SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Kollopan 500 mg/ 400 IU film-coated tablet
Kollopan 500 mg/ 800 IU film-coated tablet

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

(Invented name) 500 mg/ 400 IU film-coated ta blet
Each tablet contains calcium carbonate equivalent to 500 mg calcium and
10 microgram cholecalciferol equivalent to 400 IU vitamin D_3

Excipient(s) with known effect:
One tablet contains 15.0 mg isomalt (E953), sucrose 0.8 mg

(Invented name) 500 mg/ 800 IU film-coated tablet
Each tablet contains calcium carbonate equivalent to 500 mg calcium and
20 microgram cholecalciferol equivalent to 800 IU vitamin D_3

Excipient(s) with known effect:
One tablet contains 30.0 mg isomalt (E953), sucrose 1.6 mg

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Film-coated tablet

(Invented name) 500 mg/ 400 IU film-coated tablet
White to off white, capsule shaped, biconvex, film-coated tablet with break line, engraved CC 11 on one side, 18 x 8 mm.

(Invented name) 500 mg/ 800 IU film-coated tablet
White to off white, capsule shaped, biconvex, film-coated tablet with break line, engraved CC 12 on one side, 18 x 8 mm

The score line is only to facilitate breaking for ease of swallowing and not to divide into equal doses.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Prevention and treatment of calcium and vitamin D deficiency in elderly people.
Vitamin D and calcium supplement in addition to specific osteoporosis treatment of patients who are at risk of vitamin D and calcium deficiency.

4.2 Posology and method of administration

Posology

Adults and elderly

500 mg/400 IU tablet: 2 tablets daily

500 mg/ 800 IU tablet: 1 tablet daily

The calcium level in (Invented name) 500 mg/ 800 IU is lower than the recommended daily intake. (Invented name) 500 mg/ 800 IU is thus primarily intended for individuals in need of Vitamin D substitution with a calcium intake of 500 mg to 1000 mg daily via diet. The patient's intake of calcium via diet should be calculated by prescribing physician.

For the 500 mg/800 IU strength 2 tablets daily may be considered at low calcium intake via diet and confirmed vitamin D deficiency. The dosage of vitamin D in case of shortage should be adapted to desired serum level of 25-hydroxycolecalciferol (25 (OH) D), the severity of the condition and the patient's response to the treatment.

Dosage in hepatic impairment
No dose adjustment is required.

*Dosage in renal impairmen*t
(Invented name) should not be used in patients with severe renal impairment (see section 4.3).

Paediatric population
(Invented name) is not intended for use in children.

Method of administration
Oral. The tablet should be swallowed whole, divided or crushed before intake.

4.3 Contraindications

- Hypersensitivity to the active substances or to any of the excipients listed in section 6.1.
- Hypercalciuria and hypercalcaemia and diseases and/or conditions resulting in hypercalcaemia and/or hypercalciuria
- Nephrolithiasis
- Nephrocalcinosis
- Hypervitaminosis D
- Severe renal impairment and renal failure

4.4 Special warnings and precautions for use

(Invented name) tablets should be prescribed with caution to patients suffering from sarcoidosis due to risk of increased metabolism of vitamin D into its active form. These patients should be monitored with regard to the calcium content in serum and urine.

During long-term treatment, serum calcium levels should be followed and renal function should be monitored through measurements of serum creatinine. Monitoring is especially important in elderly patients on concomitant treatment with cardiac glycosides or diuretics (see section 4.5) and in patients with a high tendency to calculus formation. In case of hypercalcaemia (the amount of calcium in the urine exceeds 300 mg (7,5 mmol/24 hours)

or signs of impaired renal function the dose should be reduced or the treatment discontinued.

Vitamin D should be used with caution in patients with impairment of renal function and the effect on calcium and phosphate levels should be monitored. The risk of soft tissue calcification should be taken into account. In patients with severe renal insufficiency, vitamin D in the form of cholecalciferol is not metabolised normally and other forms of vitamin D should be used (see section 4.3).

(Invented name) tablets should be used cautiously in immobilised patients with osteoporosis due to increased risk of hypercalcaemia.

The content of vitamin D (400 IU or 800 IU) in (Invented name) tablets should be considered when prescribing other medicinal products containing vitamin D. Additional doses of calcium or vitamin D should be taken under close medical supervision. In such cases it is necessary to monitor serum calcium levels and urinary calcium excretion frequently. Milk-alkali syndrome (Burnett's syndrome), i.e. hypercalcaemia, alkalosis and renal impairment, can develop when large amounts of calcium are ingested with absorbable alkali.

Co-administration with tetracyclines or quinolones is usually not recommended, or must be performed with caution (see section 4.5).

Paediatric population
(Invented name) tablets are not intended for use in children.

