## Hypertension Drug Treatment Algorithm

Updated August 2022

- This algorithm was recommended in Systolic Blood Pressure Intervention Trial (SPRINT), with chlorthalidone the preferred thiazide-like diuretic, especially for African American patients
- Non-African American patients could also start with either angiotensinconverting enzyme inhibitor (ACEi) or angiotensin receptor blocker (ARB)
- Very effective in achieving even systolic blood pressures < 120 mmHg</li>
- No significant disparity in blood pressure lowering or outcome benefit similar across race/ethnicity was seen in the SPRINT trial
- May be better option in practices with large numbers of African American hypertensives since uses chlorthalidone rather than hydrochlorothiazide (HCTZ) as initial therapy

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This algorithm was recommended in YES ...... Is blood pressure at goal?

Continue current therapy

Add an ACEi/ARB (e.g., lisinopril 10-40 mg once daily or losartan 50-100 mg once daily)

In addition to lifestyle change:

Start a thiazide diuretic (1/2 tablet 25 mg chlorthalidone once daily – [will need pill cutter])

ORAmlodipine 5 mg once daily

Can be added at Step 1 if chronic kidney disease present (esp with proteinuria) or blood pressure > 20 mmHq above goal

NO

If on chlorthalidone, increase to 25 mg once daily

If on amlodipine, increase to 10 mg/day

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Add amlodipine 5-10 mg once daily

Add chlorthalidone to 12.5-25 mg/day once daily

Add spironolactone 25-50 mg once daily if potassium (K)<4.5

Add a beta blocker if heart rate >70 (e.g. metoprolol extended release

50-200 mg daily) or guanfacine 1-3 mg daily (not clonidine)

Consider non-adherence issues, secondary causes of hypertension (HTN), additional agents like hydralazine or minoxidil, or referral to a HTN specialist

For more information, head to Cardi-OH.org.