# SUMMARY OF PRODUCT CHARACTERISTICS

## NAME OF THE MEDICINAL PRODUCT
Prosta-Q 0.4 mg Sustained release capsules, hard

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION
One capsule contains 0.4 mg of tamsulosin hydrochloride. For the full list of excipients, see section 6.1.

## 3. PHARMACEUTICAL FORM
Sustained-release capsule, hard.
White pellets filled in capsule shell with transparent body and reddish brown cap.

## 4. CLINICAL PARTICULARS

### 4.1 Therapeutic indications
Lower urinary tract symptoms (LUTS) associated with benign prostatic hyperplasia (BPH).

### 4.2 Posology and method of administration
One capsule daily, to be taken after breakfast or after the first meal of the day. The capsule should be swallowed whole with a glass of water in sitting or in standing position (not in lying position). The capsule should not be broken or chewed as this will interfere with the modified release of the active ingredient. In cases when patients have difficulties swallowing (e. g. dysphagia), the capsule may be opened and the contents swallowed without chewing.Paediatric population: The safety and efficacy of tamsulosin in children < 18 years have not been established. Currently available data are described in section 5.1.

### 4.3 Contraindications
Hypersensitivity to tamsulosin hydrochloride, including drug-induced angioedema or to any of the excipients listed in section 6.1.
A history of orthostatic hypotension.
Severe hepatic insufficiency.

**4.4 Special warnings and precautions for use**

As with other α1-adrenoceptor antagonists, a reduction in blood pressure can occur in individual cases during treatment with tamsulosin as a result of which, rarely, syncope can occur. At the first signs of orthostatic hypotension (dizziness, weakness), the patient should sit or lie down until the symptoms have disappeared.

Before therapy with tamsulosin is initiated, the patient should be examined in order to exclude the presence of other conditions, which can cause the same symptoms as benign prostatic hyperplasia.

Digital rectal examination and, when necessary,determination of prostate specific antigen (PSA) should be performed before treatment and at regular intervals afterwards.smpcen-tamsulosin 0.4 mg-01-2013 2/7

The treatment of patients with severe renal impairment (creatinine clearance of < 10 ml/min) should be approached with caution, as these patients have not been studied.

Angioedema has been rarely reported after the use of tamsulosin. Treatment should be discontinued immediately, patient should be monitored until disappearance of the oedema, and tamsulosin should not be re-administered.

Tamsulosin hydrochloride should not be given in combination with strong inhibitors of CYP3A4 in patients with poor metaboliser CYP2D6 phenotype.

Tamsulosin hydrochloride should be used wih caution in combination with strong and moderate inhibitors of CYP3A4 (see section 4.5).

The 'Intraoperative Floppy Iris Syndrome' (IFIS, a variant of small pupil syndrome) has been observed during cataract surgery in some patients on or previously treated with tamsulosin. IFIS may increase the risk of eye complications during and after the operation.

Discontinuing tamsulosin hydrochloride 1-2 weeks prior to cateract surgery is anecdotally considered helpful, but the benefit and duration of stopping of therapy prior to cateract surgery has not yet been established. IFIS has also been reported in patients who had discontinued tamsulosin for a longer period prior to cateract surgery.

The initiation of therapy with tamsulosin in patients for whom cateract surgery is scheduled is not recommended. During pre-operative assessment, cateract surgeons and ophthalmic teams should consider whether patients scheduled for cateract surgery are being or have been treated with tamsulosin in order to ensure that appropriate measures will be in place to manage the IFIS during surgery.

**4.5 Interaction with other medicinal products and other forms of interaction** Interaction studies have only been performed in adults.