(Invented name) contains sucrose and isomalt
(Invented name) 500 mg/ 400 IU tablet contains 0.8 mg sucrose and (Invented name) 500 mg/ 800 IU tablet contains 1.6 mg sucrose. The tablets also contain isomalt (E953). Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine.

Sodium content
This medicine contains less than 1 mmol sodium (23 mg) per tablet, that is to say essentially 'sodium-free'.

4.5 Interaction with other medicinal products and other forms of interaction

Thiazide diuretics reduce the urinary excretion of calcium. Due to increased risk of hypercalcaemia, serum calcium should be regularly monitored during concomitant use of thiazide diuretics.

Concomitant use of phenytoin or barbiturates may reduce the effect of vitamin D_3 since the metabolism increases.

Systemic corticosteroids reduce calcium absorption. During concomitant use, it may be necessary to increase the dose of (Invented name).

Hypercalcaemia may increase the toxicity of cardiac glycosides during treatment with calcium and vitamin D. Patients should be monitored with regard to electrocardiogram (ECG) and serum calcium levels.

The efficacy of levothyroxine can be reduced by the concurrent use of calcium, due to decreased levothyroxine absorption. Administration of calcium and levothyroxine should be separated by at least four hours.

If a bisphosphonate or sodium fluoride is used concomitantly, this preparation should be administered at least three hours before the intake of (Invented name) since gastrointestinal absorption may be reduced.

Simultaneous treatment with ion exchange resins such as cholestyramine or laxatives such as paraffin oil may reduce the gastrointestinal absorption of vitamin D.

Calcium carbonate may interfere with the absorption of concomitantly administered tetracycline preparations. For this reason, tetracycline preparations should be administered at least two hours before or four to six hours after oral intake of calcium.

The absorption of quinolone antibiotics may be impaired if administered concomitantly with calcium. Quinolone antibiotics should be taken two hours before or six hours after intake of calcium.

Calcium salts may decrease the absorption of iron, zinc and strontium ranelate. Consequently, iron, zinc or strontium ranelate preparations should be taken at least two hours before or after (Invented name).

Treatment with orlistat may potentially impair the absorption of fat-soluble vitamins (e.g. vitamin D_3).

Oxalic acid (found in spinach and rhubarb) and phytic acid (found in whole cereals) may inhibit calcium absorption through formation of insoluble compounds with calcium ions. The patient should not take calcium products within two hours of eating foods high in oxalic acid and phytic acid.

Calcium decreases the exposure (AUC and Cmax) of HIV integrase inhibitors (such as ritonavir, dolutegravir, raltegravir, and elvitegravir) by chelation if co-administered. Please advise the product information of the specific HIV integrase inhibitor in use for further guidance.

4.6 Fertility, pregnancy and lactation

Pregnancy

(Invented name) is not recommended during pregnancy in patients without vitamin D- and calcium deficiency. In case of vitamin D deficiency, the recommended dose depends on national guidelines, however, the maximum daily dose should not exceed 2500 mg calcium and 4,000 IU vitamin D per day. Studies in animals have shown reproductive toxicity of high doses of vitamin D (see section 5.3). In pregnant women, overdoses of calcium and vitamin D should be avoided as permanent hypercalcaemia has been related to adverse effects on the developing foetus. A large amount of data on pregnant women (more than1000 exposed outcomes) indicated no malformative nor feto/neonatal toxicity for vitamin D and calcium at therapeutic doses. (Invented name) can be used during pregnancy if clinically needed i.e., in case of a calcium and vitamin D deficiency.

Breastfeeding

Calcium and vitamin D3 pass into the breast-milk and an overdose has to be avoided in the infant. This should be considered if additional vitamin D is given to the child. A decision must be made whether to discontinue breast-feeding or to discontinue [Invented name] or adjust therapy taking into account the benefit of breast feeding for the child and the benefit of therapy for the

woman.

Fertility
Normal endogenous levels of calcium and vitamin D_3 are not expected to have any adverse effects on fertility.

4.7 Effects on ability to drive and use machines

(Invented name) has no or negligible influence on the ability to drive and use machines.

4.8 Undesirable effects

Adverse reactions frequencies are defined as:

Very common (≥1/10)
Common (≥1/100 to
<1/10)
Uncommon (≥1/1,000 to
<1/100) Rare (≥1/10,000 to
<1/1,000)
Very rare (<1/10,000)
Not known (cannot be estimated from the available data)

Immune system disorders
Not known: Hypersensitivity reactions such as angio-oedema or laryngeal oedema.

Metabolism and nutrition disorders
Uncommon: Hypercalcaemia and hypercalciuria.
Very rare: Seen usually only in overdose (see section 4.9) Milk-alkali syndrome.

Gastrointestinal disorders
Rare: Constipation, flatulence, nausea, abdominal pain and diarrhoea.

Skin and subcutaneous tissue disorders
Rare: Pruritus, rash and urticaria.

