



**3M ESPE**

# Ubistesin<sup>TM</sup> forte

## Solution for Injection

Oromucosal use

FOR USE IN DENTAL ANAESTHESIA ONLY

### PACKAGE LEAFLET

#### COMPOSITION

1 ml solution for injection contains:

##### Active ingredients:

Articaine hydrochloride	40 mg
Adrenaline hydrochloride (equivalent to 0.010 mg adrenaline)	0.012 mg

##### Other ingredients:

Anhydrous sodium sulphite (equivalent to max. 0.31 mg SO <sub>2</sub> )	max. 0.6 mg
Sodium chloride	
Water for injections	
Hydrochloric acid and sodium hydroxide for adjusting the pH-value	

#### PHARMACEUTICAL FORM AND CONTENT

Solution for injection; one tin contains 50 cartridges of 1.7 ml each

**Local anaesthetic of the amide type with vasoconstrictive component for administration in dentistry**

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### THERAPEUTIC INDICATIONS

Local anaesthesia (infiltration and nerve-block anaesthesia) in dentistry.

Ubistesin forte is especially indicated for complicated procedures requiring prolonged anaesthesia.

### CONTRAINDICATIONS

Ubistesin forte is not allowed to be used in the event of

- children under 4 years of age
- hypersensitivity (allergic) to any of the components

Due to the local anaesthetic ingredient articaine, Ubistesin forte is not allowed to be used in the event of

- known allergy or hypersensitivity to local anaesthetics of the amide type
- severe impairment of the impulse initiation and conduction system of the heart (e.g. grade II and III AV block, pronounced bradycardia
- acutely decompensated cardiac insufficiency
- severe hypotension
- patients who are known to have a deficiency in plasma cholinesterase activity
- haemorrhagic diatheses – particularly with nerve-block anaesthesia
- injection into an inflamed area

Due to the content of adrenaline as a vasoconstrictor admixture,

Ubistesin forte is not allowed to be used in the event of

- Heart diseases such as:
  - unstable angina pectoris
  - recent myocardial infarction
  - recent coronary artery bypass surgery
  - refractory arrhythmias and paroxysmal tachycardia or high-frequency continuous arrhythmia
  - untreated or uncontrolled severe hypertension
  - untreated or uncontrolled congestive heart failure
- concomitant treatment with monoamine oxidase (MAO) inhibitors or tricyclic antidepressants (see section "Interactions")

Due to the content of sulphite as excipient, Ubistesin forte is not allowed to be used in the event of

- allergy or hypersensitivity to sulphite
- severe bronchial asthma

Ubistesin forte can provoke acute allergic reactions with anaphylactic symptoms e.g. bronchospasm.

### SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Ubistesin forte must be used with particular caution in the event of

- severe impairment to the renal function
- angina pectoris (see section "Posology and method of administration" and "Contraindications")
- arteriosclerosis
- considerably impaired blood coagulation (see section "Interactions")
- thyrotoxicosis
- narrow-angle glaucoma
- diabetes mellitus
- lung diseases – particularly allergic asthma
- pheochromocytoma

Accidental injection may be associated with convulsions, followed by damping of central nervous system or cardiorespiratory arrest. Resuscitative equipment, oxygen, and other resuscitative drugs should be available for immediate use.

Since amide-type local anaesthetics are also metabolised by the liver, Ubistesin forte should be used with caution in patients with hepatic diseases. Patients with severe hepatic diseases are at greater risk of developing toxic plasma concentration.

The product should be administered with caution in patients with impaired cardiovascular function since they may be less able to compensate for functional changes associated with the prolongation of A-V conduction produced by these drugs.

The product should be administered with caution to patients with history of epilepsy.

There is a possibility of positive results on doping tests performed on sportsmen.

It should be taken into consideration that during treatment with blood coagulation inhibitors (e.g. heparin or acetylsalicylic acid), an inadvertent vasopuncture when administering the local anaesthetic can lead to serious bleeding, and that in general the hemorrhagic tendency is increased (see section "Interactions").

Inadvertent intravascular application must be avoided (see section "Posology and method of administration")

The lower blood flow in the pulp tissue due to the content of adrenaline and thus the risk to overlook an opened pulp has to be taken into account regarding cavity or crown preparations.

#### Precautions for use:

Each time a local anaesthetic is used the following drugs/therapy should be available:

- Anti-convulsant medicines (e.g. benzodiazepines or barbiturates, myorelaxants, atropine and vasopressors or adrenaline for a severe allergic or anaphylactic reaction).
- Resuscitating equipment (in particular a source of oxygen) enabling artificial ventilation if necessary.
- Careful and constant monitoring of cardiovascular and respiratory (adequacy of ventilation) vital signs and the patient's state of consciousness should be monitored after each local anaesthetic injection. Restlessness, anxiety, tinnitus, dizziness, blurred vision, tremors, depression, or drowsiness may be early warning signs of central nervous system toxicity (see section "Therapy of Overdose").

#### Patients taking phenothiazines

Phenothiazines may reduce or reverse the pressor effect of adrenaline. Concurrent use of these agents should generally be avoided. In situations when concurrent therapy is necessary, careful patient monitoring is essential.

