

## SUMMARY OF PRODUCT CHARACTERISTICS

### 1. NAME OF THE FINISHED PHARMACEUTICAL PRODUCT

Auritz 10 (Rosuvastatin Tablets USP 10 mg)

### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

*Each Film coated tablet contain*

Rosuvastatin Calcium USP equivalent to Rosuvastatin 10 mg

This medicine contains lactose. Patients with rare hereditary problems of galactose intolerance, total lactase deficiency or glucose-galactose malabsorption should not take this medicine.

### 3. PHARMACEUTICAL FORM

Film coated tablet

Pink, round, biconvex, coated tablets, debossed "062" on one side and plain on other side and Alu-Alu blister packed.

### 4. CLINICAL PARTICULARS

#### 4.1. Therapeutic indications

##### **Hyperlipidemia And Mixed Dyslipidemia**

Rosuvastatin is indicated as adjunctive therapy to diet to reduce elevated Total-C, LDL-C, ApoB, nonHDL-C, and triglycerides and to increase HDL-C in adult patients with primary hyperlipidemia or mixed dyslipidemia. Lipid-altering agents should be used in addition to a diet restricted in saturated fat and cholesterol when response to diet and nonpharmacological interventions alone has been inadequate.

##### **Pediatric Patients with Familial Hypercholesterolemia**

Rosuvastatin is indicated as an adjunct to diet to:

- reduce Total-C, LDL-C and ApoB levels in children and adolescents 8 to 17 years of age with heterozygous familial hypercholesterolemia if after an adequate trial of diet therapy the following findings are present: LDL-C >190 mg/dL, or >160 mg/dL along with a positive family history of premature cardiovascular disease (CVD) or two or more other CVD risk factors.
- reduce LDL-C, Total-C, nonHDL-C and ApoB in children and adolescents 7 to 17 years of age with homozygous familial hypercholesterolemia, either alone or with other lipid lowering treatments (e.g., LDL apheresis).

##### **Hypertriglyceridemia**

Rosuvastatin is indicated as adjunctive therapy to diet for the treatment of adult patients with hypertriglyceridemia.

##### **Primary Dysbetalipoproteinemia (Type III Hyperlipoproteinemia)**

Rosuvastatin is indicated as an adjunct to diet for the treatment of adult patients with

primarydysbetalipoproteinemia (Type III Hyperlipoproteinemia).

### **Adult Patients with Homozygous Familial Hypercholesterolemia**

Rosuvastatin is indicated as adjunctive therapy to other lipid-lowering treatments (e.g., LDL apheresis) or alone if such treatments are unavailable to reduce LDL-C, Total-C, and ApoB in adult patients with homozygous familial hypercholesterolemia.

### **Slowing Of the Progression of Atherosclerosis**

Rosuvastatin is indicated as adjunctive therapy to diet to slow the progression of atherosclerosis in adult patients as part of a treatment strategy to lower Total-C and LDL-C to target levels.

### **Primary Prevention of Cardiovascular Disease**

In individuals without clinically evident coronary heart disease but with an increased risk of cardiovascular disease based on age  $\geq 50$  years old in men and  $\geq 60$  years old in women, hsCRP  $\geq 2$  mg/L, and the presence of at least one additional cardiovascular disease risk factor such as hypertension, low HDL-C, smoking, or a family history of premature coronary heart disease, Rosuvastatin is indicated to:

- reduce the risk of stroke
- reduce the risk of myocardial infarction
- reduce the risk of arterial revascularization procedures

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

### **General Dosing Information**

The dose range for rosuvastatin tablets is 5 to 40 mg orally once daily. The usual starting dose is 10-20 mg.

Rosuvastatin tablets can be administered as a single dose at any time of day, with or without food. When initiating rosuvastatin tablets therapy or switching from another HMG-CoA reductase inhibitor therapy, the appropriate rosuvastatin tablets starting dose should first be utilized, and only then titrated according to the patient's response and individualized goal of therapy. After initiation or upon titration of rosuvastatin tablets, lipid levels should be analyzed within 2 to 4 weeks and the dosage adjusted accordingly. The 40 mg dose of rosuvastatin tablets should be used only for those patients who have not achieved their LDL-C goal utilizing the 20 mg dose.

