

# Summary of Product Characteristics

## 1 NAME OF THE VETERINARY MEDICINAL PRODUCT

Apovomin 3 mg/ml solution for injection for dogs

## 2 QUALITATIVE AND QUANTITATIVE COMPOSITION

1 ml contains:

### Active substance:

Apomorphine hydrochloride hemihydrate	3.00 mg
(equivalent to apomorphine)	2.56 mg)

### Excipients:

Benzyl alcohol (E1519)	10 mg
Sodium metabisulfite (E223)	1.0 mg

For the full list of excipients, see section 6.1.

## 3 PHARMACEUTICAL FORM

Solution for injection.

Clear, colourless aqueous solution.

## 4 CLINICAL PARTICULARS

### 4.1 Target Species

Dogs.

### 4.2 Indications for use, specifying the target species

Induction of emesis.

### 4.3 Contraindications

Do not use in cats.

Do not use in case of depression of the Central Nervous System (CNS).

Do not use in cases of ingestion of caustic agents (acids or alkalis), foamy products, volatile substances, organic solvents and non-blunt objects (e.g. glass).

Do not use in animals which are hypoxic, dyspnoeic, seizing, in hyperexcitation, extremely weak, ataxic, comatose, lacking normal pharyngeal reflexes, or suffering other marked neurologic impairments that could lead to aspiration pneumonia.

Do not use in cases of circulatory failure, shock and anaesthesia.

Do not use in animals which are previously treated with Dopamine-Antagonists (Neuroleptics).

Do not use in cases of hypersensitivity to the active substance or to any of the excipients.

### 4.4 Special warnings for each target species

Expulsive efforts with or without vomiting are likely to be seen from 2 to 15 minutes after the injection of the product and may last from 2 minutes to 2.5 hours. If emesis is not induced following a single injection, do not repeat the injection as it will not be effective and may provoke clinical signs of toxicity.

### 4.5 Special precautions for use

Special precautions for use in animals

In dogs with known severe hepatic failure, the benefit/risk balance for use of the product in such animals should be considered by the veterinarian.

Before administering the product, consideration must be given to the time of the ingestion of the substance (in relation to gastric emptying times) and on the suitability of inducing emesis based the type of substance ingested (see also section 4.3).

#### Special precautions to be taken by the person administering the veterinary medicinal product to animals

This product may cause nausea and somnolence. In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician. DO NOT DRIVE, as sedation may occur.

Apomorphine has been shown to have teratogenic effects in laboratory animals and is excreted in breast milk. Pregnant or breast-feeding women should avoid handling the product.

This product may cause hypersensitivity reactions. People with known hypersensitivity to apomorphine or any of the excipients should avoid contact with the veterinary medical product.

If the product comes into contact with the skin or eyes, rinse immediately with water. Wash hands after use.

#### **4.6 Adverse reactions (frequency and seriousness)**

Minor adverse reactions may be observed:

- drowsiness (very common)
- modification of appetite (very common)
- increased salivation (very common)
- mild to moderate pain on injection (very common)
- slight dehydration (common)
- change in cardiac frequency (tachycardia followed by bradycardia (common)).

These reactions are transient and may be related to the physiological response to expulsive efforts. Multiple episodes of vomiting may be observed, and vomiting may occur up to several hours after the injection. Apomorphine may lower blood pressure.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals treated displaying adverse reactions(s))
- common (more than 1 but less than 10 animals in 100 animals treated)
- uncommon (more than 1 but less than 10 animals in 1,000 animals treated)
- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports).

#### **4.7 Use during pregnancy, lactation or lay**

Apomorphine has been shown to have teratogenic effects in rabbits and foetotoxic effects in rats at doses higher than the recommended dose in dogs.

The safety of the veterinary medicinal product has not been established during pregnancy and lactation in dogs.

As apomorphine is excreted in breast milk, when used in lactating females, puppies should be monitored carefully for undesired effects.

Use only accordingly to the benefit/risk assessment by the responsible veterinarian.

