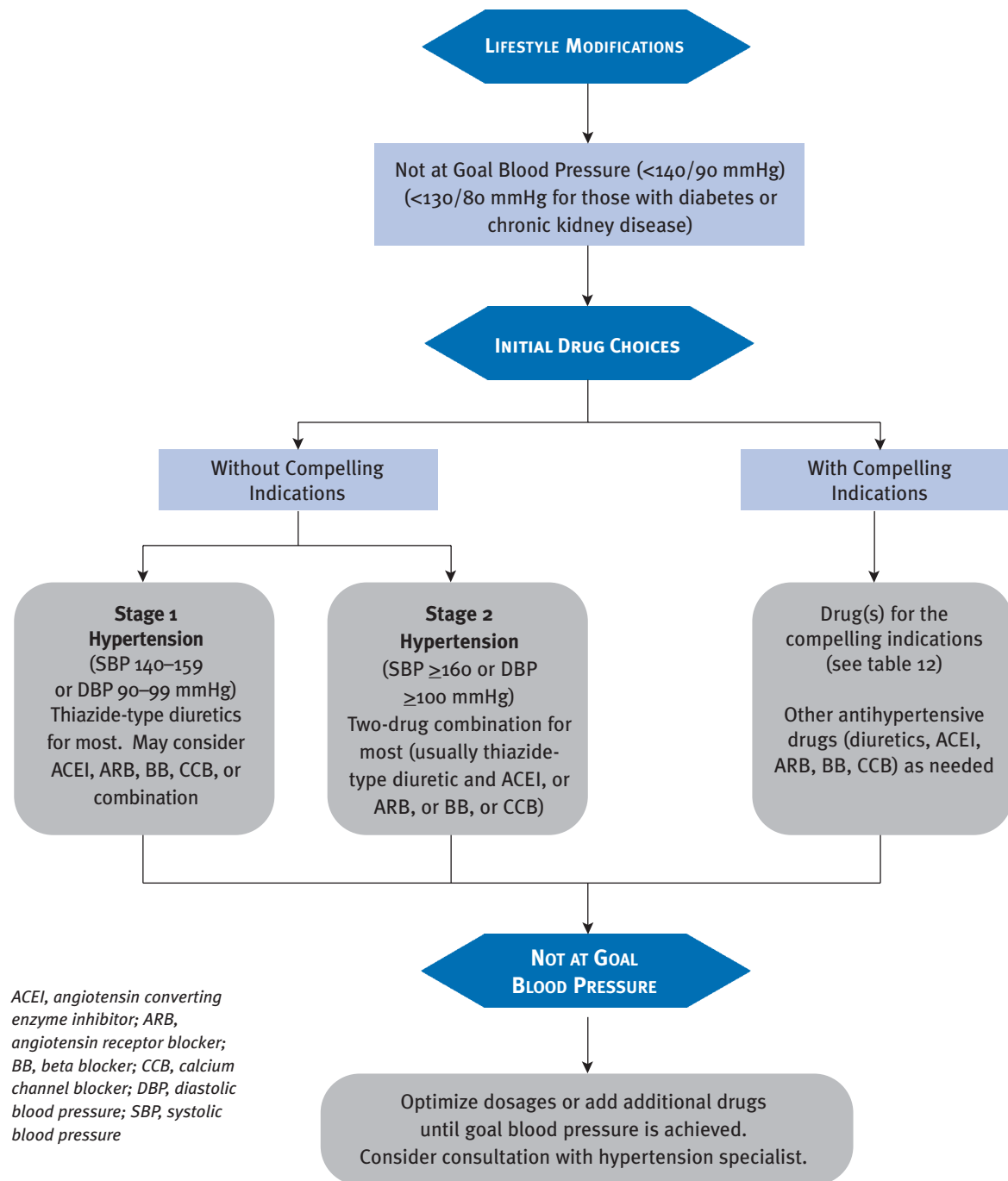


Table 12. Clinical trial and guideline basis for compelling indications for individual drug classes

