SUMMARY OF PRODUCTCHARACTERISTICS

1.7.1.1 Name of the medicinal Product

Chloramphenicol Sodium Succinate For Injection BP

1.7.1.2 Qualitative and Quantitative Composition

1.7.1.2.1 Qualitative declaration

Chloramphenicol Sodium succinate For Injection BP

1.7.1.2.2 Quantitative declaration

Sr. No.	Ingredients Chemical Name	Specification	Standard Quantity/Vial (mg)	Reason for Inclusion
01	Chloramphenicol Sodium Succinate (Sterile) Eq. to Chloramphenicol	BP	1400.0 Eq To 1000.0	Antibacterial

1.7.1.3 Pharmaceutical Form

Dry powder for Injection

1.7.1.4 Clinical Particulars

1.7.1.4.1 Therapeutic Indications

Treatment of typhoid fever caused by susceptible Salmonella typhi.

Treatment of meningitis caused by susceptible bacteria, including Neisseria meningitidis, Haemophilus influenzae, or Streptococcus pneumoniae.

Treatment of brucellosis used with or without streptomycin as an alternative to a tetracycline regimen.

Alternative for treatment of anthrax, especially anthrax meningoencephalitis.

Plague: Treatment of plague meningitis; drug of choice.

Tuaremia: In the treatment of tularemia caused by Francisella tularensis.

Rickettsial Infections: Alternative to tetracyclines for treatment of Rocky Mountain spotted fever and other rickettsial infections.

Chlamydial infection: Treatment of psittacosis (ornithosis) caused by Chlamydia psittaci. Alternative to tetracyclines.

Clostridium infection: Alternative to penicillin G or clindamycin for treatment of infections caused by Clostridium perfringens.

Vibrio infections: Treatment of cholera caused by Vibrio cholera

1.7.1.4.2 Posology and Method of Administration

Dosing in adults:

Systemic infections: Infections caused by Bactericides, H. influenza, Neisseria meningitidis, Salmonella, and Rickettsia.

I.V.: 50-100 mg/kg/day in divided doses every 6 hours; maximum daily dose: 4 g/day.

Treatment of Anthrax (Inhalational, GI, Meningeal, Septicemia):

50–100 mg/kg daily in 4 divided doses. Meningoencephalitis caused by B. anthracis may require 1 g every 4 hours.

Treatment of Plague:

Initial loading dose of 25 mg/kg followed by 15 mg/kg 4 times daily given for 10–14 days for treatment of plague meningitis.

Treatment of Tularemia:

15 mg/kg 4 times daily given for 14–21 days for treatment of tularemia.

Treatment of Typhoid Fever:

50 mg/kg daily in equally divided doses every 6 hours given for 14–15 days.

Pediatric: Other infections:

Neonates: Initial loading dose: I.V. (I.M. administration is not recommended): 20 mg/kg (the first maintenance dose should be given 12 hours after the loading dose)

Maintenance dose: Postnatal age:

≤7 days: 25 mg/kg/day once every 24 hours

>7 days, ≤2000 g: 25 mg/kg/day once every 24 hours

>7 days, >2000 g: 50 mg/kg/day divided every 12 hours

Children: Usual dosing range: I.V.: 50-100 mg/kg/day in divided doses every 6 hours; maximum daily dose: 4 g/day.

Meningitis: I.V.: Infants >30 days and Children: 75-100 mg/kg/day divided every 6 hours.

Administration:

To be given by I.V. or I.M. injection.

In order to ensure rapid attainment of high blood levels, Chloramphenicol sodium succinate is best administered by I.V. injection. Where this is not possible, however, intramuscular administration may be used, although it should be borne in mind that absorption may be slow and unpredictable.

The injection should be reconstituted with Water for Injection, Sodium Chloride Injection, or Dextrose Injection 5 %.

1.7.1.4.3 Contraindications

Chloramphenicol sodium succinate is contra-indicated in patients with a previous history of sensitivity and/or toxic reaction to Chloramphenicol. It is contra-indicated trivial infections (e.g, colds, influenza, throat infections) or infections other than indicated; prophylaxis of systemic bacterial infections.

1.7.1.4.4 Special Warnings and Special Precautions for Use

Bone marrow syndrome/Gray syndrome: Observe patient daily for signs of bone marrow depression (eg, fatigue, sore throat, bleeding, aplastic anemia, hypoplastic anemia, thrombocytopenia, agranulocytosis) and Gray syndrome in infants.

Use in Pregnancy: Category A. There are no studies to establish the safety of this drug in pregnancy.

Lactation: Excreted in breast milk.

Children: Use drug with caution and in reduced dosages in premature and term infants and children with immature metabolic functions to avoid Gray syndrome toxicity (e.g., toxic and potentially fatal reaction in premature infants and newborns).

The dosage of chloramphenicol should be reduced in patients with impairment of hepatic or renal function.

Use during immunisation: Chloramphenicol may interfere with the development of immunity and should not be used during active immunisation.

1.7.1.4.5 Interaction with other medicinal products and other forms of interaction

Chloramphenicol has been shown to interact with, and enhance the effects of coumarin anticoagulants, some hypoglycaemic agents (e.g. tolbutamide) and phenytoin.

Plasma concentrations of chloramphenicol may be reduced with concomitant usage of phenobarbital and rifampicin.

Chloramphenicol may interfere with the haematological response of Vitamin B12, folic acid or iron in patients with anaemia.

It may also reduce the reliability of the oral contraceptive pill and increase the incidence of breakthrough bleeding.

It is also dangerous in porphyria sufferers.

1.7.1.4.6 Pregnancy and Lactation

Use in Pregnancy: Category A. There are no studies to establish the safety of this drug in pregnancy.

