deltoid or the vastus lateralis. The vaccine should not be injected into the gluteal area.

Adrenaline injection must be kept readily available following immunization, should an anaphylactic or other allergic reaction occur due to any component of the vaccine

#### PRESENTATIONS:

Vial pack

- 0.5 ml Single dose container
- 2.5 ml Multidose container (For Maximum 5 withdrawal)
- 5.0 ml Multidose container (For Maximum 10 withdrawal)
- 0.5 ml PFS with needle -Single dose

Store at 2°C to 8°C, Do not freeze. Keep out of reach of children To report adverse events, call toll free on 1800 419 1141 or visit www.zyduslife.com ® Registered Trademark





For the use of a Registered Medical Practitioner or a Hospital or a Laboratory only

## Typhoid Polysaccharide Vaccine IP

#### Vactyph®

#### COMPOSITION:

Each dose of 0.5 ml contains:
Purified Vi Capsular polysaccharide
of *S. typhi* 0.025 mg
Phenol as preservative
maximum 0.25 % w/v
Isotonic buffer solution q.s.

#### DESCRIPTION:

VACTYPH® is a colorless clear sterile solution containing the purified cell surface Vi capsular polysaccharide of Salmonella typhi.

#### INDICATIONS:

VACTYPH® is indicated for active immunisation against typhoid fever in adults and children over 2 years of age.

Size: 96 x 100 mm (L x H) Colour: CMYK

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#### CONTRAINDICATIONS:

VACTYPH® should not be administered to persons with a history of hypersensitivity to any component of this vaccine

#### PRECAUTIONS & WARNINGS:

The administration of VACTYPH® should be deferred if fever or acute infection is present. The vaccine should not be administered intravenously. It should be shaken well before use & should not be used if frozen. The vaccine may not produce the desired response in immunosuppressed persons or persons receiving immunosuppressive therapy. As with any other intramuscular injection, VACTYPH® should be given with caution to individuals with thrombocytopenia or any coagulation disorder that would contraindicate intramuscular injection.

#### USAGE IN PREGNANCY, LACTATION & CHILDREN:

Since it is not known whether the vaccine can cause fetal harm when administered to a pregnant woman,

it should be given to such ladies only if clearly needed. When possible, delaying vaccination until the second or third trimester to minimize the possibility of teratogenicity is a reasonable precaution. It is not known if the vaccine is excreted in human milk. There is also no data to warrant the use of this product in nursing mothers for passive antibody transfer to an infant. Safety and effectiveness of Purified Vi Capsular Polysaccharide Typhoid Vaccine has not been established in children below the age of 2 years.

#### ADVERSE REACTIONS:

VACTYPH® is usually very well tolerated. However, mild local pain, rash, local induration or mild fever may occur occasionally.

#### DOSAGE AND ADMINISTRATION:

The recommended dose of VACTYPH® in all age groups is a single dose of 0.5ml administered intramuscularly. The dose for adults is given intramuscularly in the deltoid muscles and in children in the

Size: 96 x 100 mm (L x H) Colour: CMYK

## Summary of product characteristics as per Annexure C Typhoid Polysaccharide Vaccine I.P. VacTyph®



#### 1. NAME OF THE MEDICINAL PRODUCT

Typhoid Polysaccharide Vaccine I.P.

#### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

#### Each dose of 0.5 ml contains:

Purified Vi Capsular polysaccharide of *S. typhi*O.025 mg

Phenol as preservative maximum

O.25 % w/v

Isotonic buffer solution

q.s.

#### 3. PHARMACEUTICAL FORM

Liquid vaccine for intramuscular route of administration

#### 4. CLINICAL PARTICULARS

#### 4.1 Therapeutic indications

VacTyph® is indicated for active immunization against typhoid fever in adults and children over 2 years of age.

## 4.2 Posology and method of administration

The recommended dose of VacTyph® is single dose of 0.5 ml administered intramuscularly. Do NOT administer by intravascular injection. Ensure that the vaccine does not penetrate a blood vessel.

Do NOT inject this vaccine into the gluteal area or areas where there may be a nerve trunk. *Revaccination*: A single dose at 3 yearly intervals in subjects who remain at risk from typhoid fever.

VacTyph® should be given intramuscularly in the deltoid (upper arm) muscle in adults and in children in the vastus lateralis (anterolateral thigh) up to 12 years of age.

## Summary of product characteristics as per Annexure C Typhoid Polysaccharide Vaccine I.P. VacTyph®



#### 4.3 Contraindications

VacTyph<sup>®</sup> is contraindicated in patients with a history of hypersensitivity to any component of this vaccine.

Vaccination must be postponed in case of febrile or acute disease.

#### 4.4 Special warnings and precautions for use

This vaccine provides protection against the risk of infection related to *Salmonella typhi* but gives no protection against *Salmonella paratyphi A or B* or against *non-typhoidal Salmonellae*.

Syncope (fainting) can occur following, or even before, any vaccination especially in adolescents as a psychogenic response to the needle injection. This can be accompanied by several neurological signs such as transient visual disturbance, paraesthesia and tonic-clonic limb movements during recovery. It is important that procedures are in place to avoid injury from faints.

Do not administer intravenously, intradermally, or subcutaneously.

Like all other vaccines, supervision and appropriate medical treatment should always be available to treat any anaphylactic reactions following immunization.

Epinephrine injection (1:1000) must be immediately available in case of an acute anaphylactic reaction or any allergic reaction occurring due to any component of the vaccine.

