

## Bangladesh

# Hypertension Management Protocol

for Primary Health Care Setting\*



Measure blood pressure of **all adults  $\geq 18$  years\*\***

If SBP is 140-159 mmHg or DBP 90-99 mmHg<sup>a</sup> → Advice for lifestyle modification

Review BP after 2 weeks. If SBP is still 140-159 mmHg or DBP 90-99 mmHg, **start drug treatment as below.\*\*\***

- Step 1** Start amlodipine 5 mg<sup>b</sup> once daily.
- Step 2** Review after 1 month. If treatment target not met,<sup>c</sup> amlodipine 5 mg + losartan<sup>d</sup> 50 mg once daily.
- Step 3** Review after 1 month. If treatment target not met,<sup>c</sup> amlodipine 5 mg + losartan<sup>d</sup> 50 mg + hydrochlorothiazide 12.5 mg once daily<sup>e</sup>.
- Step 4** Review after 1 month. If treatment target not met,<sup>c</sup> refer to a specialist.

### Treatment Target Based on Levels of Blood Pressure

Most Patients	$\leq 140/90$ mmHg
Having Comorbidity (diabetes, ischemic heart disease, stroke, chronic kidney disease)	$\leq 130/80$ mmHg
High CVD Risk > 30% (as per CVD risk prediction chart)	$\leq 130/80$ mmHg

### For Women of Childbearing Age Who May Become Pregnant

- Step 1:** Start amlodipine 5 mg<sup>b</sup> once daily.
- Step 2:** Review after 1 month. If treatment target not met,<sup>c</sup> amlodipine 10 mg once daily.
- Step 3:** Review after 1 month. If treatment target not met,<sup>c</sup> refer to specialist.

**⚠ DO NOT PRESCRIBE losartan or any ACE inhibitor or ARB to women who may become pregnant.**

- For patients with SBP  $\geq 160$  mmHg or DBP  $\geq 100$  mmHg, start immediate treatment at step 2 (amlodipine 5 mg + losartan 50 mg).
- Consider amlodipine 2.5 mg as a starting dose for the elderly or patients with low body weight.
- Check that the patient has been taking drugs regularly and correctly.
- Before initiating and several weeks after starting losartan, check serum creatinine and serum potassium. Avoid losartan for women of childbearing age who may become pregnant.
- Consider the option of increasing losartan to 100 mg before proceeding to step 3, and continuing the dose of losartan 100 mg for step 3.

\* Adapted from National Protocol for Management of Diabetes and Hypertension, NCDC programme, DGHS MOHFW 2018-19.

\*\* For patients aged  $\geq 40$  years, decision to treat high blood pressure may be taken based on total cardiovascular disease (CVD) risk estimation.

\*\*\* This protocol should not be used for pregnant patients. If patient is pregnant, refer to a specialist.

### Advice for lifestyle modification



Avoid alcohol and tobacco, including secondhand smoke



Exercise 2.5 hr/week



Eat a low salt diet (under 1 tsp/day)



Eat a heart-healthy diet

If overweight, lose weight.

Eat at least 5 servings of vegetables/fruit per day.

Use healthy oils, such as sesame (til), olive, safflower, sunflower.

Eat nuts, peas, whole grains and foods rich in potassium like spinach, watermelon, yogurt and banana.

Limit red meat to once or twice per week at most.

Eat fish or other food rich in omega 3 fatty acids at least twice per week.

Avoid added sugar from cakes, cookies, sweets, fizzy drinks.