### **Heterozygous Familial Hypercholesterolemia in Pediatric Patients (10 to 17 years of age)**

The recommended dose range is 5 to 10 mg orally once daily in patients 8 to less than 10 years of age, and 5 to 20 mg orally once daily in patients 10 to 17 years of age.

### **Homozygous Familial Hypercholesterolemia**

The recommended dose is 20 mg orally once daily in patients 7 to 17 years of age.

### **Dosing in Asian Patients**

In Asian patients, consider initiation of rosuvastatin tablets therapy with 5 mg once daily due to increased rosuvastatin plasma concentrations. The increased systemic exposure should be taken into consideration when treating Asian patients not adequately controlled at doses up to 20 mg/day.

### **Use with Concomitant Therapy**

#### *Patients taking cyclosporine*

The dose of rosuvastatin tablets should not exceed 5 mg once daily.

#### *Patients taking gemfibrozil*

Initiate rosuvastatin tablets therapy with 5 mg once daily. The dose of rosuvastatin tablets should not exceed 10 mg once daily.

#### *Patients taking lopinavir and ritonavir or atazanavir and ritonavir*

Initiate rosuvastatin tablets therapy with 5 mg once daily. The dose of rosuvastatin should not exceed 10 mg once daily.

### **Dosing in Patients with Severe Renal Impairment**

For patients with severe renal impairment (CL<sub>cr</sub> <30 mL/min/1.73 m<sup>2</sup>) not on hemodialysis, dosing of rosuvastatin tablets should be started at 5 mg once daily and not exceed 10 mg once daily.

**Mode of administration:** Oral

### **4.3. Contraindications**

Rosuvastatin is contraindicated:

- in patients with hypersensitivity to rosuvastatin or to any of the excipients.
- in patients with active liver disease including unexplained, persistent elevations of serum transaminases and any serum transaminase elevation exceeding 3 times the upper limit of normal (ULN).
- in patients with severe renal impairment (creatinine clearance < 30 ml/min)

- in patients with myopathy.
- in patients receiving concomitant combination of sofosbuvir/velpatasvir/voxilaprevir
- in patients receiving concomitant ciclosporin.
- during pregnancy and lactation and in women of childbearing potential not using appropriate contraceptive measures.

The 40 mg dose is contraindicated in patients with pre-disposing factors for myopathy/rhabdomyolysis. Such factors include:

- moderate renal impairment (creatinine clearance < 60 ml/min)
- hypothyroidism
- personal or family history of hereditary muscular disorders
- previous history of muscular toxicity with another HMG-CoA reductase inhibitor or fibrate
- alcohol abuse
- situations where an increase in plasma levels may occur
- Asian patients
- concomitant use of fibrates.

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

##### Renal Effects:

Proteinuria, detected by dipstick testing and mostly tubular in origin, has been observed in patients treated with higher doses of Rosuvastatin, in particular 40 mg, where it was transient or intermittent in most cases. Proteinuria has not been shown to be predictive of acute or progressive renal disease. The reporting rate for serious renal events in post-marketing use is higher at the 40 mg dose. An assessment of renal function should be considered during routine follow-up of patients treated with a dose of 40 mg

##### Skeletal Muscle Effects

Effects on skeletal muscle e.g. myalgia, myopathy and, rarely, rhabdomyolysis have been reported in Rosuvastatin-treated patients with all doses and in particular with doses > 20 mg. Very rare cases of rhabdomyolysis have been reported with the use of ezetimibe in combination with HMG-CoA reductase inhibitors. A pharmacodynamic interaction cannot be excluded and caution should be exercised with their combined use. As with other HMG-CoA reductase inhibitors, the reporting rate for rhabdomyolysis associated with Rosuvastatin in post-marketing use is higher at the 40 mg dose.

### Creatine Kinase Measurement

Creatine Kinase (CK) should not be measured following strenuous exercise or in the presence of a plausible alternative cause of CK increase which may confound interpretation of the result. If CK levels are significantly elevated at baseline ( $>5xULN$ ) a confirmatory test should be carried out within 5 – 7 days. If the repeat test confirms a baseline CK  $>5xULN$ , treatment should not be started.

#### *Before Treatment*

Rosuvastatin, as with other HMG-CoA reductase inhibitors, should be prescribed with caution in patients with pre-disposing factors for myopathy/rhabdomyolysis. Such factors include:

- renal impairment
- hypothyroidism
- personal or family history of hereditary muscular disorders
- previous history of muscular toxicity with another HMG-CoA reductase inhibitor or fibrate
- alcohol abuse
- age  $>70$  years
- situations where an increase in plasma levels may occur
- concomitant use of fibrates.