Lactation: Excreted in breast milk..

1.7.1.4.7 Effects on ability to Drive and use Machines

Not Known

1.7.1.4.8 Undesirable Effects

Blood and Lymphatic System Disorders: Blood dyscrasias including aplastic anaemia, hypoplastic anaemia, thrombocytopenia and granulocytopenia have been attributed to the administration of chloramphenicol. A reversible type of bone marrow depression, which is dose-related, may occur. This type of marrow depression is characterised by vacuolisation of the erythroid cells, reduction of reticulocytes and leucopenia, and responds promptly to the withdrawal of chloramphenicol. An irreversible type of marrow suppression leading to aplastic anaemia, with a high mortality rate, is characterised by the appearance of bone marrow aplasia or hypoplasia weeks or months after therapy.

Gastrointestinal Disorders: Nausea, vomiting, glossitis and stomatitis, diarrhoea and enterocolitis may occur; incidence is low.

Nervous System Disorders: Headache; peripheral neuritis has been reported usually following long-term dosage. If this occurs, the drug should be promptly withdrawn.

Psychiatric Disorders: Mild depression, mental confusion and delirium.

Eye Disorders: Optic neuritis has been reported usually following long-term dosage. If this occurs, the drug should be promptly withdrawn.

Immune System Disorders: Anaphylaxis; Herxheimer reactions have occurred during therapy for typhoid fever.

Skin and Subcutaneous Tissue Disorders: Angioedema, macular and vesicular rashes, urticaria.

Cardiac Disorders: Toxic reactions including fatalities have occurred in premature and newborn infants; the signs and symptoms associated with these reactions are known as the grey baby syndrome.

1.7.1.4.9 Overdose

Levels exceeding 25 µg/mL are frequently considered toxic. Chloramphenicol toxicity can be evidenced by serious haemopoietic effects such as aplastic anaemia, thrombocytopenia, leukopenia, as well as increasing serum iron levels, nausea, vomiting and diarrhoea.

In the case of serious overdosage, charcoal haemoperfusion may be effective in removing chloramphenicol from plasma.

1.7.1.5 Pharmacological Properties

1.7.1.5.1 Pharmacodynamics Properties

Chloramphenicol, which was originally isolated from Streptomyces venezuelae and is now synthetically produced, exerts mainly a bacteriostatic effect on a wide range of gram-positive and gram-negative organisms and is active against Rickettsia, Chlamydia (psittacosis-lymphogranuloma organisms), and Mycoplasma. It is particularly effective against H. influenzae, S. pneumoniae, S. typhi and Neisseria species. The palmitate and sodium succinate esters are inactive until hydrolyzed to free chloramphenicol which occurs rapidly in vivo. The mechanism of action of chloramphenicol is through inhibition of protein synthesis by binding to the 50S ribosomal subunit.

1.7.1.5.2 Pharmacokinetic Properties

Bioavailability: Bioavailability of Chloramphenicol succinate following I.V. administration is approximately 70%; highly variable, depend on rate and extent of metabolism to Chloramphenicol.

Distribution: Chloramphenicol succinate is distributed into most tissues and body fluids. The apparent volume of distribution (V_d) of Chloramphenicol succinate is 0.2-3.1 L/kg. It decreased with hepatic or renal dysfunction.

Protein binding: Approximately 60%; decreased with hepatic or renal dysfunction and in newborn infants

Metabolism: Chloramphenicol succinate is hydrolyzed in the liver, kidney and lungs to chloramphenicol (active).

Half-life elimination: Normal renal function: Adults is approximately 3 hours.

Hepatic disease: Prolonged.

Excretion: It is excreted Urine (approximately 30% as unchanged chloramphenicol succinate in adults, 6% to 80% in children).

1.7.1.5.3 Preclinical Safety Data

Not Applicable.

1.7.1.6 Pharmaceutical Particulars

1.7.1.6.1 List of Excipients

Not Applicable

1.7.1.6.2 Incompatibilities

None.

1.7.1.6.3 Shelf Life

36 months.

1.7.1.6.4 Special Precautions for Storage

Store below 30°C. Protect from light & moisture.

1.7.1.6.5 Nature and Contents of Container

10 ml clear glass vials (USP-Type III) having 20 mm grey butyl RFU Sterile rubber stopper and 20 mm yellow Flip Off seal. Such 50 vials are packed in a Labeled Inner with a Packing Insert.

1.7.1.6.6 Special precaution for disposal and other handling

The prepared infusion solution should be made up immediately before use.

1.7.1.7 Marketing Authorization Holder And Manufacturing Site Addresses

1.7.1.7.1 Name and Address of Marketing Authorization Holder

Lincoln Parenteral Limited
11, Trimul Estate, Khatraj, Tal. Kalol,
Dist. Gandhinagar, Gujarat, India.
Phone: +91-79-41078096
Telefax: +91-79-41078062
E-mail: hiren@lincolnpharma.com
Web site: www.lincolnpharma.com

1.7.1.7.2 Name and Address of manufacturing site(s)

Lincoln Parenteral Limited
11, Trimul Estate, Khatraj, Tal. Kalol,
Dist. Gandhinagar, Gujarat, India.
Phone: +91-79-41078096
Telefax: +91-79-41078062
E-mail: hiren@lincolnpharma.com
Web site: www.lincolnpharma.com

1.7.1.8 Marketing Authorization Number

LIN/IND/004.
06862/07462/REN/2020

1.7.1.9 Date of First <Registration> / Renewal of The <Registration>

Nov 28, 2021

1.7.1.10 Date of Revision of the Text

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1.7.1.11 Dosimetry (If Applicable)

Not Applicable

1.7.1.12 Instructions for preparation of radiopharmaceuticals (if Applicable)

Not Applicable