Patients with renal impairment are at potential risk of hyperphosphatemia, nephrolithiasis and nephrocalcinosis. See section 4.4.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V.*

4.9 Overdose

Overdose can lead to hypervitaminosis and hypercalcaemia. Symptoms of hypercalcaemia may include anorexia, thirst, nausea, vomiting, constipation, abdominal pain, muscle weakness, fatigue, mental disturbances, polydipsia, polyuria, bone pain, nephrocalcinosis, renal calculi and in severe cases, cardiac arrhythmias. Extreme hypercalcaemia may result in coma and death. Persistently high calcium levels may lead to irreversible renal damage and soft tissue calcification.

Milk-alkali syndrome may occur in patients who ingest large amounts of calcium and absorbable alkali. Symptoms are frequent urge to urinate, continuing headache, continuing loss of appetite, nausea or vomiting, unusual tiredness or weakness, hypercalcaemia, alkalosis and renal impairment.

Treatment of hypercalcaemia: The treatment with calcium and vitamin D must be discontinued. Treatment with thiazide diuretics, lithium, vitamin A, vitamin D and cardiac glycosides must also be discontinued. Rehydration, and, according to severity, isolated or combined treatment with loop diuretics, bisphosphonates, calcitonin and corticosteroids. Serum electrolytes, renal function and diuresis must be monitored. In severe cases, ECG and CVP should be followed.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Calcium combinations with vitamin D and/or other drugs, ATC code: A12AX

Vitamin D increases the intestinal absorption of calcium.

Administration of calcium and vitamin D_3 counteracts the increase of parathyroid hormone (PTH) which is caused by calcium deficiency and which cause increased bone resorption.

A clinical study of institutionalised patients suffering from vitamin D deficiency indicated that a daily intake of two tablets of calcium 500 mg/vitamin D 400 IU for six months normalised the value of the 25-hydroxylated metabolite of vitamin D_3 and reduced secondary hyperparathyroidism and alkaline phosphatases.

An 18 month double-blind, placebo controlled study including 3270 institutionalised women aged 84+/- 6 years who received supplementation of vitamin D (800 IU/day) and calcium phosphate (corresponding to 1200 mg/day of elemental calcium), showed a significant decrease of PTH secretion. After 18 months, an "intent-to treat" analysis showed 80 hip fractures in the calcium-vitamin D group and 110 hip fractures in the placebo group (p=0,004). A follow-up study after 36 months showed 137 women with at least one hip fracture in the calcium-vitamin D group (n=1176) and 178 in the placebo group (n=1127) (p<0,02).

5.2 Pharmacokinetic properties

Calcium
Absorption: The amount of calcium absorbed through the gastrointestinal tract is approximately 30% of the swallowed dose.

Distribution and biotransformation: 99% of the calcium in the body is concentrated in the hard structure of bones and teeth. The remaining 1% is present in the intra- and extracellular fluids. About 50% of the total blood-calcium content is in the physiologically active ionised form with approximately 10% being complexed to citrate, phosphate or other anions, the remaining 40% being bound to proteins, principally albumin.

Elimination: Calcium is eliminated through faeces, urine and sweat. Renal excretion depends on glomerular filtration and calcium tubular reabsorption.

Vitamin D
Absorption: Vitamin D is easily absorbed in the small intestine.

Distribution and biotransformation: Cholecalciferol and its metabolites circulate in the blood bound to a specific globulin. Vitamin D which is not metabolised is stored in adipose and muscle tissues.

Metabolism: Cholecalciferol is converted in the liver by hydroxylation to the active form 25-hydroxycholecalciferol. It is then further converted in the kidneys to 1,25- hydroxycholecalciferol. 1,25-hydroxycholecalciferol is the metabolite responsible for increasing calcium absorption.

Elimination: Vitamin D is excreted in faeces and urine.

5.3 Preclinical safety data

At doses far higher than the human therapeutic range teratogenicity has been observed in animal studies. There is further no information of relevance to the safety assessment in addition to what is stated in other parts of the SPC.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Core
Croscarmellose sodium
Povidone
Citric acid monohydrate
Sodium ascorbate
Isomalt (E953)
Magnesium stearate
Sucrose
Medium chain triglycerides
Colloidal anhydrous silica
All-rac-alpha-tocopherol
Modified food starch

Film-coating
Hypromellose
Macrogol
Paraffin light liquid.

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

1 year

6.4 Special precautions for storage

This medicinal product does not require any special storage conditions.

6.5 Nature and contents of container

100, 105, 180, 200 and 210 tablets in polyethylene bottles with polyethylene liner/polypropylene cap.
Not all pack sizes may be marketed.

6.6 Special precautions for disposal and other handling

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

[To be completed nationally]

8. MARKETING AUTHORISATION NUMBER(S)

[To be completed nationally]

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

[To be completed nationally]

10. DATE OF REVISION OF THE TEXT

2026-01-14