In such patients the risk of treatment should be considered in relation to possible benefit and clinical monitoring is recommended. If CK levels are significantly elevated at baseline ( $>5xULN$ ) treatment should not be started.

#### *Whilst on Treatment*

Patients should be asked to report inexplicable muscle pain, weakness or cramps immediately, particularly if associated with malaise or fever. CK levels should be measured in these patients. Therapy should be discontinued if CK levels are markedly elevated ( $>5xULN$ ) or if muscular symptoms are severe and cause daily discomfort (even if CK levels are  $\leq 5xULN$ ). If symptoms resolve and CK levels return to normal, then consideration should be given to re-introducing Rosuvastatin or an alternative HMG-CoA reductase inhibitor at the lowest dose with close monitoring. Routine monitoring of CK levels in asymptomatic patients is not warranted. There have been very rare reports of an immune-mediated necrotising myopathy (IMNM) during or after treatment with statins, including rosuvastatin. IMNM is clinically characterised by proximal muscle weakness and elevated serum creatine kinase, which persist despite discontinuation of statin treatment.

In clinical trials, there was no evidence of increased skeletal muscle effects in the small number of patients dosed with Rosuvastatin and concomitant therapy. However, an increase in the incidence of myositis and myopathy has been seen in patients receiving other HMG-CoA reductase inhibitors together with fibric acid derivatives including gemfibrozil, ciclosporin, nicotinic acid, azole antifungals, protease inhibitors and macrolide antibiotics. Gemfibrozil increases the risk of myopathy when given concomitantly with some HMG-CoA reductase inhibitors. Therefore, the combination of Rosuvastatin and gemfibrozil is not recommended. The benefit of further alterations in lipid levels by the combined use of Rosuvastatin with fibrates or niacin should be carefully weighed against the potential risks of such combinations. The 40 mg dose is contraindicated with concomitant use of a fibrate. Rosuvastatin must not be co-administered with systemic formulations of fusidic acid or within 7 days of stopping fusidic acid treatment. In patients where the use of systemic fusidic acid is considered essential, statin treatment should be discontinued throughout the duration of fusidic acid treatment. There have been reports of rhabdomyolysis (including some fatalities) in patients receiving fusidic acid and statins in combination. Patients should be advised to seek medical advice immediately if they experience any symptoms of muscle weakness, pain or tenderness. Statin therapy may be re-introduced seven days after the last dose of fusidic acid. In exceptional circumstances, where prolonged systemic fusidic acid is needed, e.g. for the treatment of severe infections, the need for co-administration of Rosuvastatin and fusidic acid should only be considered on a case by case basis and under close medical supervision.

Rosuvastatin should not be used in any patient with an acute, serious condition suggestive of myopathy or predisposing to the development of renal failure secondary to rhabdomyolysis (e.g. sepsis, hypotension, major surgery, trauma, severe metabolic, endocrine and electrolyte disorders; or uncontrolled seizures).

#### Severe Cutaneous Adverse Reactions

Severe cutaneous adverse reactions including Stevens-Johnson syndrome (SJS) and drug reaction with eosinophilia and systemic symptoms (DRESS), which could be life-threatening or fatal, have been reported with rosuvastatin. At the time of prescription, patients should be advised of the signs and symptoms of severe skin reactions and be closely monitored. If signs and symptoms suggestive of this reaction appear, Rosuvastatin should be discontinued immediately and an alternative treatment should be considered.

If the patient has developed a serious reaction such as SJS or DRESS with the use of Rosuvastatin, treatment with Rosuvastatin must not be restarted in this patient at any time.

#### Liver Effects

As with other HMG-CoA reductase inhibitors, Rosuvastatin should be used with caution in patients who consume excessive quantities of alcohol and/or have a history of liver disease. It is recommended that liver function tests be carried out prior to, and 3 months following, the initiation of treatment.

Rosuvastatin should be discontinued or the dose reduced if the level of serum transaminases is greater than 3 times the upper limit of normal. The reporting rate for serious hepatic events (consisting mainly of increased hepatic transaminases) in post-marketing use is higher at the 40 mg dose.

