*V5.0 (18/12/ 2017)*

## PACKAGE INSERT

**SCHEDULING STATUS:**

**S1**

**PROPRIETARY NAMES AND DOSAGE FORMS:**

ZADIN 0,025 % NASAL DROPS

ZADIN 0,025 % NASAL SPRAY

ZADIN 0,05 % NASAL DROPS

ZADIN 0,05 % NASAL SPRAY

**COMPOSITION:**

Each 1 mℓ of ZADIN 0,025 % Nasal Drops and Nasal Spray solution contains 0,25 mg oxymetazoline hydrochloride.

Each 1 mℓ of ZADIN 0,05 % Nasal Drops and Nasal Spray solution contains 0,50 mg oxymetazoline hydrochloride.

Preservative: Benzalkonium chloride 0,0055 % *m/v.*

Excipients: Disodium phosphate dihydrate, sodium dihydrogen phosphate dihydrate, sodium hydroxide, water for injection.

**PHARMACOLOGICAL CLASSIFICATION:**

A 16.1 Nasal decongestants

**PHARMACOLOGICAL ACTION:**

Oxymetazoline hydrochloride is a direct acting sympathomimetic medicine with alpha-adrenergic activity. It is a vasoconstrictor which reduces swelling and congestion when applied to the nasal mucous membranes.

**Pharmacokinetic properties:**

Oxymetazoline hydrochloride acts within a few minutes and the effect lasts for up to 12 hours.

**INDICATIONS:**

ZADIN is used for the temporary relief of nasal congestion in colds and influenza, hay fever, allergic rhinitis, other upper respiratory allergies, post-nasal drip and sinusitis.

**CONTRAINDICATIONS:**

- Hypersensitivity to oxymetazoline hydrochloride or any of the ingredients.
- Inflammation of the skin and mucosa of the nasal vestibule and encrustation (rhinitis sicca).
- After trans-sphenoidal hypophysectomy.
- Narrow-angle glaucoma.
- Concomitant use of monoamine oxidase inhibitors (MAOIs), or within 14 days of terminating MAOI-therapy.
- Patients with porphyria.
- Patients with severe hypertension or phaeochromocytoma.
- Pregnancy and lactation (see “PREGNANCY AND LACTATION”).
- ZADIN 0,05 % nasal spray and nasal drops – Use in children under 6 years of age.
- ZADIN 0,025 % nasal spray and nasal drops – Use in children under 2 years of age.
- Acute coronary disease or congestive heart failure.

**WARNINGS AND SPECIAL PRECAUTIONS:**

- ZADIN should not be used for more than 5 days. If symptoms persist, a doctor should be consulted.
- Prolonged use or excessive application of ZADIN to the nasal mucosa may lead to rebound congestion and rhinorrhoea.
- Use with caution in patients with cardiovascular disorders (especially cardiac dysrhythmias, ischaemic heart disease or hypertension).
- Use with caution in patients with an occlusive vascular disease who are at an increased risk of peripheral ischaemia.
- Caution is advised in patients with hyperthyroidism, who may be at increased risk of effects on the heart (elevated thyroid hormone concentrations may also enhance adrenoceptor sensitivity).

- Diabetic and elderly patients have a high incidence of atherosclerotic disease and may also be at higher risk.
- Patients with prostatic hypertrophy should use ZADIN with caution as they may be at risk of urinary retention.
- ZADIN should not be used by more than one person as it may spread infection.
- Children may be especially sensitive to the effects of ZADIN therefore caution should be used when administering to children.

