

 **11 March 2025**

**SUMMARY OF PRODUCT CHARACTERISTICS**

**for**

**Tinguri, syrup**

**0. D.SP.NO.**

29066

**1. NAME OF THE MEDICINAL PRODUCT**

Tinguri

**2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

1 ml of syrup contains 1.5 mg butamirate citrate equivalent to 0.924 mg butamirate.

5 ml of syrup contains 7.5 mg butamirate citrate equivalent to 4.62 mg butamirate.

Excipient with known effect:

Each 5 ml contain 2250 mg sorbitol (E 420) which is equivalent to 450 mg/ml.

Each 5 ml contain 16,9 mg propylene glycol (E 1520) which is equivalent to 3,38 mg/ml.

Each 5 ml contain 5,0 mg sodium benzoate (E 211) which is equivalent to 1,0 mg/ml.

For the full list of excipients, see section 6.1

**3. PHARMACEUTICAL FORM**

Syrup

Colourless or pale yellow liquid.

**4. CLINICAL PARTICULARS**

**4.1 Therapeutic indications**

Symptomatic treatment of non-productive cough.

**4.2 Posology and method of administration**

Posology

Recommended dose

*Adults and adolescents from 16 years of age*

15 ml up to 4 times daily

*Paediatric population*

*Children from 6 to 12 years of age*

10 ml up to 3 times daily

*Children from 12 to 16 years of age*

15 ml up to 3 times daily

Treatment is limited to the symptomatic period.

The smallest effective dose should be used for the shortest possible time. Do not exceed the recommended dose.

Medical advice should be sought if the cough lasts longer than 4-5 days or if fever, dyspnoea or chest pain develops.

*Elderly*

No data exist for the use in these populations.

*Hepatic impairment*

No data exist for the use in these populations.

*Renal impairment*

No data exist for the use in these populations.

Method of administration

Tinguri syrup should be taken orally. Clean and dry the measuring cup after each use and between different users.

**4.3 Contraindications**

- Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.

- Children under 6 years of age.

**4.4 Special warnings and precautions for use**

Before starting an antitussive treatment, the causes of the cough should be investigated to assess the need for aetiological treatment. If the cough persists after taking the antitussive treatment at the usual dose, the dose should not be increased; instead, the clinical situation should be reviewed.

Antitussives should not be used for prolonged periods.

Due to inhibition of the cough reflex by butamirate, the concomitant administration of expectorants should be avoided because this can lead to the stagnation of mucus in the respiratory tract, increasing the risk of bronchospasm and respiratory tract infections (see section 4.5).

Excipients

*Sorbitol*

The additive effect of concomitantly administered products containing sorbitol (or fructose) and dietary intake of sorbitol (or fructose) should be taken into account.

Patients with hereditary fructose intolerance (HFI) should not take this medicinal product.

The content of sorbitol in medicinal products for oral use may affect the bioavailability of other medicinal products for oral use administered concomitantly.

Sorbitol may cause gastrointestinal discomfort and mild laxative effect.

*Sodium*

This medicine contains less than 1 mmol sodium (23 mg) per 5 ml, that is to say essentially ‘sodium-free’.

**4.5 Interaction with other medicinal products and other forms of interaction**

Concomitant administration of expectorants should be avoided (see section 4.4).

**4.6 Fertility, pregnancy and lactation**

Pregnancy

There are no or limited data from the use of butamirate citrate in pregnant women. Animal studies have not shown any direct or indirect deleterious effects on reproduction (see section 5.3). As a precautionary measure, it is preferable to avoid the use of butamirate citrate during pregnancy.

Breast-feeding

There are no data available on the excretion of butamirate citrate in breast milk. A decision should be made whether to discontinue breast-feeding or to discontinue from butamirate citrate therapy, taking into account the benefit of breast-feeding for the child and the benefit of therapy for the woman.

Fertility

There are no data on male and female fertility. Animal studies have shown that butamirate citrate does not have any deleterious effects on fertility parameters or general reproductive capacity (see section 5.3).

**4.7 Effects on ability to drive and use machines**

No traffic warning.

Butamirate may cause somnolence. It may have a minor influence on the ability to drive and use machines. Therefore, it should be taken into account when driving or performing other activities requiring alertness (e.g. operating machines).

**4.8 Undesirable effects**

Adverse reactions are listed below by system organ class and frequency.

Frequencies are defined as follows: very common (≥1/10), common (≥1/100 to <1/10), uncommon (≥1/1,000 to <1/100), rare (≥1/10,000 to <1/1,000), very rare (<1/10,000) and not known (cannot be estimated from the available data). With each frequency grouping, adverse reactions are presented in order of decreasing seriousness.

Nervous system disorders

Rare: somnolence

Gastrointestinal disorders

Rare: nausea, diarrhoea

Skin and subcutaneous tissue disorders

Rare: urticaria

Immune system disorders

Rare: hypersensitivity reactions

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via:

Lægemiddelstyrelsen

Axel Heides Gade 1

DK-2300 København S

Website: www.meldenbivirkning.dk

**4.9 Overdose**

*Symptoms*

Butamirate overdose may lead to the following symptoms: drowsiness, nausea, vomiting, diarrhoea, dizziness, hypotension.

*Measures*

Further management should be as clinically indicated or as recommended by the National Poison Control Center, as appropriate.

