Summary of Product Characteristics (SmPC)

1. Name of the Medicinal Product

Product Name: **Combipack of Snake Venom Antiserum with Sterile Water for Injection (PAN Africa).**

Brand/Trade Name: **PANAF-Premium.**

Strength: After reconstitution, each ml of Polyvalent Snake Venom Antiserum (Pan Africa) neutralizes at a minimum

Bitis arietans	≥ 25 LD_{50}
Bitis gabonica	≥ 25 LD_{50}
Bitis nasicornis	≥ 20 LD_{50}
Bitis rhinoceros	≥ 25 LD_{50}
Echis leucogaster	≥ 25 LD_{50}
Echis ocellatus	≥ 25 LD_{50}
Echis carinatus	≥ 25 LD_{50}
Naja haje	≥ 25 LD_{50}
Naja melanoleuca	≥ 20LD_{50}
Naja nigricollis	≥ 20LD_{50}
Dendroaspis polylepis	≥ 25LD_{50}
Dendroaspis viridis	≥ 25LD_{50}
Dendroaspis jamesoni	≥ 25LD_{50}
Dendroaspis angusticeps	≥ 25LD_{50}

2. Quality and Quantitative Composition

Qualitative Declaration: Snake venom antiserum (Pan Africa) is a sterile containing enzyme refined anti snake equine immunoglobulin $F(ab')_2$ fragments.

3.Pharmaceutical Form:

Pharmaceutical Dosage Form: Injectable (Antisera).
Cream coloured powder which when reconstituted with the diluents yields a clear, colourless or pale yellow liquid.

4. Clinical Particulars

4.1. Therapeutic Indications:

The Snake Venom Antiserum (Pan Africa) is indicated for bites caused by the following species of snakes, where the patient presents with visible clinical signs and symptoms of severe local and/or systemic envenomation – *Bitis arietans, Bitis gabonica, Bitis nasicornis, Bitis rhinoceros,*

Echis leucogaster, Echis ocellatus, Echis carinatus, Naja haje, Naja melanoleuca, Naja nigricollis, Dendroaspis polylepis, Dendroaspis viridis, Dendroaspis jamesoni and *Dendroaspis angusticeps.*

(i) **Haemorrhagic envenoming-** spontaneous systemic bleeding from gums (gingival sulci), coagulopathy detected by 20 min WBCT with or without external bleeding, persistent bleeding from fang marks, nausea, vomiting and shock.

(ii) **Cytotoxic envenoming-** Pain full and progressive swelling with blood stained tissue fluid leaking from bite wound, hypovolaemic shock, blistering and bruising. Severe pain at bite site and throughout affected limb and painful and tender enlargement of lymph glands and irreversible tissue death (necrosis/gangrene).

4.2. Posology and Method of Administration:
As of now Snake Venom Antiserum is the only specific antidote for snake envenomation and prompt administration of adequate dose of Antiserum is of paramount importance for neutralization of unbound circulating snake venom components for early response to treatment.

Snake Venom Antiserum is most effective when given intravenously. Any delay in administration may result in increased dose requirement and decreased effectiveness. As the clinical signs can vary due to many factors such as type of snake, timeof reporting after bite, size of snake, amount of venom injected during bite, seasonal & regional variation in venom composition etc., no accurate dosage can be recommended. However, considering the average quantity of venom injected by snake at the time of bite and degree of envenomation, it is recommended to administer initial dose of 5-10 vials of Snake Venom Antiserum by slow intravenous infusion either undiluted at a rate of about 5 ml per minute OR after dilution with Normal /glucose saline at a rate of 5-10 ml/kg body weight per minute over 30-60 minutes.

Children should receive the same dose as adults. Constant monitoring of the vital signs at frequent intervals during initial 1 hour is recommended. Requirement of further dosing depends on extent of reversal of coagulopathy confirmed after 6 hours of Antiserum administration by WBCT in haemorrhagic bite **OR** if symptoms persist or worsen or in respiratory failure in neurotoxic bite after one hour of Antiserum administration. If the blood is still incoagulable OR no signs of reversal of paralysis are seen, a further dose of 5 to10 vials of Antiserum should be administered by slow I.V. route only. Administration by I.M. or locally around the bite wound is not recommended. In the majority of cases of both neurotoxic and haemotoxic bites, total dose of 10- 20 vials is adequate unless a proven recurrence of envenomation is established. In such a scenario, further doses can be given as per clinical condition of the patient.

