1. NAME OF THE MEDICINAL PRODUCT

Name: Tetanus Vaccine (Adsorbed) I.P.

Suspension for injection by intramuscular route.

Strength: Each 0.5 ml contains Tetanus toxoid greater than or equal to 5 Lf to less than or equal to 25 Lf.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each dose of 0.5 ml contains:
Tetanus toxoid greater than or equal to 5 Lf to less than or equal to 25 Lf
Aluminum Phosphate (Mineral Carrier) - 1.5 mg
Thiomersal I.P. (preservative) - 0.01%w/v

S. No.	Ingredients	Spec.	Qty	Ovg.	Function
1	Tetanus Toxoid	IP	≥5Lf to ≤25Lf		Active
2	Aluminum Phosphate	IP	1.5 mg		Mineral Carrier
3	Thiomersal I.P.	IP	0.01% w/v		Preservative

3. PHARMACEUTICAL FORM

The vaccine is a sterile, turbid suspension with a greyish-white appearance.

- The vaccine is supplied as a ready-to-use suspension for intramuscular injection.
- A fine white sediment may form during storage due to the presence of Aluminum Phosphate. Shake well before use to ensure homogeneous suspension before withdrawal.
- The pH of the suspension is 6.0 to 7.0 (confirm from QC data).
- Available in 0.5 mL single-dose ampoules and 5 mL multi-dose vials, made of Type I clear glass, sealed with rubber stoppers and aluminum caps.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

For active immunization against tetanus.

4.2 Posology and method of administration Route of administration:

Inject intramuscularly deep into the deltoid muscle in adults and older children or anterolateral aspect of upper thigh (mid-thigh laterally) in younger children. The vaccine should not be injected into the gluteal areas where there may be a major nerve trunk.

A sterile needle and a sterile syringe should be used for each injection. Before injecting, the skin over the site to be injected should be cleansed with a suitable germicide. The vaccine should be

visually inspected for any foreign particulate matter and any variation in physical aspect prior to administration and in the event of either being observed discard the vaccine.

Posology:
Tetanus vaccine consists of two primary doses of 0.5ml to be administered at least four weeks apart followed by the third dose, at least six months later.

To maintain immunity of women against tetanus through the child - bearing period a total of five doses are recommended. A fourth dose should be given at least one year after the third dose, and a fifth dose at least one year after the fourth dose.

The safety of this medicinal product for use in human pregnancy has not been established in controlled clinical trials. Clinical experience with Tetanus toxoid suggests that no harmful effects on the course of pregnancy or on the fetus and the neonate are to be expected.

In previously non immunized women, two doses of Tetanus vaccine are recommended during pregnancy, at least 4 weeks apart. The second dose should be administered at least two weeks before childbirth, to prevent maternal and neonatal tetanus.

Tetanus toxoid should also be given in situations where a risk of developing tetanus from other sources (e.g.: injuries) exists. At least two doses with one-month interval will be required to provide basic protection in a previously unimmunized person and additional booster dose will be required to maintain protection over time.
Refer national immunization schedules for more details.

Method of administration:
When administration of tetanus vaccine is indicated (e.g.: tetanus prone wound) the vaccine should be administered at a separate site, with separate needle and syringe.

Persons who have not completed primary immunization against tetanus or whose vaccine history is unknown or uncertain should be immunized with tetanus vaccine. Full cycle of vaccinations plan is 0,1,6-12month (two initial doses in time intervals not shorter than 4-6 weeks, the third supplementary dose after 6 months to 1 year from the second vaccination) booster vaccination, one dose every 10 years from the last vaccination.

Tetanus vaccine may be given at the same time as BCG, measles, rubella, mumps, polio (OPV and IPV), Hepatitis B, Haemophilus influenza type b and yellow fever vaccines and vitamin A supplementation.

