Certified translation from the Polish language

Italics used for translator's comments.

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Viper Venom Antitoxin, 500 LD_{50} units, solution for injection

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

1 ml of the solution contains antibodies that neutralise no less than 130 LD_{50}* units of the common European viper (Vipera berus) venom.

1 ampoule contains antibodies that neutralise no less than 500 LD_{50}* units of the common European viper (Vipera berus) venom.

*1 LD_{50} dose results in the death of 50% of the mouse population.

This medicinal product contains less than 1 mmol (23 mg) of sodium in 1 ml of the solution, i.e. it is considered to be essentially 'sodium-free'.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Solution for injection
Yellow or colourless, clear or slightly opalescent solution

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

The medicinal product Viper Venom Antitoxin is used to neutralise the effects of the common European viper (Vipera berus) venom in the case of human bites.

4.2 Posology and method of administration

The decision to use the medicine should always be made by a doctor.
Before deciding to use the medicinal product Viper Venom Antitoxin, a history should be taken of the patient's allergic conditions, the patient's ever having received equine antitoxin and the patient's intake of antihistamines within 48 hours beforehand.

An intradermal equine antitoxin (equine protein) sensitisation test should be performed before the antitoxin administration.

In the case of a positive sensitisation test result, with concomitant indications for the use of Viper Venom Antitoxin, it can be administered using a desensitisation protocol.

An anaphylaxis response kit should always be ready for use before performing a

sensitisation test and administering an animal antitoxin.

Posology
Children and adults: the contents of one ampoule immediately after a bite.
If necessary, the dose can be re-administered.
Route of administration: intramuscular.

Method of administration
If possible, Viper Venom Antitoxin should be administered to the area around the bite site.

Sensitisation test (intradermal)
Due to the need for a rapid medical intervention within 1 to 2 hours of the bite, an intradermal test should give a prompt answer as to whether the patient is or is not allergic to equine protein.
Give an intradermal injection of 0.1 ml of the antitoxin diluted at 1:10 with sterile 0.9% sodium chloride solution.
The appearance of redness and a blister at the injection site within 10 to 20 minutes afterwards is evidence of allergy to equine protein.
In the absence of a reaction in response to the sensitisation test, the entire dose, i.e. the contents of one ampoule, can be administered intramuscularly in a single dose.
If clinical signs of venom poisoning do not resolve after 1 to 2 hours, the dose (the contents of one ampoule of the medicine) can be re-administered.

In the case of a positive sensitisation test result (appearance of a blister and redness at the injection site of diluted antitoxin) and with concomitant indications for the use of Viper Venom Antitoxin, it is recommended that the medicine be administered using a desensitisation protocol.

Administration of equine antitoxin using a desensitisation protocol
Administer the antitoxin diluted at 1:10 (as in the sensitisation test) with sterile 0.9% sodium chloride solution by subcutaneous injections every 30 minutes up to 1 hour, in quantities of 0.1 ml to 0.5 ml.
Next, administer also undiluted antitoxin by subcutaneous injections, in quantities of 0.2 ml and 0.5 ml each.
Administer the remainder of the dose intramuscularly.

Consideration should also be given to how long after the bite it is necessary to administer the antitoxin to the patient.

The long-term duration of the desensitisation method may adversely affect the patient's condition, up to and including a life-threatening situation, especially in the event of severe viper venom poisoning.
If it is necessary to urgently administer Viper Venom Antitoxin, if there is no time to perform a sensitisation test, it is advisable to inject Viper Venom Antitoxin under protection of drugs, i.e. after administration of anti-anaphylactic drugs, and the decision to do so should be made by a doctor.

Depending on the patient's condition, analeptics, sedatives, analgesics are also used, while corticosteroids, antibiotics, non-steroidal anti-inflammatory drugs and parenteral hydration, if necessary, are also administered to patients who are in severe and very severe condition with

increased allergic reactions.

4.3 Contraindications

Hypersensitivity to the active substance (equine protein) or any of the excipients listed in section 6.1.

If there is a severe poisoning and it is necessary to use Viper Venom Antitoxin, it can be administered using a desensitisation protocol or under the protection of (i.e. after administration of) anti-anaphylactic drugs.

4.4 Special warnings and precautions for use

The decision to use this medicinal product should always be made by a doctor.

Before deciding to use the medicinal product Viper Venom Antitoxin, a history should be taken of the patient's allergic conditions, the patient's ever having received equine antitoxin and the patient's intake of antihistamines within 48 hours beforehand.
Never perform a sensitisation test or inject the medicine without having a ready-to-use anaphylaxis response kit.

The antitoxin should be administered by personnel with experience in treating anaphylactic shock and with access to an anaphylaxis response kit.

Taking antihistamines within 48 hours before the sensitisation test can inhibit the onset of an allergic reaction.

A negative sensitisation test result is not an absolute guarantee that the patient is not sensitive to the antitoxin, and therefore extreme caution should be exercised and an anaphylaxis response kit should be available at all times before any administration of the medicine.

If the patient is sensitised to equine protein, has previously received an antitoxin or is allergic, if there is a severe viper venom poisoning and it is necessary to use Viper Venom Antitoxin, it should be administered using a desensitising protocol or under protection of drugs, i.e. after administration of anti-anaphylactic drugs, as described in section 4.2.

4.5 Interaction with other medicinal products and other forms of interaction

No reports of interactions between the medicinal product Viper Venom Antitoxin and other drugs have been found in the literature.

4.6 Fertility, pregnancy and lactation

There are insufficient data on the use of Viper Venom Antitoxin in pregnant and lactating women.
Caution should be exercised when prescribing this product to pregnant and lactating women.

