The Eighth Joint National Committee on Hypertension: Summary

The Eighth Joint National Committee (JNC 8) guidelines for the management of high blood pressure were published in late 2013 and provide evidence-based recommendations for treatment of patients with hypertension. James PA, Oparil S, Carter BL, et al. 2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). JAMA. 2014;311(5):507-520. Erratum in: JAMA. 2014;7;311(17):1809. [PMID: 24352797]

Primary JNC 8 recommendations are summarized below:

1. In the general adult population <60 years of age, pharmacologic treatment is recommended when the systolic BP is ≥140 mm Hg or the diastolic BP is ≥90 mm Hg. The goal of therapy should be <140/90 mm Hg.

2. In patients ≥60 years of age, therapy is recommended if the systolic BP is ≥150 mm Hg or the diastolic BP is ≥90 mm Hg. The goal of treatment is <150/90 mm Hg, although patients with a BP of <140/90 mm Hg on well-tolerated therapy do not need to have their treatment changed.

3. The initiation threshold and goal for pharmacologic treatment in those ≥18 years of age with diabetes mellitus or chronic kidney disease is 140/90 mm Hg (which differs from the previously recommended level of 130/80 mm Hg). The American Diabetes Association (ADA), however, recommends a threshold and goal of 140/80 mm Hg in patients with diabetes mellitus.

4. In the general non-black population, thiazide diuretics, ACE inhibitors, angiotensin receptor blockers (ARBs), and calcium channel blockers (CCBs) all may be considered for initial treatment of hypertension, and all reduce the complications of hypertension. The JNC 8 guidelines include patients with diabetes mellitus in this recommendation.

5. For black patients, initial therapy should be a thiazide diuretic or CCB, including those with diabetes mellitus. As a group, black patients have less BP reduction with equivalent ACE inhibitors dosing compared with non-black patients. Furthermore, black patients initially treated with ACE inhibitors rather than CCBs have about a 50% higher rate of stroke, and combined cardiovascular outcomes are better with a thiazide diuretic than with an ACE inhibitor.

6. For all patients (regardless of race or the presence or absence of diabetes mellitus) >18 years of age with chronic kidney disease (including those with and those without proteinuria), initial therapy should be an ACE inhibitor or ARB because

these agents are renoprotective and improve renal outcomes. In black patients with chronic kidney disease but without proteinuria, the initial agent can be a CCB, thiazide diuretic, ACE inhibitor, or ARB. If the initial choice is not an ACE inhibitor or ARB, then one of these should be the second drug added if necessary to lower the BP to target (<140/90 mm Hg).