4.3 Contraindications

It is a contraindication to use this vaccine after anaphylaxis or other serious allergic reaction following a previous dose of this vaccine, any other tetanus vaccine - containing vaccine, or any component of this vaccine. The vaccine should not be administered to anyone with high fever or other evidence of acute illness.

4.4 Special warnings and precautions for use

Care is to be taken by the health care provider for the safe and effective use of Tetanus vaccine.

Special care should be taken to ensure that the injection does not enter a blood vessel.

Shake well before withdrawing each dose to homogenize the suspension, avoid foaming. Discard if vaccines cannot be resuspended to a homogenous suspension.

Individuals receiving corticosteroids or other immune suppressive drugs may not develop an optimum immunological response.

Intramuscular injections should be given with great care in patients suffering from thrombocytopenia or other coagulation disorders.

As with the use of all vaccines, the person who has taken the vaccine should be under observation for not less than 30 minutes for possibility of occurrence of immediate or early allergic reactions. Hydrocortisone and antihistamines should also be available in addition to supportive measures such as oxygen inhalation.

Epinephrine (1:1000) injection and other appropriate agents and equipment must be immediately available when an acute anaphylactic reaction occurs due to any component of the vaccine.

Persons infected with human immunodeficiency virus (HIV) whether asymptomatic or symptomatic, should be immunized with tetanus vaccines according to standard schedules.

A separate sterile syringe should be used for each individual patient to prevent the transmission of hepatitis or other infectious agents.

4.5 Interaction with other medicinal products and other forms of interaction

Immunosuppressive therapies may reduce the immune response to tetanus vaccine. As with other Intramuscular injections, use with caution in patients on anticoagulant therapy.

4.6 Pregnancy and Lactation

There is no evidence that tetanus vaccine is teratogenic. Tetanus toxoid should be given to inadequately immunize pregnant women because it affords protection against neonatal tetanus. In fact, it is recommended to give the vaccine to pregnant women with greater coverage. Waiting until the second trimester is a reasonable precaution to minimize the theoretical teratogenic concern.

Tetanus vaccine does not affect the safety of mothers who are Breast feeding to their infants. Breast feeding does not adversely affect the immune response and is not a contraindication for vaccination.

4.7 Effects on ability to drive and use machines

Tetanus vaccine is not reported to have any influence on the ability to drive and use machines.

4.8 Undesirable effects

Some temporary tenderness, redness, and pain in duration may develop at the site of injection and may be associated with systemic reactions including mild to moderate transient fever and irritability. Persistent nodules at the site of injection have occurred following the use of adsorbed vaccines, but this complication is unusual. General reactions are uncommon but may include headache, lethargy, malaise, myalgia. Acute anaphylactic reactions, urticaria, angioneurotic oedema, serum sickness and peripheral neuropathy occasionally occur.

There is increased incidence of local and systemic reactions to booster doses of tetanus vaccine when given to previously immunized persons.

4.9 Overdose

The data on overdose is not available.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Vaccine

ATC code: JH07AM01

Mechanism of action: Tetanus is a condition manifested primarily by neuromuscular dysfunction caused by a potent exotoxin released by C. tetani. Protection against disease is due to the development of neutralizing antibodies to the tetanus toxin. A serum tetanus antitoxin level of at least 0.01 IU/mL, measured by neutralization assays, is considered the minimum protective level A level ≥0.1 IU/mL by ELISA has been considered as protective.

Pharmacodynamic effects: No data pertaining to pharmacodynamic properties is available.

5.2 Pharmacokinetic properties

No data pertaining to pharmacokinetic studies is available. As an inactivated bacterial toxoid vaccine, tetanus toxoid does not exhibit traditional pharmacokinetic properties.

5.3 Preclinical safety data

Single dose (5 Lf) toxicity study of intramuscular tetanus vaccine conducted in five male and five female Swiss albino mice for a duration of 14 days in the year 2013 revealed no significant treatment related effects on food intake, body weight gain and clinical signs in the mice. No mortalities were recorded in this study period.