#### Patients taking non-selective beta-blockers

The concomitant administration of non-cardioselective beta-blockers can lead to an increase in blood pressure due to adrenaline (see section "Interactions").

### **PREGNANCY AND LACTATION**

No clinical experience of the use in pregnant and lactating women is available. Safe use of local anaesthetics during pregnancy has not been established with respect to adverse effects on fetal development. This medicine should only be used in pregnancy when the benefits are considered to outweigh the risks.

The excretion of articaine and its metabolites in human milk is unknown. However, preclinical safety data suggest that the concentration of articaine in breast milk does not reach clinically relevant concentrations. Therefore, nursing mothers should milk and discard the first mother's milk following anaesthesia with articaine.

### **EFFECTS ON THE ABILITY TO DRIVE AND USE MACHINES**

Although test patients have shown no impairment of their normal reactions when driving a vehicle, the dentist has to assess in each case the possible impairment of safety when operating a motor vehicle or machinery. The patient should not leave the dental office earlier than at least 30 minutes after the injection.

### **INTERACTIONS**

- The sympathomimetic effect of adrenaline can be intensified by the simultaneous intake of MAO inhibitors or tricyclic antidepressants (see section "Contraindications").

- Adrenaline can inhibit insulin release in the pancreas and thus diminish the effect of oral antidiabetics.
- The concomitant administration of non-cardioselective  $\beta$ -blockers can lead to an increase in blood pressure due to the adrenaline in Ubistesin forte.
- Certain inhalational anaesthetics, such as halothane, can sensitise the heart to catecholamines and therefore induce arrhythmias following administration of Ubistesin forte.
- During treatment with blood coagulation inhibitors, the hemorrhagic tendency is increased (see also section "Special warnings and precautions for use").

### **POSODOLOGY AND METHOD OF ADMINISTRATION**

#### The following dosage instructions apply:

The smallest possible volume of solution which will lead to an effective anaesthesia should be used.

For extraction of maxillary teeth, 1.7 ml Ubistesin forte per tooth suffices in most cases; painful palatal injections can thus be avoided. In the case of serial extractions of neighbouring teeth, a reduction of the injection volume is often possible.

If a cut or suture is required in the palate, a palatal injection of approx 0.1 ml per puncture is indicated.

For smooth extractions of mandibular premolar teeth, infiltration anaesthesia of 1.7 ml Ubistesin forte per tooth is mostly sufficient; in single cases a buccal re-injection of 1 to 1.7 ml is required. An injection into the mandibular foramen can be indicated in rare cases.

Vestibular injections of 0.5–1.7 ml Ubistesin forte per tooth enable cavity and crown-stump preparations.

Nerve-block anaesthesia should be used in the treatment of mandibular molar teeth.

In surgical procedures Ubistesin forte should be dosed individually depending on the extent and duration of the operation and the factors relating to the patient.

Generally, in children weighing about 20–30 kg, doses of 0.25–1 ml are sufficient; in children weighing 30–45 kg, 0.5–2 ml. Ubistesin forte must not be used in children aged below 4 years.

Increased plasma levels of Ubistesin forte can occur in older patients due to diminished metabolic processes and lower distribution volume. The risk of accumulation of Ubistesin forte is increased in particular after repeated application (e.g. re-injection). A similar effect can ensue from the reduced general condition of the patient, as well as severely impaired hepatic and renal function (see also section "Special warnings and precautions for use").

A lower dosage range is thus recommended in all such cases (minimum quantity for sufficient anaesthetic depth).

The dose has to be likewise reduced in patients with certain pre-existing diseases (angina pectoris, arteriosclerosis) (see also section "Special warnings and precautions for use").

#### **Maximum Recommended Dosage:**

##### **Adults:**

The maximum dose for a healthy adult is 500 mg of articaine (7 mg per kg body weight), equivalent to 12.5 ml UBISTESIN FORTE, respectively 7 cartridges.

##### **Children:**

In children weighing 20–30 kg no more than 1.5 ml should be given during treatment and no more than 2.5 ml within 24 hours; in children weighing 30–45 kg no more than 2 ml and 5 ml should be given during treatment and within 24 hours, respectively.

Ubistesin is also available and may be more appropriate for short procedures and/or where control of bleeding in the operative field is not relevant.

#### Method of administration

For injection/oromucosal use

FOR USE IN DENTAL ANAESTHESIA ONLY

To avoid intravascular injection, aspiration control at least in two planes (rotation of the needle by 180°) must always be carefully undertaken, although a negative aspiration result does not safely rule out an unintentional and unnoticed intravascular injection.

The injection rate should not exceed 0.5 ml in 15 seconds, i.e. 1 cartridge per minute.

Major systemic reactions as a result of accidental intravascular injection can be avoided in most cases by an injection technique – after aspiration slow injection of 0.1–0.2 ml and slow application of the rest – not earlier than 20–30 seconds later.

Opened cartridges must not be used in other patients. Residues must be discarded.