COMPELLING INDICATION*	RECOMMENDED DRUGS						CLINICAL TRIAL BASIS†
	DIURETIC	BB	ACEI	ARB	CCB	ALDO ANT	
Heart failure	●	●	●	●		●	ACC/AHA Heart Failure Guideline, ¹³² MERIT-HF, ¹³³ COPERNICUS, ¹³⁴ CIBIS, ¹³⁵ SOLVD, ¹³⁶ AIRE, ¹³⁷ TRACE, ¹³⁸ ValHEFT, ¹³⁹ RALES, ¹⁴⁰ CHARM ¹⁴¹
Postmyocardial infarction		●	●			●	ACC/AHA Post-MI Guideline, ¹⁴² BHAT, ¹⁴³ SAVE, ¹⁴⁴ Capricorn, ¹⁴⁵ EPHESUS ¹⁴⁶
High coronary disease risk	●	●	●		●		ALLHAT, ¹⁰⁹ HOPE, ¹¹⁰ ANBP2, ¹¹² LIFE, ¹⁰² CONVINCe, ¹⁰¹ EUROPA, ¹¹⁴ INVEST ¹⁴⁷
Diabetes	●	●	●	●	●		NKF-ADA Guideline, ^{88,89} UKPDS, ¹⁴⁸ ALLHAT ¹⁰⁹
Chronic kidney disease			●	●			NKF Guideline, ⁸⁹ Captopril Trial, ¹⁴⁹ RENAAL, ¹⁵⁰ IDNT, ¹⁵¹ REIN, ¹⁵² AASK ¹⁵³
Recurrent stroke prevention	●		●				PROGRESS ¹¹¹

AASK, African American Study of Kidney Disease and Hypertension; ACC/AHA, American College of Cardiology/American Heart Association; ACEI, angiotensin converting enzyme inhibitor; AIRE, Acute Infarction Ramipril Efficacy; Aldo ANT, aldosterone antagonist; ALLHAT, Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial; ANBP2, Second Australian National Blood Pressure Study; ARB, angiotensin receptor blocker; BB, beta blocker; BHAT, β -Blocker Heart Attack Trial; Capricorn, Carvedilol Post-Infarct Survival Control in Left Ventricular Dysfunction; CCB, calcium channel blocker; CHARM, Candesartan in Heart Failure Assessment of Reduction in Mortality and Morbidity; CIBIS, Cardiac Insufficiency Bisoprolol Study; CONVINCe, Controlled Onset Verapamil Investigation of Cardiovascular End Points; COPERNICUS, Carvedilol Prospective Randomized Cumulative Survival Study; EPHESUS, Eplerenone Post-Acute Myocardial Infarction Heart Failure Efficacy and Survival Study; EUROPA, European Trial on Reduction of Cardiac Events with Perindopril in Stable Coronary Artery Disease; HOPE, Heart Outcomes Prevention Evaluation Study; IDNT, Irbesartan Diabetic Nephropathy Trial; INVEST, The International Verapamil-Trandolapril Study; LIFE, Losartan Intervention for Endpoint Reduction in Hypertension Study; MERIT-HF, Metoprolol CR/XL Randomized Intervention Trial in Congestive Heart Failure; NKF-ADA, National Kidney Foundation-American Diabetes Association; PROGRESS, Perindopril Protection against Recurrent Stroke Study; RALES, Randomized Aldactone Evaluation Study; REIN, Ramipril Efficacy in Nephropathy Study; RENAAL, Reduction of Endpoints in Non-Insulin Dependent Diabetes Mellitus with the Angiotensin II Antagonist Losartan Study; SAVE, Survival and Ventricular Enlargement Study; SOLVD, Studies of Left Ventricular Dysfunction; TRACE, Trandolapril Cardiac Evaluation Study; UKPDS, United Kingdom Prospective Diabetes Study; ValHEFT, Valsartan Heart Failure Trial

* Compelling indications for antihypertensive drugs are based on benefits from outcome studies or existing clinical guidelines; the compelling indication is managed in parallel with the BP.

† Conditions for which clinical trials demonstrate the benefit of specific classes of antihypertensive drugs used as part of an antihypertensive regimen to achieve BP goal to test outcomes.