**Effects on ability to drive and use machines:**
ZADIN has no influence on the ability to drive and use machines.

**INTERACTIONS:**

- Concomitant use of tricyclic antidepressants, maprotiline or monoamine oxidase inhibitors (MAOIs), may potentiate the pressor effects of ZADIN (see “CONTRAINDICATIONS”). Tricyclic antidepressants also block the inactivation of epinephrine (adrenaline) and norepinephrine (noradrenaline) by uptake into the nerve endings and as a result hypertension and dysrhythmias may occur.
- Increased cardiac effects may occur with medicines that increase the sensitivity of the myocardium to $beta_1$ agonists. Take special care when using ZADIN together with digoxin and antidysrhythmics.
- Caution is required when ZADIN is used in combination with thyroid hormones.
- Use ZADIN with caution in combination with antihypertensive medicines or medicines that cause hypotension, particularly those whose action involves the sympathetic nervous system.
- Interactions with alpha- and beta-blockers may be complex and can produce a hypertensive crisis.
- The antihypotensive effects of adrenergic neurone blockers such as alpha-methyldopa may be reversed and may result in hypertension.
- The effect of central nervous system (CNS) stimulants may be potentiated, while the vasoconstrictor and vasopressor effects of alpha agonists may be enhanced by medicines with similar effects, such as ergot alkaloids or oxytocin.
- Inhalation anaesthetics may increase the risk of dysrhythmias when used in combination with ZADIN.

**PREGNANCY AND LACTATION:**

Safety in pregnancy and lactation has not been established (see “CONTRAINDICATIONS”). Mothers on ZADIN should not breastfeed their infants.

**DOSAGE AND DIRECTIONS FOR USE:**

**ZADIN 0,025 % for children 2 to 6 years of age (with adult supervision):**

***How to use ZADIN 0,025 % Nasal Drops:***

- Tilt the child’s head back (this will ensure that the drops will penetrate as deeply as possible).
- Instill 1 to 3 drops into each nostril, not more than every 10 to 12 hours.
- Tell the child to sniff in simultaneously during administration. (This is most effectively accomplished with the patient in the lateral head position.)
- Immediately move the child’s head forward toward his/her knees for a few seconds, and then return to the upright position.
- Do not exceed 2 applications in any 24 hour period.
- Wipe dropper nozzle clean after each use.

***How to use ZADIN 0,025 % Nasal Spray:***

- Place the tip of the nozzle in one nostril without completely occluding the nostril.
- Bend head slightly forward and spray 2 to 3 times while sniffing briskly, not more than every 10 to 12 hours.
- Treat the other nostril in the same way.
- Do not exceed 2 applications in any 24 hour period.
- Wipe nozzle clean after each use.

**Do not exceed the recommended dosage or use for longer than 5 days.**

**ZADIN 0,05 % for adults and children over 6 years of age:**

***How to use ZADIN 0,05 % Nasal Drops*:**

- Hold the head well back.
- Instill 1 to 2 drops into each nostril, not more than every 10 to 12 hours.
- Sniff in simultaneously during administration. (This is most effectively accomplished with the patient in the lateral head position.)

- Do not exceed 2 applications in any 24 hour period.
- Wipe dropper nozzle clean after each use.

***How to use ZADIN 0,05 % Nasal Spray:***

- Place the tip of the nozzle in one nostril without completely occluding the nostril.
- Bend head slightly forward and spray 1 to 2 times while sniffing briskly, not more than every 10 to 12 hours.
- Treat the other nostril in the same way.
- Do not exceed 2 applications in any 24 hour period.
- Wipe nozzle clean after each use.

**Do not exceed the recommended dosage or use for longer than 5 days.**

**SIDE EFFECTS:**

**Immune system disorders:**

***Less frequent:*** Hypersensitivity reactions (angioedema, skin rash, pruritus).

**Metabolism and nutrition disorders:**

***The following has been reported but frequency is unknown****:* Altered metabolism (including disturbances of glucose metabolism).

**Nervous system disorders:**

***Less frequent:*** Anxiety, irritability, headache, insomnia, nervousness, tremor, restlessness, fatigue (drowsiness; sedation), hallucinations (mainly in children), and convulsions (especially in children).

***The following has been reported but frequency is unknown:*** Confusion, fear, pain, dizziness, lightheadedness, cerebral haemorrhage.

**Cardiac disorders:**

***Less frequent:*** Palpitations, tachycardia, dysrhythmia.

***The following has been reported but frequency is unknown:*** Anginal pain, cardiac arrest, bradycardia.

**Vascular disorders:**

***Less frequent:*** Hypertension.
***The following has been reported but frequency is unknown:*** Vasoconstriction, hypotension.

