

## **SUMMARY OF PRODUCT CHARACTERISTICS**

### **1 NAME OF THE MEDICINAL PRODUCT**

Ketogress (Alpha Ketoanalogue Tablets)

### **2 QUALITATIVE AND QUANTITATIVE COMPOSITION**

Each tablet contains;

Calcium-3 methyl-2-oxo-valerate 67 mg

Calcium-4-methyl-2-oxo-valerate 101 mg

Calcium-2-oxo-3-Phenylpropionate 68 mg

Calcium-3-methyl-2-oxo-butyrate 86 mg

Calcium-DL-2-hydroxy-4-(methylthio)-butyrate 59 mg

Lysine Acetate USP

Eq to L-Lysine 75 mg

L-Threonine USP 53 mg

L-Tryptophan USP 23 mg

Histidine 38 mg

L-Tyrosine USP 30 mg

For the full list of excipients, see section 6.1.

### **3 PHARMACEUTICAL FORM**

Film Coated Tablet.

Pearl yellow, capsule shaped biconvex, film coated tablets debossed with "LA RENON" on one side and plain on other side.

### **4 CLINICAL PARTICULARS**

#### **4.1 Therapeutic indications**

Prevention & therapy of damages due to deficient or faulty protein metabolism in chronic renal insufficiency due to a protein deficient ( $\leq 40$  g/day) diet (for adults).

- a) Reduction of uremic symptom
- b) Prevent degradation of body protein
- c) Reduction of proteinuria
- d) Decreased secondary hyperparathyroidism and renal osteodystrophy
- e) Normalization of carbohydrate metabolism
- f) Improvement of the disturbed serum lipid profile
- g) Improvement of endocrine disturbances
- h) Increases the intervals between two dialysis

#### **4.2 Posology and method of administration**

For oral use. The dose of Ketogress is 1tab/5kg body wt. /day. A person weighing 60 kg will require 12 tabs/day.

Ketogress is given as long as the GFR is  $< 25$  mL/min and a diet with an intake of maximum 40 g protein/day (for adults) is followed.

Should be taken with food. Swallow whole, do not chew/crush.

#### **4.3 Contraindications**

Hypercalcemia, disturbed amino acid metabolism. In case of

hereditary phenylketonuria, it has to be taken into account that Ketogress contains phenylalanine.

#### **4.4 Special warnings and precautions for use**

Ketogress should be taken during meals to allow proper absorption and metabolism into the corresponding amino acids. The serum calcium level should be monitored regularly. Ensure the sufficient supply with calories.

#### **4.5 Interaction with other medicinal products and other forms of interaction**

The simultaneous administration of medicaments containing calcium (eg, acetolyte) may lead to pathological increases of the serum calcium level or intensification.

In order not to interfere with absorption, do not take drugs together with Ketogress that form sparingly soluble compounds with calcium (eg, tetracyclines, quinolone eg, ciprofloxacin and norfloxacin, iron-, fluoride- and estramustin-containing drugs). Between the intake of Ketogress and drugs from the mentioned categories, a period of at least 2 hours should pass.

#### **4.6 Fertility, pregnancy and lactation**

Use in pregnancy & lactation: No experience has been made so far with the application in pregnancy and lactation.

#### **4.7 Effects on ability to drive and use machines**

Ketogress has no influence on the ability to drive and use machines.

#### **4.8 Undesirable effects**

Hypercalcemia may develop. In this case, it is recommended to decrease vitamin D intake. If the hypercalcemia persists, reduce the dosage of Ketogress as well as any other source of calcium.

#### **4.9 Overdose**

No symptoms have been observed to date.

