1 NAME OF THE MEDICINAL PRODUCT

XYLONOR SPRAY, oromucosal spray, solution.

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each gram contains:
Lidocaine 150 mg
Cetrimide 1.5mg

One spray container contains 5.4 g of Lidocaine and 0.054 g of Cetrimide

Excipient(s) with known effect: XYLONOR SPRAY contains dipropylene glycol.
For a full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Oromucosal spray, solution.
Clear liquid, not more intensely coloured than reference solution BY5 and with a characteristic odour of spearmint.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

XYLONOR SPRAY is indicated for the production of topical anaesthesia in adults, adolescents and children above 6 years of age (or from 25 kg (55lbs) of body weight) in the buccal cavity, including the following dental procedure:
- Anaesthesia of the mucous membrane before injection, lancing of abscesses or scaling;
- Surface anaesthesia for the extraction of mobile, deciduous or permanent teeth;
- Prevention of gagging during impression taking Juxta-gingival and sub-gingival scaling.

4.2 Posology and method of administration

For professional use by dentists and stomatologists.

4.2.1 Posology

- **Adults**
  One metered dose delivers approximately 10 mg of lidocaine. One dose is usually sufficient before anaesthetic injection. When used for scaling, three doses are usually sufficient (approximately applied on a 10 cm² surface).
  The maximum dose for a healthy adult of 70 kg is 200 mg of lidocaine (corresponding to six times the dose of applied solution in case of scaling).

- **Children (above 6 years old) and adolescents**
  One metered dose delivers approximately 10 mg of lidocaine. One dose is usually sufficient
before anaesthetic injection (approximately applied on a 1 cm\(^2\) surface). Sub-gingival scaling is usually performed when the patient is over 12 years old (35 kg of body weight) and on maximum half of the mouth per session. When used for scaling, three doses are usually sufficient (approximately applied on a 10 cm\(^2\) surface). The maximum dose is 100 mg of lidocaine (corresponding to three times the dose of applied solution in case of scaling).

- **Special populations**

**Elderly**
Due to reduced liver activity, particular precaution should be used in order to administer the lowest dose leading to efficient anaesthesia in elderly patients.

### 4.2.2 Method of administration:

Application should be performed onto a previously dried mucosa. Place the end of the spray nozzle at 2 to 4 cm from the area to be anesthetized.

Dispense one metered dose which covers an area of about 1cm\(^2\)

This operation can be repeated in three different areas in the mouth during the same session.

To lessen the gag reflex, spray the solution towards the palate.

### 4.3 Contraindications

- Known hypersensitivity to lidocaine, or to any local anaesthetics of the amide type, or to cetrimide or to any of the excipients.
- Children (age below 6 years old), because of a risk of choking.

### 4.4 Special warnings and precautions for use

#### 4.4.1 Special warnings

*XYLONOR SPRAY must be used with caution in:*

- Case when the product is applied onto an inflamed or infected area, since there is a risk of rapid systemic absorption of lidocaine.
- Patients with porphyria: This product should be used very cautiously.
- Patients with history of epilepsy as this product contains terpene derivatives which may cause, at very high doses, neurological disorders such as seizures.

*XYLONOR SPRAY must be used safely and effectively under appropriate conditions:*

The oropharyngeal use of topical anaesthetics may interfere with swallowing capacities, particularly in children, and may lead to choking.

Risk of biting trauma (lips, jaws, tongue) exists, especially in children; the patient should be told to avoid chewing-gum or eating until normal sensation is restored.

XYLONOR SPRAY contains dipropylene glycol, which may cause skin irritation.

#### 4.4.2 Precautions for use

XYLONOR SPRAY should not be sprayed in the rear of the throat.
4.5 Interaction with other medicinal products and other forms of interaction

**Interactions requiring precautions for use**

**Other local anaesthetics:** Toxicity of local anaesthetics is additive. It is not relevant considering dental anaesthesia doses and blood levels, but it is a concern in children.

The total dose of administered lidocaine should not exceed the maximum recommended dose.

**Non Selective Beta-adrenergic Blockers (e.g. propranolol, nadolol):** Reduced doses of this product should be used due to possible increase in blood pressure. Close cardiovascular monitoring is recommended.

**H2 antihistaminics** (cimetidine): Increased serum levels of amide anaesthetics have been reported following concomitant administration of cimetidine.

4.6 Fertility, pregnancy and lactation

4.6.1 Fertility

Animal studies do not indicate reproductive toxicity. The use of the product may be considered during pregnancy, if necessary.

4.6.2 Pregnancy

The product is applied locally on gingival tissues. No effects during pregnancy are anticipated, since systemic exposure to lidocaine is negligible.

The product can be used during pregnancy.

4.6.3 Breastfeeding

The product is applied locally on gingival tissues. Lidocaine is excreted in human milk, but at therapeutic doses of the product no effects on the breastfed newborns/infants are anticipated.

The product can be used during breastfeeding.

4.7 Effects on ability to drive and use machines

No effect is expected on ability to drive and use machines.