In patients with secondary hypercholesterolaemia caused by hypothyroidism or nephrotic syndrome, the underlying disease should be treated prior to initiating therapy with Rosuvastatin.

#### Race

Pharmacokinetic studies show an increase in exposure in Asian subjects compared with Caucasians

#### Protease Inhibitors

Increased systemic exposure to rosuvastatin has been observed in subjects receiving rosuvastatin concomitantly with various protease inhibitors in combination with ritonavir. Consideration should be given both to the benefit of lipid lowering by use of Rosuvastatin in HIV patients receiving protease inhibitors and the potential for increased rosuvastatin plasma concentrations when initiating and up titrating Rosuvastatin doses in patients treated with protease inhibitors. The concomitant use with certain protease inhibitors is not recommended unless the dose of Rosuvastatin is adjusted.

#### Lactose Intolerance

Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine.

#### Interstitial Lung Disease

Exceptional cases of interstitial lung disease have been reported with some statins, especially with long-term therapy. Presenting features can include dyspnoea, non-productive cough and deterioration in general health (fatigue, weight loss and fever). If it is suspected a patient has developed interstitial lung disease, statin therapy should be discontinued.

### Diabetes Mellitus

Some evidence suggests that statins as a class raise blood glucose and in some patients, at high risk of future diabetes, may produce a level of hyperglycaemia where formal diabetes care is appropriate. This risk, however, is outweighed by the reduction in vascular risk with statins and therefore should not be a reason for stopping statin treatment. Patients at risk (fasting glucose 5.6 to 6.9 mmol/l, BMI >30 kg/m<sup>2</sup>, raised triglycerides, hypertension) should be monitored both clinically and biochemically according to national guidelines.

In the JUPITER study, the reported overall frequency of diabetes mellitus was 2.8% in rosuvastatin and 2.3% in placebo, mostly in patients with fasting glucose 5.6 to 6.9 mmol/l.

### Paediatric Population

The evaluation of linear growth (height), weight, BMI (body mass index), and secondary characteristics of sexual maturation by Tanner staging in paediatric patients 6 to 17 years of age taking rosuvastatin is limited to a two-year period. After two years of study treatment, no effect on growth, weight, BMI or sexual maturation was detected.

In a clinical trial of children and adolescents receiving rosuvastatin for 52 weeks, CK elevations >10xULN and muscle symptoms following exercise or increased physical activity were observed more frequently compared to observations in clinical trials in adults.

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

### Effect of co-administered medicinal products on rosuvastatin

**Transporter protein inhibitors:** Rosuvastatin is a substrate for certain transporter proteins including the hepatic uptake transporter OATP1B1 and efflux transporter BCRP. Concomitant administration of Rosuvastatin with medicinal products that are inhibitors of these transporter proteins may result in increased rosuvastatin plasma concentrations and an increased risk of myopathy.

**Ciclosporin:** During concomitant treatment with Rosuvastatin and ciclosporin, rosuvastatin AUC values were on average 7 times higher than those observed in healthy volunteers.



Rosuvastatin is contraindicated in patients receiving concomitant ciclosporin . Concomitant administration did not affect plasma concentrations of ciclosporin.

**Protease inhibitors:** Although the exact mechanism of interaction is unknown, concomitant protease inhibitor use may strongly increase rosuvastatin exposure . For instance, in a pharmacokinetic study, co-administration of 10 mg rosuvastatin and a combination product of two protease inhibitors (300 mg atazanavir/100 mg ritonavir) in healthy volunteers was associated with an approximately three-fold and seven-fold increase in rosuvastatin AUC and C<sub>max</sub> respectively. The concomitant use of Rosuvastatin and some protease inhibitor combinations may be considered after careful consideration of Rosuvastatin dose adjustments based on the expected increase in rosuvastatin exposure

**Gemfibrozil and other lipid-lowering products:** Concomitant use of Rosuvastatin and gemfibrozil resulted in a 2-fold increase in rosuvastatin C<sub>max</sub> and AUC .

Based on data from specific interaction studies no pharmacokinetic relevant interaction with fenofibrate is expected, however a pharmacodynamic interaction may occur. Gemfibrozil, fenofibrate, other fibrates and lipid lowering doses (> or equal to 1 g/day) of niacin (nicotinic acid) increase the risk of myopathy when given concomitantly with HMG-CoA reductase inhibitors, probably because they can produce myopathy when given alone. The 40 mg dose is contraindicated with concomitant use of a fibrate . These patients should also start with the 5 mg dose.

