Summary of Product Characteristics

1. **Name of the Medicinal Product**
   Telmicos Tablets 40mg

2. **Qualitative and Quantitative Composition**
   Each tablet contains 40 mg Telmisartan.

3. **Pharmaceutical Form**
   Tablets

4. **Clinical Particulars**

4.1 Therapeutic Indications

Hypertension
Treatment of essential hypertension in adults.

Cardiovascular prevention
Reduction of cardiovascular morbidity in patients with:
i) Manifest atherothrombotic cardiovascular disease (history of coronary heart disease, stroke, or peripheral arterial disease) or
ii) Type 2 diabetes mellitus with documented target organ damage

4.2 Posology and Method of administration

Treatment of essential hypertension
The usually effective dose is 40 mg once daily. Some patients may already benefit at a daily dose of 20 mg. In cases where the target blood pressure is not achieved, the dose of telmisartan can be increased to a maximum of 80 mg once daily.

Cardiovascular prevention:
The recommended dose is 80 mg once daily. It is not known whether doses lower than 80 mg of telmisartan are effective in reducing cardiovascular morbidity.

Special populations:
Renal impairment: No posology adjustment is required for patients with mild to moderate renal impairment. A lower starting dose of 20 mg is recommended in these patients.

Hepatic impairment: In patients with mild to moderate hepatic impairment, the posology should not exceed 40 mg once daily.

Elderly: No dose adjustment is necessary for elderly patients.

Paediatric population: Telmsartan is not recommended for use in children below 18 years due to a lack of data on safety and efficacy.

Method of administration
Telmisartan tablets are for once-daily oral administration and should be taken with liquid, with or without food.

4.3 Contraindication

- Hypersensitivity to the active substance or to any of the excipients
- Second and third trimesters of pregnancy
- Biliary obstructive disorders
- Severe hepatic impairment

4.4 Special warnings and precautions for use

Pregnancy:
Angiotensin II receptor antagonists should not be initiated during pregnancy. Unless continued angiotensin II receptor antagonist therapy is considered essential, patients planning pregnancy should be changed to alternative antihypertensive treatments which have an established safety profile for use in pregnancy.

Hepatic impairment:
Telmisartan is not to be given to patients with cholestasis, biliary obstructive disorders or severe hepatic impairment since telmisartan is mostly eliminated with the bile.

Renovascular hypertension:
There is an increased risk of severe hypotension and renal insufficiency when patients with bilateral renal artery stenosis or stenosis of the artery to a single functioning kidney are treated with medicinal products that affect the renin-angiotensinaldosterone system.

Renal impairment and kidney transplantation:
When Telmisartan is used in patients with impaired renal function, periodic monitoring of potassium and creatinine serum levels is recommended. There is no experience regarding the administration of Telmisartan in patients with recent kidney transplantation.

Intravascular hypovolaemia:
Symptomatic hypotension, especially after the first dose of Telmisartan, may occur in patients who are volume and/or sodium depleted by vigorous diuretic therapy, dietary salt restriction, diarrhoea, or vomiting. Such conditions should be corrected before the administration of Telmisartan.

Dual blockade of the renin-angiotensin-aldosterone system:
As a consequence of inhibiting the reninangiotensin-aldosterone system, hypotension, syncope, hyperkalaemia, and changes in renal function (including acute renal failure) have been reported in susceptible individuals, especially if combining medicinal products that affect this system. Dual blockade of the renin-angiotensin-aldosterone system (e.g. by adding an ACE-inhibitor to an angiotensin II receptor antagonist) is therefore not recommended in patients with already controlled blood pressure and should be limited to individually defined cases with close monitoring of renal function.

Primary aldosteronism:
Patients with primary aldosteronism generally will not respond to antihypertensive medicinal products acting through inhibition of the renin-angiotensin system. Therefore, the use of telmisartan is not recommended.

Aortic and mitral valve stenosis, obstructive hypertrophic cardiomyopathy:
As with other vasodilators, special caution is indicated in patients suffering from aortic or mitral stenosis, or obstructive hypertrophic cardiomyopathy.

Hyperkalaemia:
The use of medicinal products that affect the renin-angiotensin-aldosterone system may cause hyperkalaemia.