4.8 Undesirable effects

a) Summary of the safety profile

Adverse reactions following the administration of XYLONOR SPRAY are similar to those observed with other local amide anaesthetics. These adverse reactions are, in general, dose-related and may result from high plasma levels caused by overdose, rapid absorption. They may also result from hypersensitivity, idiosyncrasy, or diminished tolerance by patient.

Serious adverse reactions are generally systemic.

b) Tabulated list of adverse reactions

The reported adverse reactions come from spontaneous reporting and literature.
The frequencies classification follows the convention: Very common (≥ 1/10), Common (≥1/100 - <1/10), Uncommon (≥1/1,000 - <1/100), Rare (≥1/10,000 - <1/1,000) and Very rare (<1/10,000). Frequency “Not known”: “Not known (cannot be estimated from the available data)”.

The seriousness of adverse reactions is classified from 1 (most serious) to 3 (less serious) in the following table:

<table>
<thead>
<tr>
<th>MedDRA System Organ Class</th>
<th>Frequency</th>
<th>Adverse Reactions</th>
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| **Immune System disorders** | Rare | 1. Anaphylactic reactions: cutaneous lesions, urticaria, oedema  
2. Allergic reactions |
| **Psychiatric disorders** | Not known | Nervousness, anxiety (apprehension) |
| **Nervous System disorders** | Not known | 1. Convulsions  
2. Unconsciousness  
3. Dizziness  
Somnolence (Drowsiness)  
Tremor  
Restlessness, agitation  
Dysguesia  
Headache  
Nystagmus  
Speech disorder |
| **Ear and labyrinth disorders** | Not known | Tinnitus |
| **Eye disorders** | Not known | Vision blurred |
| **Cardiac disorders** | Not known | Cardiac arrest  
Myocardial depression  
Bradycardia  
Tachycardia |
| **Vascular disorders** | Not known | Hypotension, hypertension |
| **Respiratory, thoracic and mediastinal disorders** | Not known | Respiratory arrest  
Dyspnea  
Tachypnea  
Bronchospasm  
Yawning |
| **Gastrointestinal disorders** | Not known | Dysphagia  
Gingival ulceration  
Gingival blister  
Oral mucosal exfoliation (Gingival sloughing)  
Nausea, Vomiting |
| **Skin and subcutaneous tissue disorders** | Not known | Rash, Pruritus |
| **General disorders and administration site conditions** | Not known | Burning sensation mucosal  
Local swelling  
Localised oedema  
Application site burn |
4.9 Overdose

4.9.1 Types of overdose

Local anaesthetic overdose in the largest sense is often used to describe:

- absolute overdose,
- relative overdose such as:
  - abnormal rapid absorption into the systemic circulation, or
  - delayed metabolism and elimination of XYLONOR SPRAY.

4.9.2 Symptomatology

The symptoms are dose-dependent and have progressive severity in the realm of neurological manifestations, followed by vascular toxicity, respiratory toxicity, and finally cardiac toxicity (detailed in section 4.8).

4.9.3 Treatment of overdose

The availability of resuscitation equipment should be ensured before the onset of dental anesthesia with local anaesthetics.

If acute toxicity is suspected, the administration of XYLONOR SPRAY must immediately be stopped.

Oxygen should rapidly be administered, if necessary assisted ventilation should be used. Change patient position to supine position if necessary.

In case of cardiac arrest, immediate initiation of cardiopulmonary resuscitation should be performed.
5  PHARMACOLOGICAL PROPERTIES

5.1  Pharmacodynamic properties

Pharmacotherapeutic group: Nervous System /Anaesthetics /Local anaesthetics /Amides /Lidocaine combinations.
ATC code: N01 BB 52

Lidocaine is a local anesthetic which stabilizes the neuronal membranes and prevents the initiation and conduction of nerve impulses.

Cetrimide is a quaternary ammonium antiseptic with both bactericidal and detergent properties. It has bactericidal activity against Gram-positive organisms but is less effective against Gram-negative organisms; strains of *Pseudomonas aeruginosa* are particularly resistant.

Onset of action
The onset of action is 2-5 minutes.

Analgesia duration
The duration of anaesthesia is 30-60 minutes.

5.2  Pharmacokinetic properties

Lidocaine is mainly metabolized in the liver, and is excreted by kidney.
Approximately 10% of administered lidocaine is excreted without any change whereas 90% is metabolized before excretion.

The main metabolite excreted in urine is a conjugate of 4-hydroxy-2, 6-dimethylaniline.
Cetrimide penetrates into the superficial layer of the epidermis.

5.3  Preclinical safety data

Not applicable.

6  PHARMACEUTICAL PARTICULARS

6.1  List of excipients

Saccharin
Spearmint flavour
Dipropylene glycol and Ethanol (96 per cent).

6.2  Incompatibilities

Not applicable.

6.3  Shelf life

36 months.
6.4 Special precautions for storage

Do no store above 25°C.

6.5 Nature and contents of container

Packaged in metered dose aerosol mainly composed of a glass bottle and a pump, on which is fitted a diffuser nozzle. When the diffuser nozzle is not fitted to the pump, the bottle is caped with a plastic cap, which is not in contact with the solution.

6.6 Special precautions for disposal

No special requirements.

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