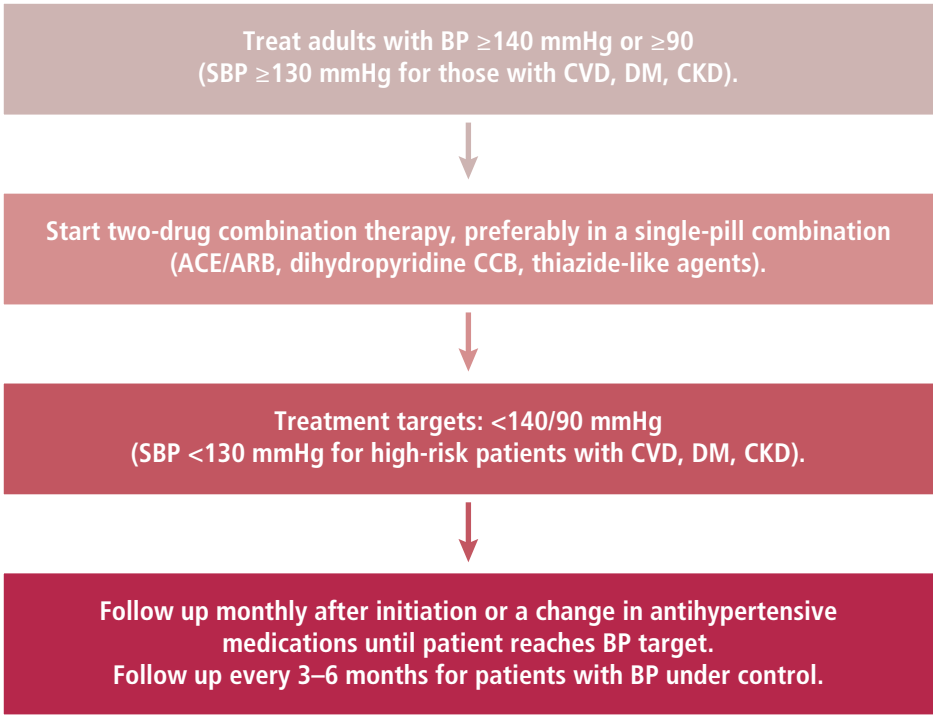
6 Implementation tools

6.1 Guideline recommendations

Graphic summaries of the guideline recommendations are presented below in an algorithmic approach (Figs 3 and 4). This maps the recommendations to a patient-care pathway.

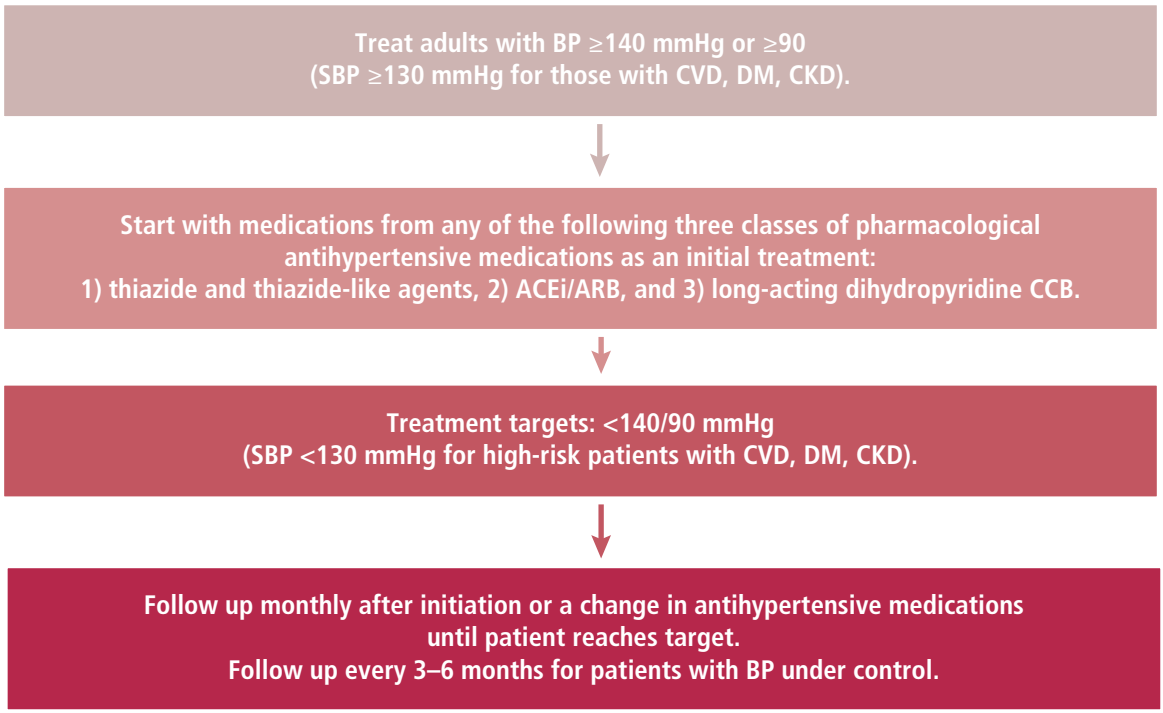
Fig. 3 An approach for starting treatment with a single-pill combination