The vaccine should remain under medical supervision for at least 30 minutes after vaccination.

As with all injectable vaccines, VacTyph® must be administered with caution to subjects with thrombocytopenia or a bleeding disorder since bleeding may occur following intramuscular administration to these subjects.

## Summary of product characteristics as per Annexure C Typhoid Polysaccharide Vaccine I.P. VacTyph®



As with any vaccine, vaccination with VacTyph® may not result in protection in all vaccine recipients.

The immunogenicity of VacTyph® may be reduced by immunosuppressive treatment or immunodeficiency. In such cases it is recommended to postpone vaccination until the end of the disease or treatment.

The administration of VacTyph® should be deferred if fever or acute infection is present.

The vaccine should be shaken well before use & should not be used if frozen.

#### 4.5 Interaction with other medicinal products and other forms of interaction

For concomitant or co-administration, use different injection sites and separated syringes. VacTyph® should not be mixed with any other vaccine or medicinal product, because interaction with other vaccines or medical products have not been established.

Immunosuppressive therapies may reduce the immune response to VacTyph<sup>®</sup>. As with other intramuscular injections, use with caution in patients on anticoagulant therapy.

#### 4.6 Special Population

Animal reproduction studies have not been conducted with VacTyph<sup>®</sup>. There is no data on the use of this vaccine in pregnant women. Therefore, the administration of the vaccine during pregnancy is not recommended. VacTyph<sup>®</sup> should be given to pregnant women only if clearly needed and following an assessment of the risks and benefits. It is not known whether this vaccine is excreted in human milk. Caution must be exercised when VacTyph<sup>®</sup> is administered to a nursing mother. Safety and effectiveness of VacTyph<sup>®</sup> has not been established in children below the age of 2 years.

## 4.7 Effects on ability to drive and use machines

No studies on the effect of VacTyph® on the ability to drive and use machines have been performed.

## Summary of product characteristics as per Annexure C Typhoid Polysaccharide Vaccine I.P. VacTyph®



#### 4.8 Undesirable effects

The adverse events reported with typhoid polysaccharide vaccine include the following:

- Very common (≥1/10): injection site pain, injection site erythema, injection site swelling/ edema/ induration, headache, myalgia, malaise and fatigue / asthenia
- Common ( $\ge 1/100$  to < 1/10): fever
- Uncommon ( $\geq 1/1000$  to < 1/100): injection site pruritus
- Not known (cannot be estimated from the available data): Nausea, vomiting, diarrhoea, abdominal pain, anaphylactic / anaphylactoid reactions including shock, Serum sickness disease, pruritus, rashes, urticaria, arthralgia and vasovagal syncope in response to injection.

#### 4.9 Overdose

No case of overdose has been reported.

#### 5. PHARMACOLOGICAL PROPERTIES

#### **5.1 PHARMACODYNAMICPROPERTIES**

Typhoid fever is a very common and serious bacterial disease caused by *Salmonella typhi*. Typhoid polysaccharide vaccine contains purified Vi capsular polysaccharide of *Salmonella typhi*. The vaccine is immunogenic and is T-cell independent which induces Vi antibodies that neutralize Vi antigen and hence prevents the infection. Immunity appears within 1-3 weeks after injection and lasts around 3 years

#### **5.2 PHARMACOKINETIC PROPERTIES**

Evaluation of pharmacokinetic properties is not required for vaccines.

## 5.3 Preclinical safety data

## 5.3.1 Animal Toxicology & Pharmacology:

Not applicable OR Preclinical data reveal no special hazard for humans based on conventional studies of safety and of toxicity.

## Summary of product characteristics as per Annexure C Typhoid Polysaccharide Vaccine I.P. VacTyph®



#### 6. PHARMACEUTICAL PARTICULARS

## 6.1 List of excipients

- Potassium dihydrogen orthophosphate
- Disodium hydrogen orthophosphate
- Sodium chloride
- Potassium chloride
- Phenol
- Sodium hydroxide
- Hydrochloric acid

## 6.2 Incompatibilities

This vaccine must not be mixed with other medicinal products.

#### 6.3 Shelf life

The expiry date of the vaccine is indicated on the label and carton of the product.

## 6.4 Special precautions for storage

Store at 2°C to 8°C.

Do not freeze.

Keep out of reach of children.

#### 6.5 Nature and contents of container

2R Clear tubular Glass Vial - USP Type I with 13 mm Grey Bromo Butyl Rubber Stopper and 13 mm Aluminium Flip Off Seals.

## For Single dose (0.5 ml) in PFS presentation

Pre-Filled Syringe (PFS) device- USP Type I glass with Bromo Butyl plunger stopper

# Summary of product characteristics as per Annexure C Typhoid Polysaccharide Vaccine I.P. VacTyph®



## 6.6 Special precautions for disposal

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

## 7. Details of manufacturer

Zydus Lifesciences Limited

Plot Survey No. 23, 25/P, 37, 40/P, 42 to 47, 49 & 50,

Sarkhej-Bavla N.H. 8A, Opp. Ramdev Masala,

Village: Changodar, Taluka: Sanand,

Dist. Ahmedabad – 382 213

## 8. MARKETING AUTHORISATION NUMBER(S)

Permission No. M.F. (821)

## 9. DATE OF FIRST AUTHORISATION

Dated: 9-Sep-2003, NOC dated: 6-Oct-2021

SmPC updated on: 11/05/2024