Ethnic differences:
As observed for angiotensin converting enzyme inhibitors, telmisartan and the other angiotensin II receptor antagonists are apparently less effective in lowering blood pressure in black people than in non-blacks, possibly because of higher prevalence of low-renin states in the black hypertensive population.

Other:
As with any antihypertensive agent, excessive reduction of blood pressure in patients with ischaemic cardiopathy or ischaemic cardiovascular disease could result in a myocardial infarction or stroke.

4.5 Interaction with other medicinal products and other forms of interaction
Interaction studies have only been performed in adults.
As with other medicinal products acting on the renin-angiotensin-aldosterone system, telmisartan may provoke hyperkalaemia. The risk may increase in case of treatment combination with other medicinal products that may also provoke hyperkalaemia (salt substitutes containing potassium, potassium-sparing diuretics, ACE inhibitors, angiotensin II receptor antagonists, non steroidal anti-inflammatory medicinal products (NSAIDs, including selective COX-2 inhibitors), heparin, immunosuppressives (cyclosporin or tacrolimus), and trimethoprim).

Concomitant use is not recommended with lithium, Potassium sparing diuretics or potassium supplements.
Concomitant use with non-steroidal anti-inflammatory medicinal and diuretics (thiazide or loop diuretics) products require caution

Other antihypertensive agents:
Based on their pharmacological properties it can be expected that the following medicinal products may potentiate the hypotensive effects of all antihypertensives including telmisartan: Baclofen, amifostine. Furthermore, orthostatic hypotension may be aggravated by alcohol, barbiturates, narcotics, or antidepressants.

4.6 Pregnancy and lactation

Pregnancy
The use of angiotensin II receptor antagonists is not recommended during the first trimester of pregnancy. The use of angiotensin II receptor antagonists is contraindicated during the second and third trimesters of pregnancy.

Breastfeeding
Because no information is available regarding the use of telmisartan during breastfeeding, Telmisartan is not recommended and alternative treatments with better established safety profiles during breastfeeding are preferable, especially while nursing a newborn or preterm infant.

4.7 Effects on ability to drive and use machines

No studies on the effects on the ability to drive and use machines have been performed. However, when driving vehicles or operating machinery it should be taken into account that dizziness or drowsiness may occasionally occur when taking antihypertensive therapy.

4.8 Undesirable effects

Adverse reactions have been ranked under headings of frequency using the following convention: 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). Within each frequency grouping, adverse reactions are presented in order of decreasing seriousness.
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Infections and infestations
Uncommon: Urinary tract infection including cystitis, upper respiratory tract infection including pharyngitis and sinusitis
Rare: Sepsis including fatal outcome

Blood and the lymphatic system disorders
Uncommon: Anaemia
Rare: Eosinophilia, thrombocytopenia

Immune system disorders
Rare: Anaphylactic reaction, hypersensitivity

Metabolism and nutrition disorders
Uncommon: Hyperkalaemia
Rare: Hypoglycaemia (in diabetic patients)

Psychiatric disorders
Uncommon: Insomnia, depression
Rare: Anxiety

Nervous system disorders
Uncommon: Syncope

Eye disorders
Rare: Visual disturbance

Ear and labyrinth disorders
Uncommon: Vertigo

Cardiac disorders
Uncommon: Bradycardia
Rare: Tachycardia

Vascular disorders
Uncommon: Hypotension, orthostatic hypotension

Respiratory, thoracic and mediastinal disorders
Uncommon: Dyspnoea

Gastrointestinal disorders
Uncommon: Abdominal pain, diarrhoea, dyspepsia, flatulence, vomiting
Rare: Dry mouth, stomach discomfort

Hepato-biliary disorders
Rare: Hepatic function abnormal/liver disorder

Skin and subcutaneous tissue disorders
Uncommon: Pruritus, hyperhidrosis, rash
Rare: Angioedema (also with fatal outcome), eczema, erythema, urticaria, drug eruption, toxic skin eruption

Muscoloskeletal and connective tissue disorders
Uncommon: Back pain (e.g. sciatica), muscle spasms, myalgia
Rare: Arthralgia, pain in extremity, tendon pain (tendinitis like symptoms)

Renal and urinary disorders
Uncommon: Renal impairment including acute renal failure

General disorders and administration site conditions
Uncommon: Chest pain, asthenia (weakness)
Rare: Influenza-like illness

Investigations
Uncommon: Blood creatinine increased
Rare: Haemoglobin decreased, blood uric acid increased, hepatic enzyme increased, blood creatine phosphokinase increased.

