Diphtheria antitoxin

(Dip/Ser)

● **INDICATIONS AND DOSE**

Passive immunisation in suspected cases of diphtheria

► BY INTRAVENOUS INFUSION

‣ Child: Dose should be given without waiting for bacteriological confirmation (consult product literature)

● **CAUTIONS**

CAUTIONS, FURTHER INFORMATION

‣ Hypersensitivity Hypersensitivity is common after administration; resuscitation facilities should be available.

Diphtheria antitoxin is no longer used for prophylaxis because of the risk of hypersensitivity; unimmunised contacts should be promptly investigated and given antibacterial prophylaxis and vaccine.

● **SIDE-EFFECTS**

‣ **Common or very common** Hypersensitivity

● **PRE-TREATMENT SCREENING** Diphtheria antitoxin is derived from horse serum and reactions are common; tests for hypersensitivity should be carried out before use.

● **PRESCRIBING AND DISPENSING INFORMATION** Available from Centre for Infections (Tel (020) 8200 6868) or in Northern Ireland from Public Health Laboratory, Belfast City Hospital (Tel (028) 9032 9241).

● **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.

Solution for injection

‣ **Diphtheria antitoxin (Non-proprietary)**

Diphtheria antitoxin 1000 unit per 1 ml Antidiphtheria serum 10,000units/10ml solution for injection ampoules | 1 ampoule PoM Ⓐ

3 Tuberculosis diagnostic test

DIAGNOSTIC AGENTS

Tuberculin purified protein derivative

(Tuberculin PPD)

● **INDICATIONS AND DOSE**

Mantoux test

► BY INTRADERMAL INJECTION

‣ Child: 2 units for one dose

Mantoux test (if first test is negative and a further test is considered appropriate)

► BY INTRADERMAL INJECTION

‣ Child: 10 units for 1 dose

DOSE EQUIVALENCE AND CONVERSION

‣ 2 units is equivalent to 0.1 mL of 20 units/mL strength.

‣ 10 units is equivalent to 0.1 mL of 100 units/mL strength.

● **CAUTIONS**

CAUTIONS, FURTHER INFORMATION

‣ Mantoux test Response to tuberculin may be suppressed by viral infection, sarcoidosis, corticosteroid therapy, or immunosuppression due to disease or treatment and the MMR vaccine. If a tuberculin skin test has already been initiated, then the MMR should be delayed until the skin test has been read unless protection against measles is required urgently. If a child has had a recent MMR, and requires a tuberculin test, then a 4 week interval should be observed. Apart from tuberculin and MMR, all other live vaccines can be administered at any time before or after tuberculin.

● **PRESCRIBING AND DISPENSING INFORMATION** Available from ImmForm (SSI brand).

The strength of tuberculin PPD in currently available products may be different to the strengths of products used previously for the Mantoux test; care is required to select the correct strength.

● **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug. Forms available from special-order manufacturers include: solution for injection

Solution for injection

‣ **Tuberculin purified protein derivative (Non-proprietary)**

Tuberculin purified protein derivative 20 tuberculin unit per 1 ml Tuberculin PPD RT 23 SSI 20 tuberculin units/ml solution for injection 1.5ml vials | 1 vial Ⓐ

Tuberculin purified protein derivative 100 tuberculin unit per 1 ml Tuberculin PPD RT 23 SSI 100 tuberculin units/ml solution for injection 1.5ml vials | 1 vial Ⓐ

4 Vaccination

Vaccination, general principles

06-Feb-2020

Active immunity

Active immunity can be acquired by natural disease or by vaccination. **Vaccines** stimulate production of antibodies and other components of the immune mechanism; they consist of either:

1. a *live attenuated* form of a virus (e.g. measles, mumps and rubella vaccine) or bacteria (e.g. BCG vaccine), or
2. *inactivated* preparations of the virus (e.g. influenza vaccine) or bacteria, or
3. *detoxified exotoxins* produced by a micro-organism (e.g. tetanus vaccine), or
4. *extracts of* a micro-organism, which may be derived from the organism (e.g. pneumococcal vaccine) or produced by recombinant DNA technology (e.g. hepatitis B vaccine).

Live attenuated vaccines usually produce a durable immunity, but not always as long-lasting as that resulting from natural infection.

Inactivated vaccines may require a primary series of injections of vaccine to produce an adequate antibody response, and in most cases booster (reinforcing) injections are required; the duration of immunity varies from months to many years. Some inactivated vaccines are adsorbed onto an adjuvant (such as aluminium hydroxide) to enhance the antibody response.

Passive immunity

Immunity with immediate protection against certain infective organisms can be obtained by injecting preparations made from the plasma of immune individuals with adequate levels of antibody to the disease for which protection is sought (see under *Immunoglobulins*). The duration of this passive immunity varies according to the dose and the type of immunoglobulin. Passive immunity may last only a few weeks; when necessary, passive immunisation can be repeated.

Antibodies of human origin are usually termed *immunoglobulins*. The term *antiserum* is applied to material prepared in animals. Because of serum sickness and other allergic-type reactions that may follow injections of antisera, this therapy has been replaced whenever possible by the use of immunoglobulins.