Concurrent administration of other a1-adrenoceptor antagonists may lead to hypotensive effects.
Phosphodiesterase-5 inhibitors and tamsulosin
In a crossover-trial with 18 healthy volunteers treated with 0.4 mg tamsulosin daily, the concomitant administration of tadalafil (10mg or 20mg) led to a lowering of systolic or diastolic blood pressure**4.5 Interaction with other medicinal products and other forms of interaction** Interaction studies have only been performed in adults.
Concurrent administration of other a1-adrenoceptor antagonists may lead to hypotensive effects.
Phosphodiesterase-5 inhibitors and tamsulosin
In a crossover-trial with 18 healthy volunteers treated with 0.4 mg tamsulosin daily, the concomitant administration of tadalafil (10mg or 20mg) led to a lowering of systolic or diastolic blood pressure values from the starting values (>30 mm Hg systolic or >20 mmHg diastolic) in either lying or standing position in more volunteers than after administration of placebo, namely in 7 (10 mg tadalafil) and 5 (20 mg tadalafil) versus 4 (placebo) volunteers. However, none of these reductions in blood pressure were clinically relevant (<85 mmHg systolic or <45 mmHg diastolic).
No interactions have been seen when tamsulosin hydrochloride was given concomitantly with either atenolol, enalapril, or theophylline. Concomitant cimetidine brings about a rise in plasma levels of tamsulosin, whereas furosemide a fall, but as levels remain within the normal range posology need not be adjusted.
In vitro, neither diazepam nor propranolol, trichlormethiazide, chlormadinon, amitriptyline, diclofenac, glibenclamide, simvastatin and warfarin change the free fraction of tamsulosin in human plasma. Neither does tamsulosin change the free fractions of diazepam, propranolol, trichlormethiazide and chlormadinon.
Diclofenac and warfarin, however, may increase the elimination rate of tamsulosin.smpcentamsulosin 0.4 mg-01-2013 3/7
Concomitant administration of tamsulosine hydrochloride with strong inhibitors of CYP3A4 may lead to increased exposure to tamsulosin hydrochloride. Concomitant administration with ketoconazole (a known strong CYP3A4 inhibitor) resulted in an increase in AUC und Cmax of tamsulosin hydrochloride by a factor of 2.8 and 2.2, respectively.
Tamsulosine hydrochloride should not be given in combination with strong inhibitors of CYP3A4 in patients with poor metaboliser CYP2D6 phenotype.
Tamsulosine hydrochloride should be used with caution in combination with strong and moderate inhibitors of CYP 3A4.

Concomitant administration of tamsulosin hydrochloride with paroxetine, a strong inhibitor of CYP2D6, resulted in a Cmax and AUC of tamsulosin that had increased by a factor of 1.3 and 1.6, respectively, but these increases are not considered clinically relevant. **4.6 Fertility, pregnancy and lactation**

Prosta-Q is not indicated for use in woman.

Ejaculation disorders have been observed in short and long term clinical studies with tamsulosin. Events of ejaculation disorder, retrograde ejaculation and ejaculation failure have been reported in the post authorization phase.

**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 patients should be aware of the fact that dizziness can occur.

**4.8 Undesirable effects**

Within each frequency grouping, undesirable effects are presented in order of decreasing seriousness.

Nervous system disorders

Common (≥1/100 to <1/10)

Uncommon (≥1/1,000 to <1/100)

Rare (≥1/10,000 to <1/1,000)

Dizziness (1.3%)

Headache

Syncope

Eye disorders

Not known (cannot be estimated from the available data)

Vision blurred, visual impairment

Cardiac disorders

Uncommon (≥1/1,000 to <1/100)

Palpitations Vascular disorders

Uncommon (≥1/1,000 to <1/100):

Not known (cannot be estimated from the available data)

Orthostatic hypotension

Atrial fibrillation, arrhythmia, tachycardia

Respiratory, thoracic and mediastinal smpcen-tamsulosin 0.4 mg-01-2013 4/7 disorders

Uncommon (≥1/1,000 to <1/100)

Not known (cannot be estimated from the available data)

Rhinitis

Dyspnoea, epistaxis

Gastrointestinal disorders

Uncommon (≥1/1,000 to <1/100) Constipation, diarrhoea, nausea, vomiting
Skin and subcutaneous tissue disorders
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)
Rash, pruritus, urticaria
Angioedema
Stevens-Johnson syndrome
Erythema multiforme, dermatitis exfoliative
Reproductive system and breast disorders
Common (≥1/100 to <1/10)
Very rare (<1/10,000)
Not known (cannot be estimated from the available data)
Ejaculation disorders
Priapism
Ejaculation disorder, retrograde ejaculation, ejaculation failure
General disorders and administration site conditions
Uncommon (≥1/1,000 to <1/100) Asthenia
During cataract surgery a small pupil situation, known as Intraoperative Floppy Iris Syndrome (IFIS), has been associated with therapy of tamsulosin during post-marketing surveillance (see also section 4.4).

**4.9 Overdose**

Acute overdose with 5 mg of tamsulosin hydrochloride has been reported. Acute hypotension (systolic blood pressure 70 mm hg), vomiting and diarrhoea were observed, which were treated with fluid replacement and the patient could be discharged the same day.

In case of acute hypotension accurring after overdosage cardiovascular support should be given. Blood pressure can be restored and heart rate brought back to normal by lying the patient down. If this does not help then volume expanders and, when necessary, vasopressors could be employed.

Renal function should be monitored and general supportive measures applied. Dialysis is unlikely to be of help as tamsulosin is very highly bound to plasma proteins.

Measures, such as emesis, can be taken to impede absorption. Whenlarge quantities are involved, gastric lavage canbe applied and activated charcoal and an osmotic laxative, such as sodium sulphate, canbe administered.

