### Important potential risks

None

### Missing information

#### Use during pregnancy and lactation

Text included in the SmPC:
- special information about use during pregnancy and lactation are included in section 4.6;
- preclinical evidence concerning developmental and peri-postnatal toxicity is included in section 5.3.
Similar information is included in the PIL in language more appropriate for the lay audience.

#### Effect on fertility

Text included in the SmPC:
- information concerning fertility is included in section 4.6;
- preclinical evidence concerning developmental and peri-postnatal toxicity is included in section 5.3.
Similar information is included in the PIL in language more appropriate for the lay audience.

#### Overdose

Text included in the SmPC:
- information concerning right route of administration and posology is included in section 4.2;
- information about overdose is included in section 4.9.
Similar information is included in the PIL in language more appropriate for the lay audience.

### VI.2 Elements for a public summary

#### VI.2.1 Overview of disease epidemiology

The inflammations of the mouth (oral cavity) and throat are especially occurring during the cold seasons of the year and are usually caused by viruses or bacteria. Adults average two to four and children six to eight upper respiratory tract infections (URTIs) caused by viruses per year. Painful conditions of oral cavity include pain; reddening; and swelling. Benzydamine oromucosal spray solution is used for the symptomatic treatment of irritated oral and pharyngeal mucosa, which may be cause of mechanical disruption during dental surgery or endotracheal intubation, as well.
VI.2.2 Summary of treatment benefit

Benzydamine belongs to a group of medicines called non-steroidal anti-inflammatory drugs (NSAIDs) and works by stopping pain and swelling (inflammation), and reducing or preventing fever. It has pain-relieving (analgesic), anti-inflammatory, and fever-preventing/reducing (antipyretic) properties. It has been widely used across Europe for nearly four decades. Benzydamine hydrochloride is the active substance of Benzydamine hydrochloride 3 mg/ml, oromucosal spray, solution, which is used as a spray and acts at the site of application (topically used medicine). A major contrast with other NSAIDs is that benzydamine is a weak inhibitor of the production of the substances called prostaglandins which made at sites of tissue damage or infection, where they cause inflammation, pain and fever as part of the healing process. Clinical studies demonstrate that benzydamine is effective for treatment of local mouth and throat (pharynx) irritative processes.

VI.2.3 Unknowns relating to treatment benefits

None
### VI.2.4 Summary of safety concerns

#### Table 26 Summary of safety concerns for important identified risks

<table>
<thead>
<tr>
<th>Important Identified Risk</th>
<th>What is known</th>
<th>Preventability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudden difficulty in breathing caused by constriction of the muscles in the walls of the</td>
<td>Bronchospasm or a bronchial spasm is a sudden constriction of the muscles in the walls of the bronchioles (the airways in the lungs). It is caused by the release (degranulation) of substances from immune cells (mast cells or basophils). It causes difficulty in breathing which can be very mild to severe. Bronchospasm has been reported in patients using some anti-inflammatory drugs. The use of benzydamine is connected with a small increase in the risk of bronchospasm especially in patients with severe or moderate asthma, especially asthmatics with persistent inflammation of the nose or history of fleshy swellings, or polypoidal masses in nose. The mechanism of development of this risk remains unknown.</td>
<td>Special caution should be applied to treatment of patients with asthma or allergic diseases because of the higher incidence of sudden constriction of the muscles in the walls of the bronchioles.</td>
</tr>
<tr>
<td>walls of the airways of the lungs (Bronchospasm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypersensitivity (allergic) reactions</td>
<td>Hypersensitivity reactions may occur after oral and local administration of non-steroidal anti-inflammatory drugs. The use of benzydamine hydrochloride is rarely connected with either allergic skin reactions or photoallergic reactions (allergic reactions to the drug induced by patient’s exposition to sunlight). The risk of hypersensitivity (allergic) reaction to benzydamine is higher in patients with allergic disease, known allergy to other anti-inflammatory drug or aspirin. Long-term use of benzydamine may result in development of allergic reactions as well. Despite its widespread use, nearly four decades experience, and its known potential to cause photoallergic (sun-induced) and skin allergic reactions, the allergies induced by benzydamine are probably underdiagnosed. In some portion of sensitive patients, numbness or stinging sensation in the mouth or throat were reported but disappear spontaneously after the medicine is discontinued.</td>
<td>Special caution should be taken when the patient has known allergy to other anti-inflammatory drugs (oral or local used). The user of Benzydamine hydrochloride 3 mg/ml, oromucosal spray, solution should avoid direct exposition to sunlight.</td>
</tr>
<tr>
<td>Overdose</td>
<td>In the oral doses much larger than those recommended, the symptoms of acute overdose of benzydamine hydrochloride were observed. The symptoms such as seizures (convulsions), excitation, sweating, loss of full control of bodily movements (ataxia), trembling (tremor) and vomiting. After massive oral overdose (500-3000 mg per day), the visual hallucinations, sickness (nausea), vomiting, irritation of the gullet, anxiety or nervous excitement (agitation), headache and irritability were reported and are common signs of benzydamine misuse, recreational use or abuse specifically related to vaginal preparations with benzydamine.</td>
<td>When the Benzydamine hydrochloride 3 mg/ml, oromucosal spray, solution is applied locally, the risk of overdose by benzydamine hydrochloride is low. Nevertheless, instructions about recommended dosage and correct route of administration of this product are described in the SmPC and PIL, and should be followed.</td>
</tr>
</tbody>
</table>
### Table 27  Summary of safety concerns for important potential risks

<table>
<thead>
<tr>
<th>Important Potential Risk</th>
<th>What is known (including reason why it is considered a potential risk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Table 28  Summary of safety concerns for missing information

<table>
<thead>
<tr>
<th>Missing information</th>
<th>What is known (including reason why it is considered a potential risk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use during the pregnancy and lactation</td>
<td>There is a lack of the information about the use of Benzydamine hydrochloride 3 mg/ml, oromucosal spray, solution in pregnancy and lactation. Due to limited data and no human experience, the use of Benzydamine hydrochloride 3 mg/ml, oromucosal spray, solution in pregnant or nursing women is not recommended.</td>
</tr>
<tr>
<td>Effect on fertility</td>
<td>Due to limited human experience, effect of Benzydamine hydrochloride 3 mg/ml, oromucosal spray, solution on fertility is not known and impact of its use on fertility cannot be established.</td>
</tr>
</tbody>
</table>

**VI.2.5 Summary of risk minimisation measures by safety concern**

All medicines have a Summary of Product Characteristics (SmPC) which provides physicians, pharmacists and other health care professionals with details on how to use the medicine, the risks and recommendations for minimising them. An abbreviated version of this in lay language is provided in the form of the package leaflet (PL). The measures in these documents are known as routine risk minimisation measures.

**VI.2.6 Planned post-authorisation development plan (if applicable)**

Not applicable.

**VI.2.7 Summary of changes to the risk management plan over time**

Not applicable.