12. Cardiovascular medicines

12.7. Fixed-dose combinations for prevention of atherosclerotic cardiovascular disease

Acetylsalicylic acid + simvastatin + ramipril + atenolol + hydrochlorothiazide

**Indication**
Chronic ischaemic heart disease

**ICD11 code**: BA5Z

**Medicine type**
Chemical agent

**List type**
Core

**Additional notes**
Therapeutic alternatives are atorvastatin, Fluvastatin, lovastatin, pravastatin (for simvastatin); medicines in the 4th level ATC chemical subgroup C09AA ACE inhibitors, plain (for ramipril); bisoprolol, carvedilol and metoprolol (for atenolol); and chlorothiazide, chlortalidone and indapamide (for hydrochlorothiazide)

**Formulations**
Oral > Solid > tablet: 100 mg + 20 mg + 5 mg + 50 mg + 12.5 mg

**EML status history**
First added in 2023 (TRS 1049)

**Sex**
All

**Age**
Adolescents and adults

**Therapeutic alternatives**
The recommendation is for this specific medicine

**Patent information**
Patents have expired in most jurisdictions
Read more about patents.

**Wikipedia**
Acetylsalicylic acid + simvastatin + ramipril + atenolol + hydrochlorothiazide

**DrugBank**
Acetylsalicylic acid, Simvastatin, Ramipril, Atenolol, Hydrochlorothiazide

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**Summary of evidence and Expert Committee recommendations**

The Committee recommended the inclusion of three fixed-dose combinations of cardiovascular medicines (acetylsalicylic acid + simvastatin + ramipril + atenolol + hydrochlorothiazide; acetylsalicylic acid + atorvastatin + ramipril; atorvastatin + perindopril + amlodipine) on the core list of the EML for use in primary and secondary prevention of atherosclerotic cardiovascular diseases. Components of the combinations are listed with a square box, indicating other medicines within the respective pharmacological classes represent therapeutic alternatives, consistent with the current square box listings for hydrochlorothiazide, antihypertensives and statins. The Committee noted evidence from large randomized-controlled trials that indicate that use of these combinations is associated with reduced risks of cardiovascular events, including fatal and non-fatal myocardial infarction and stroke and the need for revascularization in primary and secondary prevention settings. The Committee also noted data that indicates that the combination products are associated with improved adherence and quality of life, at prices equal to or lower than multiple component monotherapies. This recommendation notwithstanding, the Committee emphasized that the ongoing availability of single agent cardiovascular medicines was critical to allow treatment modification where necessary, and that combination products should not displace single components at country level. The Committee further considered that guidance concerning the most appropriate use of these FDCs for different indications should be provided in separate WHO guidance documents.