Single dose (5 Lf) toxicity study of intramuscular tetanus vaccine conducted in five male and five female wistar rats for a duration of 14 days in the year 2013 revealed that the food intake, the body weight gain was normal in rats, there was no gross changes in the vital organs observed after euthanization and that there were physical, physiological and behavioural changes in the studied rats. No mortalities were recorded after administration of single dose tetanus vaccine in this study period.

6. PHARMACEUTICAL PARTICULARS

6.1 List of Excipients

Aluminium
Phosphate
Formaldehyde
Sodium chloride
Water for Injection (WFI)
Thiomersal

6.2 Incompatibilities

None Known.

6.3 Shelf life

Thirty-six months (3 years) from the date of manufacture.

6.4 Special precautions for storage

DANO-TT® should be stored and transported between 2°C to 8°C. **"IT MUST NOT BE FROZEN".**

Once opened Multi - dose vials should be kept between 2°C to 8°C and Multi-dose vials of DANO-TT® from which one or more doses of vaccine has been removed during an immunization session may be used in subsequent immunization sessions for up to a maximum of 4 weeks, provided that all of the following conditions are met (as described in the WHO policy statement: The use of opened multi dose vials in subsequent immunization sessions. WHO/V&B/00.09).

The expiry date has not passed.

The vaccine is stored under appropriate cold - chain conditions.

The vaccine vial septum has not been - submerged in water.

Aseptic technique has been used to withdraw all doses.

If not sure of the above conditions, it is recommended to discard the multi dose presentation at the end of day's shift.

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

6.5 Nature and contents of container

Tetanus Vaccine (Adsorbed) I.P. is supplied in the following primary packaging configurations:

- Vial Presentation: A Type I clear glass vial containing 5 mL of Tetanus Vaccine. The vial is sealed with a rubber stopper and an aluminium flip-off seal. The vials are packed in a plastic tray and

placed inside a carton containing 50 vials (50 × 5 mL).

- Ampoule Presentation: A Type I clear glass ampoule containing 0.5 mL of Tetanus Vaccine. The ampoules are packed in a plastic tray and placed inside a carton containing 50 ampoules (50 × 0.5 mL).

6.6 Special precautions for disposal

General vaccine disposal guidelines for:

- Expired or compromised vaccine-sometimes unused vaccine and diluent doses, unopened vials, expired vials, and potentially compromised vaccine may be returned for credit, even if they must be discarded. Contact your immunization program* and/or the vaccine manufacturer for vaccine- specific information.
- Open and broken vials and syringes, manufacturer-filled syringes that have been activated, and vaccine pre-drawn by providers-these cannot be returned and should be discarded according to your state requirements.
- Empty vaccine vials-most are not considered hazardous or pharmaceutical waste and do not require disposal in a biomedical waste container. However, check and comply with your local requirements for disposal.
  Medical waste disposal requirements may vary from state to state because they are set by state environmental agencies. Contact your immunization program or state environmental agency for guidance to ensure your facility's vaccine disposal procedures comply with applicable local regulations.

7. APPLICANT/MANUFACTURER

LOCAL APPLICANT

Name and Address:
GOD IS WITH ME PHARMACEUTICALS NIG. LTD.
Address: PS/2, CREEK ROAD, FEGGE, ONITSHA
Telephone: 08033420281/ 07054916748

MANUFACTURER

Name and Address:
DANO VACCINES & BIOLOGICALS PRIVATE LIMITED
Address: Sy. No. 575, Sivareddyguda, Ghatkesar, Medchal -Malkajgiri,501301, T.S., INDIA
Email: pv@danovaccines.com
Website: www.danovaccines.com 24 hrs helpline No: 1800 3096 00924 hrs helpline No: 1800 3096 009

8. NAFDAC REGISTRATION NUMBER(S)

NAFDAC Registration No.: *Provision for NAFDAC Registration number after approval*