**Ezetimibe:** Concomitant use of 10 mg Rosuvastatin and 10 mg ezetimibe resulted in a 1.2-fold increase in AUC of rosuvastatin in hypercholesterolaemic subjects (Table 1). A pharmacodynamic interaction, in terms of adverse effects, between Rosuvastatin and ezetimibe cannot be ruled out .

**Antacid:** The simultaneous dosing of Rosuvastatin with an antacid suspension containing aluminium and magnesium hydroxide resulted in a decrease in rosuvastatin plasma concentration of approximately 50%. This effect was mitigated when the antacid was dosed 2 hours after Rosuvastatin. The clinical relevance of this interaction has not been studied.

**Erythromycin:** Concomitant use of Rosuvastatin and erythromycin resulted in a 20% decrease in AUC and a 30% decrease in C<sub>max</sub> of rosuvastatin. This interaction may be caused by the increase in gut motility caused by erythromycin.

**Cytochrome P450 enzymes:** Results from in vitro and in vivo studies show that rosuvastatin is neither an inhibitor nor an inducer of cytochrome P450 isoenzymes. In addition, rosuvastatin is a poor substrate for these isoenzymes.

Therefore, drug interactions resulting from cytochrome P450-mediated metabolism are not expected. No clinically relevant interactions have been observed between rosuvastatin and either fluconazole (an inhibitor of CYP2C9 and CYP3A4) or ketoconazole (an inhibitor of CYP2A6 and CYP3A4).

**Interactions requiring rosuvastatin dose adjustments:** When it is necessary to co-administer Rosuvastatin with other medicinal products known to increase exposure to rosuvastatin, doses of Rosuvastatin should be adjusted. Start with a 5 mg once daily dose of Rosuvastatin if the expected increase in exposure (AUC) is approximately 2-fold or higher. The maximum daily dose of Rosuvastatin should be adjusted so that the expected rosuvastatin exposure would not likely exceed that of a 40 mg daily dose of Rosuvastatin taken without interacting medicinal products, for example a 20 mg dose of Rosuvastatin with gemfibrozil (1.9-fold increase), and a 10 mg dose of Rosuvastatin with combination ritonavir/atazanavir (3.1-fold increase). If medicinal product is observed to increase rosuvastatin AUC less than 2-fold, the starting dose need not be decreased but caution should be taken if increasing the Rosuvastatin dose above 20mg.

<b>Table 1 Effect of co-administered medicinal products on rosuvastatin exposure (AUC; in order of decreasing magnitude) from published clinical trials</b>		
<b>2-fold or greater than 2-fold increase in AUC of rosuvastatin</b>		
<b>Interacting drug dose regimen</b>	<b>Rosuvastatin dose regimen</b>	<b>Change in rosuvastatin AUC*</b>
Sofosbuvir/velpatasvir/voxilaprevir (400 mg-100mg-100 mg) + Voxilaprevir (100 mg) once daily for 15 days	10mg single dose	7.4 -fold ↑
Ciclosporin 75 mg BID to 200 mg BID, 6 months	10 mg OD, 10 days	7.1-fold ↑
Darolutamide 600 mg BID, 5 days	5mg, single dose	5.2-fold ↑
Regorafenib 160 mg, OD, 14 days	5 mg, single dose	3.8-fold ↑
Atazanavir 300 mg/ritonavir 100 mg OD, 8 days	10 mg, single dose	3.1-fold ↑
Velpatasvir 100 mg OD	10 mg, single dose	2.7-fold ↑
Ombitasvir 25 mg/paritaprevir 150	5 mg, single dose	2.6-fold ↑

