ABBREVIATIONS AND DEFINITIONS

Ab
Antibody

ACV-Abs
Purified Anti-CV Antibodies

ARV-Abs
Purified Anti-RV Antibodies

Antidote
A medicine or remedy, which prevents or counteract with the effects of toxic material.

Ag
Antigen

Adjuvant
A substance, which enhances body’s immune response to an antigen.

Antivenom
A purified fraction of immunoglobulins or immunoglobulin fragments from the hyperimmune plasma of animals that have been immunized against snake venom or a snake venom mixture along with the adjuvant.

ASVA
Anti Snake Venom Antibodies

BSA
Bovine serum albumin

CFA
Complete Freund’s adjuvant
**Cross-reactivity**
The ability of an antivenom raised against a venom, or a number of venoms, to react and neutralize the lethal effects of the venom of a closely related species though it is not included in the immunizing mixture.

**Conspecific**
Belongs to same species or group.

**CV**
Cobra venom

**Da**
Dalton

**ED$_{50}$**
The effective dose 50 is the quantity of antivenom that protects 50% of test animals injected with a specified number of LD$_{50}$ venom.

**EDTA**
Ethylene diamine tetra acetic acid.

**ELISA**
Enzyme-linked immunosorbent assay

**Envenomation**
The introduction of venom into a body of victim by means of the bite or sting of a venomous animal.

**EV**
Echis venom

**F (ab)$_2$**
Bivalent fragments obtained by pepsin digestion of immunoglobulin of hyperimmune plasma.
**Fc fragment**
The crystallizable fragment of an immunoglobulin molecule composed of the constant region of the heavy chains.

**g**
Gram

**GMP**
Good manufacturing practices

**h**
Hour

**HBPCL**
Haffkine Biopharmaceutical Corporation Limited

**Heterospecific**
Belongs to a different species or group.

**HRP**
Horseradish peroxides

**Hyperimmune plasma**
Plasma containing antibody at desired level

**Hyperimmunization**
Repeated immunization of animal with single or mixture of venoms along with a suitable adjuvant to produce long lasting antibodies or higher neutralizing antibody titer against the lethal and other deleterious components in the immunogenic toxins.

**IFA**
Incomplete Freund’s adjuvant
**IgG**
Immunoglobulin G

**IgE**
Immunoglobulin E

**IU**
International unit

**i.v.**
Intravenous (ly)

**Immunization process**
A process of producing long-lasting and high-titer neutralizing antibody responses against the lethal and other deleterious components of the immunogen.

**Immunoglobulin**
Antibody molecule generated by immunizing an animal (most often a horse or sheep) using the antigen with or without adjuvant.

**kDa**
Kilodalton

**KV**
Krait venom

**l**
litre

**LD_{50} (Lethal dose_{50})**
The quantity of snake venom injected intravenously/subcutaneously that causes death of 50% of animal population in a group after a specified period of time (usually 24-48 h)
**LFA**
Lateral flow assay

**LPS**
Lipop polysaccharides

**Lyophilization**
A process by which material is rapidly frozen and dehydrated under high vacuum.

**M**
Molar

**MAb**
Monoclonal antibody

**ml**
Milliliter

**mm**
Millimeter

**mg**
Milligram

**MW**
Molecular weight

**Mol**
Mole

**Monospecific antivenom or antivenin**
Antivenom that obtained by fractionating the plasma from animals immunized with a single species of venom.
NA
Not applicable

NC
Nitrocellulose

ND
Not determined

nm
Nanometer

NS
Normal Saline

OD
Optical density

PBST
Phosphate-buffered saline containing Tween 20

Plasma
The liquid portion remaining after the separation of the cellular elements from blood collected in a receptacle containing an anticoagulant, or separated by continuous filtration or centrifugation of anti-coagulated blood in an apheresis procedure.

Plasmapheresis
Procedure in which whole blood is removed from the donor, the plasma is separated from the cellular elements by gravity separation or centrifugation, and at least the red blood cells are returned back to the donor.

Polyspecific antivenom
Antivenom that obtained by fractionating the plasma from animals immunized with the mixture of venoms.
**Primary immunization**
The immunization of unexposed fresh animals to the immunogen to attain the desired immune response.

**rpm**
Revolutions per minute

**RV**
Russell’s viper venom

**s.c.**
Subcutaneous

**SD**
Standard deviation

**SDS–PAGE**
Sodium dodecyl sulfate–polyacrylamide gel electrophoresis.

**SE**
Standard error

**SEDIA**
Snake envenomation detection immunoassay

**SSAb**
Species-specific antibody

**TMB**
Tetra methyl benzidine

**TLC**
Thin layer chromatography
**Tris**
Tris (hydroxymethyl) aminomethane

**Quarantine**
A period of enforced isolation and observation of new animals before induction on immunization program mainly to avoid the possibility of an infectious disease among animals.

**µg**
Microgram

**Venom**
The toxic secretion of a specialized venom gland of snakes is delivered through the fangs and provokes deleterious effects. Venoms usually comprise many different proteins and enzymes.

**WBCT**
Whole blood clotting test

**WHO**
World health organization