Pharmacological treatment to be initiated under the following circumstances:

- A diagnosis of HTN has already been made.
- Initiation of pharmacological HTN treatment should start no later than four weeks after diagnosis of HTN.
- If BP level is high or there is accompanying evidence of end organ damage, initiation of treatment should be started without delay.
- Patient should be counselled about starting medication therapy.
- Basic laboratory testing (electrolytes, creatinine, lipogram, glucose, HbA1C, urine dipstick, and ECG) to occur as long as it does not delay treatment.
- A CV risk assessment can be conducted immediately (as long as it does not delay initiation of treatment) or at a later visit.
- Consider using diuretics or CCB in patients 65 years or older, or those of African or Afro-Caribbean descent, beta-blockers (BBs) post MI, ACEis/ARBs in those with DM, heart failure or CKD.

Fig. 4 An approach for starting treatment not using a single-pill combination (i.e. with monotherapy or free combination therapy)



Pharmacological treatment to be initiated under the following circumstances:

- A diagnosis of HTN has already been made.
- Initiation of pharmacological HTN treatment should start no later than four weeks after diagnosis of HTN.
- If BP level is high or there is accompanying evidence of end organ damage, initiation of treatment should be started without delay.
- Patient should be counselled about starting medication therapy.
- Basic laboratory testing (electrolytes, creatinine, lipogram, glucose, HbA1C, urine dipstick, and ECG) to occur as long as it does not delay treatment.
- A CV risk assessment can be conducted immediately (as long as it does not delay initiation of treatment) or at a later visit.
- Consider using diuretics or CCB in patients 65 years or older, or those of African or Afro-Caribbean descent, beta-blockers (BBs) post MI, ACEis/ARBs in those with DM, heart failure or CKD.