There is no specific treatment for butamirate overdose. In the event of overdose, the patient should receive supportive treatment with appropriate monitoring, if necessary.

**4.10 Legal status**

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**5. PHARMACOLOGICAL PROPERTIES**

**5.1 Pharmacodynamic properties**

Pharmacotherapeutic group: Other cough suppressants, Атс-code: R05DB13.

Tinguri syrup contains butamirate citrate which is a cough suppressant used for the symptomatic treatment of non-productive cough.

Butamirate acts centrally by diminishing the tussigenic reflex, and also acts peripherally via a bronchospasmolytic activity enhanced by an anti-inflammatory action.

Butamirate is a non-narcotic substance that is not chemically or pharmacologically related to the opioid alkaloids. It does not produce the undesirable effects caused by narcotic antitussives, such as sedation, constipation and addiction.

**5.2 Pharmacokinetic properties**

Pharmacokinetic data have been obtained from studies in healthy subjects.

Absorption

Butamirate administered orally is absorbed rapidly and completely.

Measurable plasma concentrations are reached 5 to 10 minutes after administration of a 22.5 mg, 45 mg, 67.5 mg or 90 mg dose. For all doses peak plasma concentrations are reached within 1 hour, with a mean value of 16.10 ng/ml for the 90 mg dose.

The mean plasma concentration of the main metabolite, 2-phenylbutyric acid, is reached within approximately 1.5 hours with the highest concentration (3052 ng/ml) observed after administration of a 90 mg dose.

The mean plasma concentration of diethylaminoethoxyethanol, another metabolite, is reached within 0.67 hours and the highest concentration (160 ng/ml) is again observed after administration of a 90 mg dose.

The effect of food intake has not been studied.

Distribution

Butamirate has a high volume of distribution ranging between 81 L/kg and 112 L/kg. It is also highly protein bound. 2-phenylbutyric acid is highly bound to plasma proteins in the dose range of 22.5 mg to 90 mg with mean values ranging from 89.3% to 91.6%.

Diethylaminoethoxyethanol shows some protein binding with mean values ranging from 28.8% to 45.7%. No studies have been conducted to date regarding the passage of butamirate across the placental barrier or its excretion into breast milk.

Biotransformation

Esterbutamirate is rapidly hydrolysed, mainly to 2-phenylbutyric acid and diethylaminoethoxyethanol. These two metabolites and butamirate have an antitussive effect 2-phenylbutyric acid is partially metabolised by hydroxylation in the para position. Through a conjugation, mainly in the liver, the acid metabolites are largely bound to glucuronic acid.

Elimination

All three metabolites are mainly eliminated renally.

Conjugated 2-phenylbutyric acid levels are significantly higher in urine than in plasma.

Butamirate is detectable in urine for up to 48 hours; the amount of butamirate eliminated in the urine during a 96 hour sampling period reaches 0.02, 0.02, 0.03 and 0.03% of the 22.5 mg, 45 mg, 67.5 mg and 90 mg dose, respectively.

The percentage of the butamirate dose eliminated in the urine as diethylaminoethoxy­ethanol is higher than the percentage of the butamirate dose eliminated in the urine as butamirate or unconjugated 2-phenylbutyric acid. The elimination half-lives measured for 2-phenylbutyric acid, butamirate and diethylaminoethoxyethanol are 23.26 – 24.42, 1.48 – 1.93 and 2.72 –2.90 hours, respectively.

Linearity/non-linearity

Exposure to 2-phenylbutyric acid and diethylaminoethoxyethanol is fully dose proportional in the dose range of 22.5 mg to 90 mg.

Pharmacokinetics in specific patient groups

The influence of hepatic or renal disease on the pharmacokinetic parameters of butamirate has not been studied.

Pediatric population

Pediatric pharmacokinetic studies have not been conducted.

**5.3 Preclinical safety data**

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential, toxicity to reproduction and development.

**6. PHARMACEUTICAL PARTICULARS**

**6.1 List of excipients**

Sorbitol (E420)

Glycerol

Sucralose (E955)

Sodium benzoate (Е211)

Citric acid monohydrate

Caramel flavour containing:

flavouring substances

flavouring preparations

natural flavouring substances

propylene glycol (E1520)

Bitter Chocolate Flavour F2428 containing:

flavouring substances

flavouring preparation

quinine hydrochloride

natural flavouring substances

propylene glycol (E1520)

water

quassin

Purified water

**6.2 Incompatibilities**

Not applicable

**6.3 Shelf life**

2 years

Shelf life after first opening the bottle: 6 months

**6.4 Special precautions for storage**

Do not store above 25 °C.

**6.5 Nature and contents of container**

Tinguri syrup is supplied in a 100 ml or 200 ml amber glass or polyethylene terephthalate bottle with a child-resistant polypropylene/polyethylene screw cap.

Each pack contains a polypropylene measuring cup graduated for dosing of 5 ml, 10 ml, 15 ml, 20 ml, 25 ml and 30 ml.

**6.6 Special precautions for disposal and other handling**

No special requirements.

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

**7. MARKETING AUTHORISATION HOLDER**

Teva B.V.

Swensweg 5

2031 GA Haarlem

 Holland

**Representative**

Teva Denmark A/S

Vandtårnsvej 83A

2860 Søborg

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

 53446

**9. DATE OF FIRST AUTHORISATION**

 22 May 2015

**10. DATE OF REVISION OF THE TEXT**

11 March 2025