## THERAPY OF OVERDOSE

Undesirable effects (showing an abnormally high concentration of local anaesthetic in the blood) may appear either immediately, caused by accidental intravascular injection or abnormal absorption conditions, e.g. in inflamed or intensive vascularised tissue, or later, caused by true overdose following an injection of excessive quantity of anaesthetic solution, and manifest themselves as central nervous and/or vascular symptoms.

### Symptoms caused by the local anaesthetic ingredient articaine:

Milder central nervous symptoms involve metallic taste, tinnitus, dizziness, nausea, vomiting, restlessness, anxiety, initial increase in respiratory rate.

More severe symptoms are drowsiness, confusion, tremor, muscular twitching, tonic-clonic seizures, coma and respiratory paralysis.

Severe cardiovascular episodes are seen in the form of a drop in blood pressure, cardiac impulse conduction disorders, bradycardia, cardiovascular arrest.

### Symptoms caused by adrenaline as a vasoconstrictor:

Cardiovascular symptoms such as heat sensation, sweating, heart racing, migraine-like headache, blood pressure increase, angina pectoris disorders, tachycardias, tachyarrhythmias and cardiovascular arrest.

Interferences in the clinical picture can result from the simultaneous occurrence of various complications and side effects.

### Therapy

If adverse reaction arises the application of the local anaesthetic has to be stopped.

### General basic measures:

Diagnostics (respiration, circulation, consciousness), maintenance/restoration of the vital functions of respiration and circulation, oxygen administration, intravenous access.

### Special measures:

Hypertension:	Elevation of the upper body, if necessary sublingual nifedipine.
Convulsions:	Protect patients from concomitant injuries, if necessary benzodiazepines (e.g. diazepam iv).
Hypotension:	Horizontal position, if necessary intravascular infusion of a whole electrolyte solution, vasopressors e.g. etilefrine i.v.
Bradycardia:	Atropine iv.
Anaphylactic shock:	Contact emergency physician, in the meantime shock positioning, generous infusion of a whole electrolyte solution, if necessary adrenaline iv., cortisone iv.
Cardiovascular arrest:	Immediate cardiopulmonary resuscitation, contact emergency physician.

## UNDESIRABLE EFFECTS

Due to the local anaesthetic ingredient articaine, the following undesirable effects can occur

### **Cardiovascular disorders**

Rare ( $\geq 0.01\%$ )

Decrease in heart rate, hypotension.

Drop in blood pressure, cardiac impulse conduction disorders, bradycardia, asystolia, cardiovascular arrest.

### **Nervous system disorders**

Rare ( $\geq 0.01\%$ )

Metallic taste, tinnitus, dizziness, nausea, vomiting, restlessness, anxiety, yawning, shaking, nervousness, nystagmus, logorrhoea, headache, increase in respiratory rate.

Paresthesias e.g. burning, tingling of the lip, tongue, or both.

These signs when they appeared required rapid corrective measures to prevent possible worsening: Drowsiness, confusion, tremor, muscle twitching, tonic-clonic seizures, coma and respiratory paralysis.

### **Respiratory disorders**

Rare ( $\geq 0.01\%$ )

Tachypnea, then bradypnea, which could lead to Apnoea.

### **Allergic reactions**

Very rare ( $< 0.01\%$ )

One may observe manifestation of hypersensitivity to articaine as rash, pruritus edema, pruritus, and erythema as well as nausea, diarrhea, wheezing or anaphylaxis.

Cross reactivity to articaine has been reported in a patient with delayed hypersensitivity to prilocaine. In general, patients with demonstrated hypersensitivity to articaine or other amides should receive an ester-group local anaesthetic for subsequent procedures.

The administration of large doses of articaine may produce methaemoglobinemia in patients with subclinical methaemoglobinemia.

Due to the content of adrenaline as a vasoconstrictor admixture, the following undesirable effects can occur

### **Cardiovascular disorders**

Rare ( $\geq 0.01\%$ )

Heat sensation, sweating, heart racing, migraine-like headache, blood pressure increase, angina pectoris disorders, tachycardias, tachyarrhythmias and cardiovascular arrest as well as acute oedematous thyroid swelling.

Due to the content of sulphite as excipient, the following undesirable effects can occur

### **Allergic reactions**

Very rare ( $< 0.01\%$ )

Allergic reactions or hypersensitivity reactions, particularly in bronchial asthmatics, which are manifested as vomiting, diarrhoea, wheezing, acute asthma attack, clouding of consciousness or shock.

Due to the content of both articaine and adrenaline, the following undesirable effects can occur

### **Nervous system disorders**

2 weeks delayed onset of facial nerve paralysis has been described with articaine/adrenaline, the event still occurs 6 months later.

Interferences in the clinical picture can result from the simultaneous occurrence of various complications and side effects.

## INFORMATION CONCERNING STORAGE AND STABILITY

Keep out of the reach and sight of children.

Do not store above 25 °C.

Store in the original package in order to protect from light.

Do not use after the expiry date stated on the bottom of the tin and the cartridges.

## DATE OF REVISION OF THE TEXT

01/2012