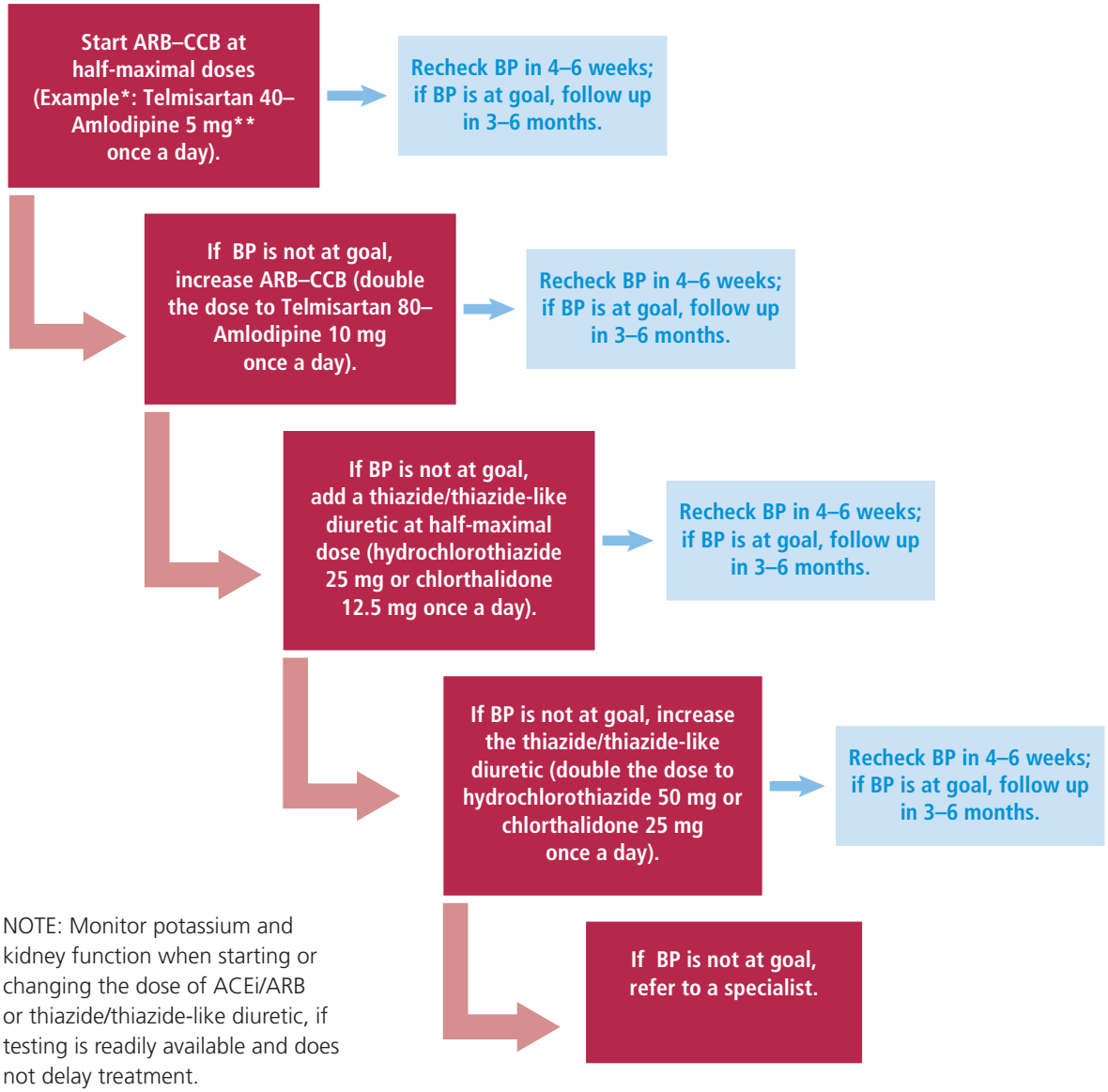
6.2 Drug- and dose-specific protocols

Two examples of suggested drug and dose-specific protocols are presented below (Figs 5 and 6). These should be viewed as examples and other approaches are possible.

Algorithm 1: Initiation of treatment with a single-pill combination

- Beginning treatment with two antihypertensive drugs from different classes is recommended when baseline BP is ≥20/10 mmHg above goal, and should be considered when baseline BP is ≥140/90 mmHg.
- Drugs affecting the renin–angiotensin system (ACEis, ARBs, and aliskiren) have been associated with serious fetal toxicity, including renal and cardiac abnormalities and death; they are contraindicated for use during pregnancy.

Fig. 5 Algorithm 1



NOTE: Monitor potassium and kidney function when starting or changing the dose of ACEi/ARB or thiazide/thiazide-like diuretic, if testing is readily available and does not delay treatment.

This protocol is contraindicated for women who are or could become pregnant. Neither an ACEI or ARB should be given to pregnant women.