mg/ Ritonavir100 mg OD/ dasabuvir 400 mg BID, 14 days		
Grazoprevir 200 mg/elbasvir 50 mg OD, 11days	10 mg, single dose	2.3-fold ↑
Glecaprevir 400 mg/pibrentasvir 120 mg OD, 7days	5 mg OD, 7 days	2.2-fold ↑
Lopinavir 400 mg/ritonavir 100 mg BID, 17 days	20 mg OD, 7 days	2.1-fold ↑
Clopidogrel 300 mg loading, followed by 75 mgat 24 hours	20 mg, single dose	2-fold ↑
Gemfibrozil 600 mg BID, 7 days	80 mg, single dose	1.9-fold ↑
<b>Less than 2-fold increase in AUC of rosuvastatin</b>		
Interacting drug dose regimen	Rosuvastatin dose regimen	Change in rosuvastatinAUC *
Erythromycin 500 mg QID, 7 days	80 mg, single dose	20% ↓
Baicalin 50 mg TID, 14 days	20 mg, single dose	47% ↓
<p>*Data given as x-fold change represent a simple ratio between co-administration and rosuvastatalone. Data given as% change represent % difference relative to rosuvastatin alone. Increase is indicated as “↑”, decrease as “↓”.</p> <p>** Several interaction studies have been performed at different Crestor dosages, the table shows themost significant ratio</p> <p>AUC = area under curve; OD = once daily; BID = twice daily; TID = three times daily; QID = four times daily</p>		

The following medical product/combinations did not have a clinically significant effect on the AUC ratio of rosuvastatin at coadministration:

Aleglitazar 0.3 mg 7 days dosing; Fenofibrate 67 mg 7 days TID dosing; Fluconazole 200mg 11 days OD dosing; Fosamprenavir 700 mg/ritonavir 100 mg 8 days BID dosing; Ketoconazole 200 mg 7 days BID dosing; Rifampin 450 mg 7 days OD dosing; Silymarin 140 mg 5 days TID dosing.

#### Effect of rosuvastatin on co-administered medicinal products

**Vitamin K antagonists:** As with other HMG-CoA reductase inhibitors, the initiation of treatment or dosage up-titration of Rosuvastatin in patients treated concomitantly with vitamin K antagonists (e.g. warfarin or another coumarin anticoagulant) may result in an



increase in International Normalised Ratio (INR). Discontinuation or down-titration of Rosuvastatin may result in a decrease in INR. In such situations, appropriate monitoring of INR is desirable.

**Oral contraceptive/hormone replacement therapy (HRT):** Concomitant use of Rosuvastatin and an oral contraceptive resulted in an increase in ethinyl estradiol and norgestrel AUC of 26% and 34%, respectively. These increased plasma levels should be considered when selecting oral contraceptive doses. There are no pharmacokinetic data available in subjects taking concomitant Rosuvastatin and HRT, therefore, a similar effect cannot be excluded. However, the combination has been extensively used in women in clinical trials and was well tolerated.

**Other medicinal products:**

Digoxin: Based on data from specific interaction studies no clinically relevant interaction with digoxin is expected.

Fusidic Acid: Interaction studies with rosuvastatin and fusidic acid have not been conducted. The risk of myopathy, including rhabdomyolysis may be increased by the concomitant administration of systemic fusidic acid with statins. The mechanism of this interaction (whether it is pharmacodynamic or pharmacokinetic, or both) is yet unknown. There have been reports of rhabdomyolysis (including some fatalities) in patients receiving this combination.

If treatment with systemic fusidic acid is necessary, Rosuvastatin treatment should be discontinued throughout the duration of the fusidic acid treatment.

**Paediatric population:** Interaction studies have only been performed in adults. The extent of interactions in the paediatric population is not known.

**4.6.Pregnancy and lactation**

Rosuvastatin is contraindicated in pregnancy and lactation.

Women of child bearing potential should use appropriate contraceptive measures.

Since cholesterol and other products of cholesterol biosynthesis are essential for the development of the foetus, the potential risk from inhibition of HMG-CoA reductase outweighs the advantage of treatment during pregnancy. Animal studies provide limited evidence of reproductive toxicity. If a patient becomes pregnant during use of this product, treatment should be discontinued immediately.

Rosuvastatin is excreted in the milk of rats. There are no data with respect to excretion in milk in humans.

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

Studies to determine the effect of Rosuvastatin on the ability to drive and use machines have not been conducted. However, based on its pharmacodynamic properties, Rosuvastatin is unlikely to affect this ability. When driving vehicles or operating machines, it should be taken into account that dizziness may occur during treatment.