5 Overdose

There is limited information available with regard to overdose in humans.
Symptoms:
The most prominent manifestations of telmisartan overdose were hypotension and tachycardia; bradycardia dizziness, increase in serum creatinine, and acute renal failure have also been reported.

Treatment:
Telmisartan is not removed by haemodialysis. The patient should be closely monitored, and the treatment should be symptomatic and supportive. Management depends on the time since ingestion and the severity of the symptoms. Suggested measures include induction of emesis and / or gastric lavage. Activated charcoal may be useful in the treatment of overdosage. Serum electrolytes and creatinine should be monitored frequently. If hypotension occurs, the patient should be placed in a supine position, with salt and volume replacement given quickly.

6 Pharmacological Properties

6.1 Pharmacodynamic Properties

Pharmacotherapeutic group: Angiotensin II Antagonists, plain, ATC Code: C09CA07.
Telmisartan is an orally active and specific angiotensin II receptor (type AT1) antagonist. Telmisartan displaces angiotensin II with very high affinity from its binding site at the AT1 receptor subtype, which is responsible for the known actions of angiotensin II. Telmisartan does not exhibit any partial

agonist activity at the AT1 receptor. Telmisartan selectively binds the AT1 receptor. The binding is long-lasting.
Telmisartan does not show affinity for other receptors, including AT2 and other less characterised AT receptors. The functional role of these receptors is not known, nor is the effect of their possible overstimulation by angiotensin II, whose levels are increased by telmisartan. Plasma aldosterone levels are decreased by telmisartan. Telmisartan does not inhibit human plasma renin or block ion channels. Telmisartan does not inhibit angiotensin converting enzyme (kininase II), the enzyme which also degrades bradykinin. Therefore it is not expected to potentiate bradykinin-mediated adverse effects.

6.2 Pharmacokinetic Properties

Following oral administration, peak concentrations (Cmax) of telmisartan are reached in 0.5 to 1 hour after dosing. Food slightly reduces the bioavailability of telmisartan, with a reduction in the area under the plasma concentration-time curve (AUC) of about 6% with the 40 mg tablet and about 20% after a 160 mg dose. The absolute bioavailability of telmisartan is dose dependent. At 40 and 160 mg the bioavailability was 42% and 58%, respectively. The pharmacokinetics of orally administered telmisartan are nonlinear over the dose range 20 to 160 mg, with greater than proportional increases of plasma concentrations (Cmax and AUC) with increasing doses. Telmisartan shows bi-exponential decay kinetics with a terminal elimination half life of approximately 24 hours. Trough plasma concentrations of telmisartan with once daily dosing are about 10% to 25% of peak plasma concentrations. Telmisartan has an accumulation index in plasma of 1.5 to 2.0 upon repeated once daily dosing.

6.3 Preclinical safety data

There is no clear evidence of teratogenic effect, however at toxic dose levels of telmisartan an effect on the postnatal development of the offsprings such as lower body weight and delayed eye opening was observed in dogs and rats.There was no evidence of mutagenicity and relevant clastogenic activity in in vitro studies and no evidence of carcinogenicity in rats and mice.

7 Pharmaceutical Particulars

7.1 list of Excipients

Mannitol
Sodium Hydroxide
Povidone K30
Microcrystalline Cellulose
Sodium Starch Glycollate
Magnesium Stearate
Meglumine
Purified Water

7.2 **Incompatibilities**
Not applicable.

7.3 **Shelf life**
2 years

7.4 **Special precautions for storage**
Store in a dry place below 30°C. Protect from light

7.5 **Nature and contents of container**
ALU/ALU Blister Packing

7.6 **Instructions for use, handling and disposal**
No special requirements for disposal.

8 **Registrant**
Cosmos Limited

9 **Manufacturer**
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10 **Date of Revision of Text**
02/05/2014

11 **Dosimetry (if applicable)**
New registration

12 **Instructions for Preparation of radiopharmaceuticals (if applicable)**
New Registration

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