### **5 PHARMACOLOGICAL PROPERTIES**

**Pharmacotherapeutic group:** Not applicable

**ATC code:** Not applicable

#### **5.1 Pharmacodynamic properties**

KETOGRESS allows the intake of essential amino acids while minimizing the amino-nitrogen intake. Following ingestion, the keto analogues are transaminated by taking nitrogen from non-essential amino acids, thereby decreasing the formation of urea by re-using the amino group. The levels of accumulating uremic

toxins are decreased. Keto-and/or hydroxy-acids do not elicit hyperfiltration of residual nephrons. Ketoacid-containing supplements have a positive influence on the renal hyperphosphatemia and secondary hyperparathyroidism and can improve renal osteodystrophy. The use of Ketogress in association with a very low protein diet allows a reduced intake of nitrogen while avoiding the deleterious consequences of inadequate dietary protein intake and malnourishment.

## **5.2 Pharmacokinetic properties**

The plasma kinetics of amino acids and their integration in metabolic pathways are well established. In uremic patients, the plasma disturbances do not seem to depend on digested amino acid intake, and that the post-absorptive kinetics seems to be disturbed very early in the development of the disease. In normal individuals, there is an increase in the plasma level of keto-analogues, 10 min after oral ingestion. These levels reach values that are approximately 5 times higher than the initial level. Peak levels are reached within 20-60 min, and normal levels are reached again after 90 min. Gastrointestinal absorption is thus very rapid. In the plasma, a simultaneous increase in levels of the keto-analogue and the corresponding amino acid show that transamination of the keto-analogues is very rapid. Due to the natural pathways of disposal of  $\alpha$ -ketonic acids in the organism, it is probable that exogenous intakes are very rapidly integrated into metabolic cycles. Ketoacids follow the same catabolic pathways as the classical amino acids.

## **5.3 Preclinical safety data**

Preclinical data reveal no special hazards for humans based on conventional studies on pharmacological safety, acute and repeated dose toxicity, reproduction toxicity, and genotoxicity. The product does not show teratogenic properties.

# **6 PHARMACEUTICAL PARTICULARS**

## **6.1 List of excipients**

Sodium Benzoate  
Polacrillin potassium  
Microcrystalline cellulose  
Colloidal Silicon Dioxide  
Sodium Bicarbonate  
Povidone [Povidone K 30]  
Isopropyl Alcohol  
Colloidal Silicon Dioxide  
Shellac (white)  
Flavor Pineapple Dry  
Sodium Starch Glycolate  
Citric Acid Anhydrous  
Magnesium Stearate

Insta Moist Shield [A21E00024]  
Ferric Oxide (Yellow)  
Hypromellose -15 cps  
Polyethylene glycol-6000  
Purified Talc  
Titanium Dioxide  
Ferric Oxide (Black)  
Ferric Oxide (Yellow)  
Flavor Pineapple Dry  
Wincoat WT PRL 0025

**6.2 Incompatibilities**

None stated.

**6.3 Shelf life**

24 months.

**6.4 Special precautions for storage**

Do not store above 30°C. Protect from light & Moisture.

**6.5 Nature and contents of container**

Alu -Alu blister pack

10 tablets in a blister, 10 such blisters are packed in a primary carton along with the package insert.

10 tablets in a blister, 3 such blisters are packed in a primary carton along with the package insert.

**6.6 Special precautions for disposal**

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

**7 MARKETING AUTHORISATION HOLDER**

**La Renon Healthcare Pvt. Ltd**

207-208, ISCON Elegance, Circle-P,  
Prahlaad Nagar Cross Roads, S.G.  
Highway, Ahmedabad-380015,  
Gujarat, India

**Manufactured at:**

Stanford Laboratories Pvt. Ltd.

(A subsidiary company of La Renon Healthcare Pvt. Ltd)  
8, Industrial Area, Mehatpur, Dist. Una, (H.P.) 174315,  
India.

**8 MARKETING AUTHORISATION NUMBER(S)**

H2019/CTD6180/923ER

**9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

Date of first authorization: 17<sup>th</sup> August 2018

**10**    **DATE OF REVISION OF THE TEXT**  
30<sup>th</sup> March 2026