



Cardiovascular, kidney, and metabolic conditions are deeply interconnected, with shared risk factors and therapies. A holistic, coordinated approach, **led by primary care**, is therefore essential to support individuals to maintain their cardio-kidney-metabolic health. The approach should be individualized by patient profile, considering clinical presentation, comorbidities, social determinants of health, age, sex, gender and pregnancy/lactation), and may involve both initiation of guideline-directed medical therapies and/or non-medical interventions.

Social Determinants of Health

- Social determinants of health are the conditions in which people are born, grow, live, work, and age (e.g. education, family income, food security, employment status, proximity to pollutants, housing).
- Based on these, consider where referral to other members of the multidisciplinary team, including, social workers, physiotherapists, dieticians, etc, may be needed.



Non-Medication Interventions to Discuss

Healthy low-salt diet

Smoking cessation

Regular physical activity

Weight control

Avoidance of nephrotoxic agents
(e.g. traditional medicines, NSAIDs, contrast media)

These non-medical interventions are relevant not just for kidney disease, but also for cardiovascular and metabolic conditions.

First Line Therapies

RAASi

- Indications for CKD (with or without diabetes), heart failure, hypertension.
- Can be continued but initiated with caution, if at all, where compelling indications exist if GFR < 20 ml/min. Close monitoring would be required if initiated.
- Aim for SBP < 120 mm Hg at maximum tolerated dose if HTN.
- Mitigate the risk of hyperkalemia with preventive measures (continuous review of concomitant drugs, diet, use of diuretics, acidosis correction and K+ binders).
- If hyperkalemia arises, manage according to [this tool](#).

SGLT2i

- Indications for CKD, heart failure, Type 2 diabetes.
- Continue until dialysis or transplant.
- Can be continued but not initiated in individuals with eGFR < 20 mL/min.

Additional Therapies

nsMRA

- To reduce the risk of CKD progression and cardiovascular events in individuals with Type 2 diabetes and CKD, and individuals with heart failure (HFpEF).
- Should not be initiated if eGFR < 25 mL/min.
- Mitigate the risk of hyperkalemia with preventive measures (continuous review of concomitant drugs, diet, use of diuretics, acidosis correction and K+ binders). If hyperkalemia arises, manage according to [this tool](#).

GLP-1RA

- Indicated in individuals with Type 2 diabetes.
- Manage hyperglycemia and reduce the risk of CKD progression and cardiovascular events.

Based on patient profile, consider the need for:

Individualized BP Control

Glycemic Control

Anti-platelet therapies for cardiovascular protection

Dyslipidemia therapies for cardiovascular protection

Symptom Management