#### **4.8 Interaction with other medicinal products and other forms of interactions**

Neuroleptics (e.g. chlorpromazine, haloperidol), and anti-emetics (metoclopramide, domperidone) reduce or suppress the emesis induced by the administration of apomorphine.

The administration or the prior ingestion of opiates or barbiturates can induce additive CNS effects and respiratory depression with apomorphine.

Caution is advised when dogs are receiving other dopamine agonists, such as cabergoline, due to possible additive effects such as exacerbation or inhibition of vomiting.

#### **4.9 Amounts to be administered and administration route**

For single subcutaneous administration only.

0.05-0.1 mg of apomorphine hydrochloride hemihydrate per kg bodyweight (approximately 0.02-0.03 ml product per kg bodyweight).

An appropriately graduated syringe must be used to allow accurate administration of the required dose volume. This is particularly important when injecting small volumes. Animals should be accurately weighed to ensure administration of the correct dose.

Do not use if the solution has turned green.

#### **4.10 Overdose (symptoms, emergency procedures, antidotes), if necessary**

Excessive doses of apomorphine may result in respiratory and/or cardiac depression, CNS stimulation (excitement, seizures) or depression, protracted vomiting, or rarely in restlessness, excitement or even convulsion.

At higher doses apomorphine may also suppress vomiting.

Naloxone may be used to reverse the CNS and respiratory effects of apomorphine.

Anti-emetics such as metoclopramide and maropitant should be considered in case of protracted vomiting.

#### **4.11 Withdrawal period(s)**

Not applicable.

### **5 PHARMACOLOGICAL or IMMUNOLOGICAL PROPERTIES**

**Pharmacotherapeutic group:** Dopamine agonists

**ATCvet code:** QN04BC07

#### **5.1 Pharmacodynamic properties**

Apomorphine is an aporphine derivative of the dibenzoquinoline class and a synthetic derivative of morphine with no analgesic, opiate or addictive properties.

At lower doses apomorphine induces emesis by stimulation of the dopamine D2-receptors in the chemoreceptor trigger zone (CTZ).

Higher doses of apomorphine may suppress vomiting by stimulation of the  $\mu$  receptors in the vomiting centre of the brain.

#### **5.2 Pharmacokinetic particulars**

After subcutaneous administration apomorphine is rapidly absorbed.

Apomorphine binds extensively to plasma proteins.

Apomorphine is extensively metabolised by the liver into non-active metabolites. The metabolites and very little unchanged apomorphine (<2%) are excreted via the urine. It is also excreted in breast milk.

### **6 PHARMACEUTICAL PARTICULARS**

#### **6.1 List of excipients**

Benzyl alcohol (E 1519)

Sodium metabisulfite (E 223)

Sodium chloride

Water for injections

Sodium hydroxide (for pH adjustment)

Hydrochloric acid, diluted (for pH adjustment)

#### **6.2 Major incompatibilities**

In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

#### **6.3 Shelf-life**

Shelf life of the veterinary medicinal product as packaged for sale: 36months.

Shelf life after opening of the immediate packaging: 28 days.

#### **6.4 Special precautions for storage**

5 ml and 10 ml vial: Store in a refrigerator (2°C to 8°C). Do not freeze.

20 ml vial: Do not freeze.

#### **6.5 Nature and composition of immediate packaging**

Clear Type I glass vials containing 5, 10 or 20 ml, closed with a coated bromobutyl rubber stopper and sealed with an aluminium cap. Each vial is packed into a cardboard box.

Pack sizes:

Box with 1 vial of 5 ml

Box with 1 vial of 10 ml

Box with 1 vial of 20 ml

Multi-pack with 10 vials of 5 ml

Multi-pack with 10 vials of 10 ml

Not all pack sizes may be marketed.

#### **6.6 Special precautions for the disposal of unused veterinary medicinal products or waste materials derived from the use of such products**

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

### **7 MARKETING AUTHORISATION HOLDER**

Dechra Regulatory B.V.

Handelsweg 25

5531 AE Bladel

Netherlands

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

VPA22622/002/001

### **9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

Date of first authorisation: 16<sup>th</sup> March 2018

### **10 DATE OF REVISION OF THE TEXT**

February 2019