Hypersensitivity skin test has no predictability value and hence should not be used.

4.3. **Contraindications**
Hypersensitivity to the product and its constituents.

4.4 Special warnings and precautions for use
These are necessary while dealing with persons with a known hypersensitivity to constituents of product. It is preferable to pre-medicate patient with Inj. Adrenaline (1:1000) 0.5-1.0 ml subcutaneously (for adults) and 0.01 mg/Kg to prevent the hypersensitivity reaction.

5. Interaction with other medicinal products and forms of other interactions:
There no drug interactions reported.

6. Pregnancy and Lactation:
However, considering the lethal risk associated with snake bites, pregnancy is not a contraindication to the administration of Snake Venom Antiserum (Pan Africa) treatment

subsequent to snake bites.

Local envenomation:

Presence of bite marks with or without oozing of blood, blistering and changein colour of skin.

Rapidly progressive or massive swelling involving more than half of the bitten limb within few hours of bite (without tourniquet).

Enlargement and tenderness of regional lymph nodes within hours after bite.

Systemic envenomation

Neurotoxic envenoming - Moderate or no local swells, progressive descending paralysis with ptosis and paralysis of eye movements. Earliest symptoms of neurotoxicity are blurred vision/ double vision, feeling of heaviness of eyelids and apparent drowsiness, raising the eyebrows and puckering the forehead even before ptosis, Imminent respiratory failure is suggested by dyspnoea, distress, restlessness, sweating, respiratory muscle weakness and terminal coma as a result of respiratory or circulatory failure.

7. Effects on ability to drive and use machine:

It is not recommended to drive vehicle and use machines immediately after the administration of Snake Venom Antiserum (Pan Africa).

8. Undesirable Effects

Combipack of Snake Venom Antiserum with Sterile Water for Injection being derived fromequines is heterologous to humans and hence can give occasional reactions.

Before injection of Snake Venom Antiserum (Pan Africa), it is necessary to enquire from the patient,

1) Whether he/she has received injections of horse serum previously.

2) Whether there is personal or family history of allergy, i. e. asthma, eczema or drug allergy.Every care should be taken to prevent reactions which could be countered immediately by injection of 1 ml. of 1:1000 adrenalines which should be always kept handy, before injectingthe dose of Snake Venom Antiserum (Pan Africa). In allergic individuals, the Snake Venom Antiserum (Pan Africa) 1 ml of Adrenaline 1:1000 may be injected intramuscularly at the same time as the antiserum. In some cases, symptoms such as itching, urticarial rash, pain in joints and muscles, fever, enlargement of lymph glands, appear about 7-12, days after injection of serum. These should be treated with antihistamines and corticosteroids. Usually these symptoms of serum sickness last a few days and patients recover without any complications. There can be transient tenderness at injection site and a brief rise in body temperature which does not require treatment.

9. Overdose:

In normal circumstances, overdose is likely to result in suppression of own immune response to prophylactic. Apart from this no other health hazards are anticipated.

5. Pharmacological Properties:

1. Pharmacodynamic Data:

Not performed.

2. Pharmacokinetic Data:

Not performed.

5.3 Preclinical safety Data:

Attached herewith.

6. Pharmaceutical Particulars

6.1. List of Excipients:

Glycine B.P.
Sodium Chloride B.P
Cresol

6.2.Incompatibilities
None

6.3. Shelf life
- Shelf life of the medicinal product as packages for sale: 3 Years
- Shelf life after dilution or reconstitution according to directions: 3 Years
- Shelf-life after first opening the container: N.A.

6.4. Special precautions for storage
Do not store above 30˚C, away from light.

6.5. **Nature and contents of container**
Material of construction of glass vial is USP type 1

7. Marketing Authorization Holder
Premium Serums and Vaccines Pvt. Limited
S. No.354-1,354-2A/1,
At/Post., Narayangaon, Behind Champagne Indage,
Tal. - Junnar, Dist.-Pune -410 504, **India.**

8. Marketing Authorization Numbers
TAN 22 HM 0135

9. Date of first Authorization/renewal of the Authorization
13/04/2022

10. Date of revision of the Text