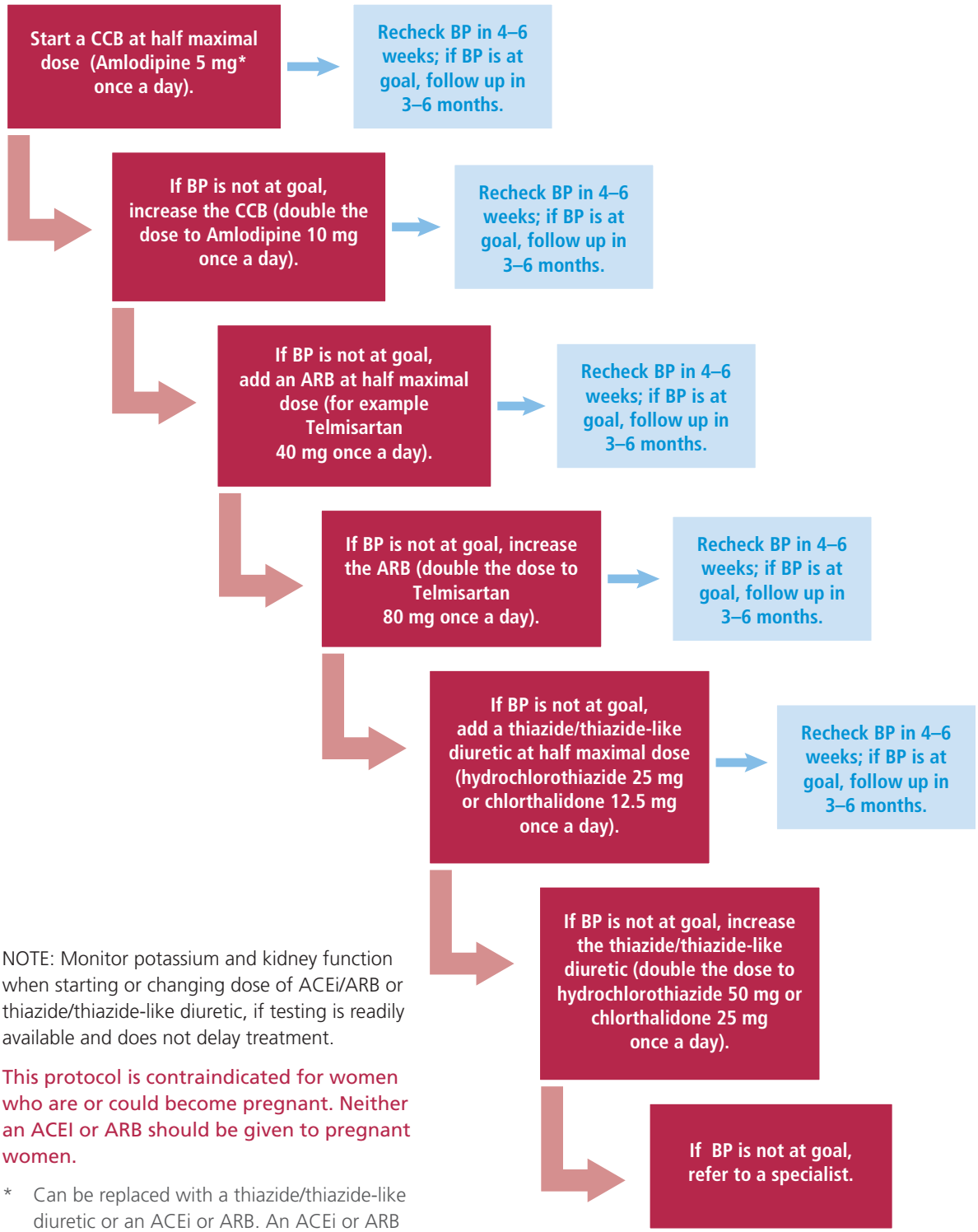
* The medications mentioned serve as examples and can be replaced with any two medications from any of the three drug classes (ACEis/ARBs, CCBs or thiazide/thiazide-like diuretics). Start two individual pills or, if available, both in a single-pill combination (fixed-dose combination).

** Can be replaced with other individual pills or, if available, other single-pill combinations (fixed-dose combinations).

Algorithm 2: Initiation of treatment not using a single-pill combination (i.e. with monotherapy or free combination therapy)

- A CCB, rather than a thiazide-type diuretic or ACEi/ARB, was selected as first-line medication if one agent is used, to avoid the need for electrolyte measurements or to alleviate concerns regarding potential change in GFR.
- Drugs affecting the renin-angiotensin system (ACEis, ARBs, and aliskiren) have been associated with serious fetal toxicity, including renal and cardiac abnormalities and death; they are contraindicated for use during pregnancy.

Fig. 6 Algorithm 2



NOTE: Monitor potassium and kidney function when starting or changing dose of ACEi/ARB or thiazide/thiazide-like diuretic, if testing is readily available and does not delay treatment.

This protocol is contraindicated for women who are or could become pregnant. Neither an ACEI or ARB should be given to pregnant women.

* Can be replaced with a thiazide/thiazide-like diuretic or an ACEi or ARB. An ACEi or ARB is preferred for patients with proteinuria.