## 5. PHARMACOLOGICAL PROPERTIES

### 5.1 Pharmacodynamic propertiessmpcen-tamsulosin 0.4 mg-01-2013 5/7

Pharmacotherapeutic group: alpha-adrenoreceptor antagonists,
ATC code:G04CA02

**Mechanism of action**

Tamsulosin binds selectively and competitively to postsynaptic α1A adrenoreceptors, which convey smooth muscle contraction, thereby relaxing prostatic and urethral smooth muscle.

**Pharmacodynamic effects**

Tamsulosin increases the maximum urinary flow rate by relaxing prostatic and urethral smooth muscle, thus relieving obstruction.

The medicinal product also improves the irritative and obstructive symptoms in which the contraction of smooth muscle in the lower urinary tract plays an important role.

Alpha-blockers can reduce blood pressure by lowering peripheral resistance. No reduction in blood pressure of any clinical significance was observed during studies with tamsulosin in normotensive patients.

The medicinal product's effect on storage and voiding symptoms are also maintained during longterm therapy, as a result of which the need for surgical treatment is significantly postponed. **Pediatric population**

A double-blind, randomized, placebo-controlled, dose ranging study was performed in children with neuropathic bladder. A total of 161 children (with an age of 2 to 16 years) were randomized and treatedat 1 of 3 dose levels of tamsulosin (low [0.001 to 0.002 mg/kg], medium (0.002 to 0.004 mg/kg], and high [0.004 to 0.008 mg/kg], or placebo. The primary endpoint was number of patients who decreased their detrusor leak point pressure (LPP) to < 40 cm H2O based upon two evaluations on the Same day. Secondary endpoints were: Actual and percent change from baseline in detrusor leak point pressure, improvement or stabilization of hydronephrosis and hydroureter and change in urine volumes obtained by catheterisation and number of times wet at time of catheterisation as recorded in catheterisation diaries. Nostatistically significant difference was found between the placebo group and any of the 3 tamsulosin dose groups for either the primary or any secondary endpoints. No dose response was observed for any dose level.

### 5.2 Pharmacokinetic properties

**Absorption**

Tamsulosin is rapidly absorbed from the intestine and its bioavailability is almost complete. Absorption is slowed down if a meal has been eaten before taking the medicinal product. Uniformity of absorption can be assured by always taking

tamsulosin after breakfast. Tamsulosin shows linear kinetics.Peak plasma levels are achieved at approximately six hours after a single dose of tamsulosin taken after a full meal. The steady state is reached by day five of multiple dosing, when Cmax in patients is about two-thirds higher than that reached after a single dose. Althoughthis has been demonstrated only in the elderly, the same result would also be expected in younger patients. There are huge inter-patient variations in plasma levels of tamsulosin, both after single as well as multiple dosing.

**Distribution**

In humans, tamsulosin is more than 99% bound to plasma proteins and the volume of distribution is small (about 0.2 l/kg).smpcen-tamsulosin 0.4 mg-01-2013 6/7

**Biotransformation**

Tamsulosin has a low first pass metabolic effect. Most tamsulosin is found unaltered in plasma. The substance is metabolised in the liver. In studies on rats, tamsulosin was found to cause only a slight induction of microsomal liver enzymes. The metabolites are not as effective and toxic as the active medicinal product itself.

**Elimination**

Tamsulosin and its metabolites are mainly excreted in the urine with about 9% of the dose being present in unchanged form.The elimination half-life of tamsulosin in patients is approximately 10 hours (when taken after a meal) and 13 hours in the steady state.

**5.3 Preclinical safety data**

Toxicity after a single dose and multiple dosing has been investigated in mice, rats and dogs. Reproductive toxicity has also been investigated in rats, carcinogenicity in mice and rats, and genotoxicity in vivo and in vitro.The common toxicity profile found with large doses of tamsulosin is equivalent to the pharmacological effect associated with alpha adrenergic antagonists.

Changes in ECG readings were found with very large doses in dogs. This is not, however, assumed to be of any clinical significance. Tamsulosin has not been found to have any significant genotoxic properties. Greater proliferative changes in the mammary glands of female rats and mice have been discovered on exposure to tamsulosin. These findings, which are probably indirectly linked to hyperprolactinaemia and only occur as a result of large doses having been taken, are considered clinically insignificant.

**6. PHARMACEUTICAL PARTICULARS**

**6.1 List of excipients**

N/A

**6.2 Incompatibilities** Not applicable.

**6.3 Shelf life**

Pallets expiry

**6.4 Special precautions for storage**

Do not store above 30°C.Keep in a dry place.

**6.5 Nature and contents of container**

White, black, blue and red color Unit carton containing capsules with the transparent body and reddish brown cap packed in printed aluminium foil on one side and plain Aluminium foil on other side.

Pack sizes: 2×5's

**Prosta-Q 0.4mg Capsule**
**(Tamsulosin)**

**6.6 Special precautions for disposal** No special requirements for disposal.

**7. MARKETING AUTHORISATION HOLDER**

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

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