4.7 Effects on ability to drive and use machines

Viper Venom Antitoxin has no effects on the ability to drive and use machines.

4.8 Undesirable effects

There are insufficient data from clinical trials on the incidence of adverse effects. Based on the literature, the undesirable effects may be as described below.
The following frequency rating is used for undesirable effects: 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), not known (cannot be estimated from the available data).

General disorders and administration site conditions
In uncommon cases, anaphylactic shock (acute allergic reaction of the whole body) may occur. Serum sickness may also occur, usually between 7 and 20 days after administration of the medicinal product Viper Venom Antitoxin. The following uncommon symptoms of serum sickness may occur: swelling at the injection site, enlargement of lymph nodes, elevation of body temperature, swelling of joints and urticaria.

Renal and urinary disorders
Serum sickness may occur, and in rare acute cases it may present as kidney damage.

Nervous system disorders
Very rarely complications may occur, such as inflammation of the brachial plexus nerves, cranial and peripheral nerves (i.e. encephalopathy) or Guillan-Barre syndrome (acute idiopathic, i.e. spontaneous, polyneuritis). Symptoms of the disease disappear when the antigen is removed from the body.

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 profile of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Pharmacovigilance Department of the Office for Registration of Medicinal Products, Medical Devices and Biocidal Products:
Al. Jerozolimskie 181C
02-222 Warszawa
Tel.: +48 22 49 21 301
Fax: +48 22 49 21 309
Website: https://smz.ezdrowie.gov.pl
Adverse reactions can also be reported to the Marketing Authorisation Holder.

4.9 Overdose

The dose size depends on the patient's condition. The decision on the dose size should always be made by a doctor.
Avoid giving higher doses than necessary.
Higher doses may exacerbate the adverse reactions listed in section 4.8.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Immune sera, Viper Venom Antitoxin, ATC code: J06AA03.

Viper Venom Antitoxin contains purified $F(ab)_2$ fragments of specific immunoglobulins of the IgG class, obtained from the serum of horses immunised with the common European viper (Vipera berus) venom. The $F(ab)_2$ fragments are obtained by a modified Pop's thermal method that involves enzymatic proteolysis of proteins using pepsin, precipitation of labile proteins by thermocoagulation and selective salting out with ammonium sulphate. This process allows the elimination of ballast proteins and Fc fragments of the IgG molecule, which are responsible for the capability to form aggregates, bind to proteins of the complement system or induce skin reactions. This purification of the product contributes to the reduction of adverse reactions after administration of heterologous immunoglobulins.

Viper Venom Antitoxin neutralises the effects of the common European viper venom through a specific reaction between an antibody (antitoxin) and an antigen (viper venom). The resulting complexes are gradually captured by the macrophage system and partially deposited in the vascular endothelium, in the basement membrane of the renal glomeruli, the joints and the myocardium.

Due to the presence of an excess of an antigen (foreign protein), the resulting IgG class antibodies form complexes with the antigen. Patients also develop IgE class antibodies responsible for the generalised urticaria associated with this syndrome.

The medicinal product Viper Venom Antitoxin, as it is of animal origin, may cause severe adverse allergic reactions associated with the administration of a foreign protein.

General characteristics of the studies performed
Viper venom antitoxin has been in use for more than 55 years.
Clinical trials in humans were conducted to assess the efficacy and safety of specific viper venom antitoxins. The results showed that the administration of such products are effective in promptly reducing early clinical symptoms while making them milder, as well as shortening the length of hospital treatment.
Based on an analysis of clinical cases, it was concluded that early application of Viper Venom Antitoxin should always be considered after a bite, even if there are yet no symptoms of exposure to a large amount of venom, such as hypotonia, drowsiness, acidosis or leucocytosis. The product is most effective when administered within the first few hours of the bite.

5.2 Pharmacokinetic properties

Absorption
After intramuscular injection of Viper Venom Antitoxin, complete absorption of the product into the bloodstream occurs within 1 to 2 days.

Distribution
Release from the intramuscular injection site is by simple diffusion from the tissue environment into the plasma.

Biotransformation
The antigen (viper venom) – antibody (antitoxin) complex undergoes phagocytosis. The half-life is 2-3 days.

Elimination
Complete elimination occurs within 8-12 days.

5.3 Preclinical safety data
There are no data indicating toxic effects of the use of Viper Venom Antitoxin at therapeutic doses on reproduction in animals.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Phenol
Sodium chloride
Water for injection
Sodium hydroxide and hydrochloric acid – in small quantities for pH adjustment.

6.2 Incompatibilities

As no compatibility studies have been performed, the medicinal product must not be combined with other drugs.

6.3 Shelf life
3 years

Special precautions for storage
Store in a refrigerator (2°C – 8°C). Do not freeze.
Keep in the original packaging to protect against light.

6.5 Nature and contents of container

A type I glass ampoule containing antibodies that neutralise no less than 500 LD_{50} units of the common European viper (Vipera berus) venom, in a cardboard box – a package of 1.

6.6 Special precautions for disposal and preparation of the medicinal product for use

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

7. MARKETING AUTHORISATION HOLDER

Wytwórnia Surowic i Szczepionek BIOMED Sp. z o.o.
ul. Chełmska 30/34
00-725 Warszawa
Tel.: +48 22 841 40 71

8. MARKETING AUTHORISATION NUMBER

Marketing Authorisation No. R/0286

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 23 March 1967

Date of last renewal: 19 May 2020

10. DATE OF REVISION OF THE TEXT

Repertory no. 1489/2025

I, the undersigned, Ryszard Pruszkowski, sworn translator of the English language entered on the list of sworn translators of the Minister of Justice under number TP/2196/05, hereby certify that the above text is a true and complete translation of the Polish document.

Warsaw, 28 April 2025