#### **4.8. Undesirable effects**

The following serious adverse reactions are discussed in greater detail in other sections of the label:

- Rhabdomyolysis with myoglobinuria and acute renal failure and myopathy (Including myositis)
- Liver enzyme abnormalities

In the rosuvastatin tablets controlled clinical trials database (placebo or active-controlled) of 5394 patients with a mean treatment duration of 15 weeks, 1.4% of patients discontinued due to adverse reactions. The most common adverse reactions that led to treatment discontinuation were:

- myalgia
- abdominal pain
- nausea

The most commonly reported adverse reactions (incidence  $\geq 2\%$ ) in the rosuvastatin tablets controlled clinical trial database of 5394 patients were:

- headache
- myalgia
- abdominal pain
- asthenia
- nausea

#### **4.9. Overdose**

There is no specific treatment in the event of overdose. In the event of overdose, the patient should be treated symptomatically and supportive measures instituted as required.

Hemodialysis does not significantly enhance clearance of rosuvastatin.

## **5. PHARMACOLOGICAL PROPERTIES**

### **5.1. Pharmacodynamic Properties:**

Rosuvastatin calcium is a selective and competitive inhibitor of HMG-CoA reductase, the rate-limiting enzyme that converts 3-hydroxy-3-methylglutaryl coenzyme A to mevalonate, a precursor of cholesterol. In vivo studies in animals, and in vitro studies in cultured animal and human cells have shown rosuvastatin to have a high uptake into, and selectivity for, action in the liver, the target organ for cholesterol lowering. In in vivo and in vitro studies, rosuvastatin produces its lipid-modifying effects in two ways. First, it increases the number of hepatic LDL receptors on the cell-surface to enhance uptake and catabolism of LDL. Second, rosuvastatin inhibits hepatic synthesis of VLDL, which reduces the total number of VLDL and LDL particles.

### **5.2. Pharmacokinetic**

#### **properties Absorption**

In clinical pharmacology studies in man, peak plasma concentrations of rosuvastatin were reached 3 to 5 hours following oral dosing. Both C<sub>max</sub> and AUC increased in approximate proportion to Rosuvastatin dose. The absolute bioavailability of rosuvastatin is approximately 20%.

Administration of Rosuvastatin with food did not affect the AUC of rosuvastatin.

The AUC of rosuvastatin does not differ following evening or morning drug administration.

#### **Distribution**

Mean volume of distribution at steady-state of rosuvastatin is approximately 134 liters.

Rosuvastatin is 88% bound to plasma proteins, mostly albumin. This binding is reversible and independent of plasma concentrations.

#### **Elimination**

Rosuvastatin is primarily eliminated by excretion in the feces. The elimination half-life of rosuvastatin is approximately 19 hours.

#### **Metabolism**

Rosuvastatin is not extensively metabolized; approximately 10% of a radiolabeled dose is recovered as metabolite. The major metabolite is N-desmethylrosuvastatin, which is formed principally by cytochrome P450 \ 2C9, and in vitro studies have demonstrated that N-desmethylrosuvastatin has approximately one-sixth to one-half the HMG-CoA reductase inhibitory activity of the parent compound. Overall, greater than 90% of active plasma HMGCoA reductase inhibitory activity is accounted for by the parent compound.

## **Excretion**

Following oral administration, rosuvastatin and its metabolites are primarily excreted in the feces (90%). After an intravenous dose, approximately 28% of total body clearance was via the renal route, and 72% by the hepatic route.

### **5.3.Preclinical safety data**

Not applicable

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1.List of excipients**

Microcrystalline Cellulose PH-122 NF, Lactose Monohydrate (SD250) NF, Carboxymethyl cellulose Calcium NF, Magnesium stearate NF, Opadry Pink 03K54121 IH, Purified water USP/Ph.Eur

### **6.2.Incompatibilities**

Not applicable.

### **6.3.Shelf life**

24 Months

### **6.4.Special precautions for storage**

Store below 30°C. Protect from light and moisture.Keep out of reach of children.

### **6.5.Nature and contents of container**

Rosuvastatin Tablets USP 10 mg packed in Alu – Alu Blister pack of 10 tablets, such a 3 blisters packed in a printed carton along with pack insert.

### **6.6.Special precautions for disposal and other handling**

No special requirements for disposal.

## **7. MARKETING AUTHORISATION HOLDER-**

MEGA LIFESCIENCE (AUSTRALIA) PTY LTD

Victoria 3810, Australia.

## **8. MARKETING AUTHORISATION NUMBER(S)**

**TAN 22 HM 0412**

## **9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION--**

**21/09/2022**

## **10. DATE OF REVISION OF THE TEXT**

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