**Respiratory, thoracic and mediastinal disorders:**
***Frequent:*** Sneezing, burning and dryness of the nasal mucosa.
***Less Frequent:*** Rebound congestion, epistaxis, apnoea in young infants and neonates.
***The following has been reported but frequency is unknown:*** Pulmonary oedema, increased nasal discharge, dyspnoea.

**Gastrointestinal disorders:**
***Less frequent:*** Dryness of the mouth and throat, nausea.
***The following has been reported but frequency is unknown:*** Vomiting, reduced appetite, thirst.

**Skin and subcutaneous tissue disorders:**
***The following has been reported but frequency is unknown:*** Increased sweating, unusual paleness, piloerection.

**Renal and urinary disorders:**
***The following has been reported but frequency is unknown:*** Difficult or painful urination, urinary retention.

**General disorders and administrative site conditions:**
***Less frequent:*** Flushing.
***The following has been reported but frequency is unknown:*** Local stinging, burning, hypersalivation, cold extremities, weakness, fainting.

**KNOWN SYMPTOMS OF OVERDOSAGE AND PARTICULARS OF ITS TREATMENT:**
Symptoms of moderate or severe overdose can be mydriasis, nausea, cyanosis, fever, spasms, tachycardia, cardiac dysrhythmia, cardiac arrest, hypertension, oedema of the lungs, dyspnoea and psychic disturbance. The inhibition of functions of the central nervous system such as somnolence, lowering of body temperature, bradycardia, shock like hypotension, apnoea and loss of consciousness is also possible. A non-selective alphalytic such as phentolamine may be

administered to depress the increased blood pressure. Intubation and artificial respiration may be necessary in serious cases.

In the case of moderate or severe inadvertent oral consumption, the administration of activated carbon (absorbent) and sodium sulphate (laxative) or perhaps gastro-lavage in the case of large amounts should be undertaken.
Further treatment is supportive and symptomatic.
Vasopressor medicines are contraindicated.

**IDENTIFICATION:**
ZADIN 0,025 **%** Nasal Drops and Nasal Spray: Colourless, clear solution.
ZADIN 0,05 **%** Nasal Drops and Nasal Spray: Colourless, clear solution.

**PRESENTATION:**
**ZADIN 0,025 % and ZADIN 0,05 % Nasal Spray:**

White plastic bottle (HDPE) with a mechanical spraying device. Nasal spray pump consisting of a nasal actuator with white screw closure/protection cap and housing with basic pump system. Each bottle contains 10 mℓ of solution. Each carton contains 1 bottle.

**ZADIN 0,025 % and ZADIN 0,05 % Nasal Drops:**
White plastic bottle with a screw cap (both a mixture of LDPE and HDPE) and dropper (HDPE), containing 10 mℓ of solution. Each carton contains 1 bottle.

**STORAGE INSTRUCTIONS:**
Store at or below 25 °C.
**KEEP OUT OF THE REACH OF CHILDREN.**
Keep container tightly closed when not in use.
This product should be discarded if the solution becomes discoloured.

**REGISTRATION NUMBERS:**
ZADIN 0,025 % Nasal Drops: 44/16.1/0751
ZADIN 0,025 % Nasal Spray: 44/16.1/0749
ZADIN 0,05 % Nasal Drops: 44/16.1/0752

ZADIN 0,05 % Nasal Spray: 44/16.1/0750

**NAME AND BUSINESS ADDRESS OF THE HOLDER OF THE CERTIFICATES OF REGISTRATION:**

Sandoz SA (Pty) Ltd.[1]
72 Steel Road
Spartan
Kempton Park
1619

**DATE OF PUBLICATION OF THE PACKAGE INSERT:**

**Date of registration:** 5 June 2014.

**Date of most recent approval of professional information:** 17 February 2017.

**Additional country registration details:**

| *Country* | *Product name* | *Scheduling status (or Category of distribution)* | *Registration number* |
|---|---|---|---|
| **Namibia** | Zadin 0,025 % Nasal drops | NS1 | 14/16.1/0622 |
| | Zadin 0,05 % Nasal drops | NS1 | 14/16.1/0621 |

***Name and address of manufacturer:***

Lek Pharmaceuticals d.d.

Verovškova 57, Ljubljana

Slovenia

[1]Company Reg. No.: 1990/001979/07