SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Chloramphenicol <TRADE NAME> <STRENGTH> Eye Drops, Solution

<REGARDING THE APPROVAL>

1. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 1 mL solution contains <STRENGTH> of Chloramphenicol

For the full list of excipients, see section 6.1.

<REGARDING THE APPROVAL>

1. PHARMACEUTICAL FORM

Eye Drops, Solution <REGARDING THE APPROVAL>

1. CLINICAL PARTICULARS
   1. Therapeutic indications

For the treatment of bacterial conjunctivitis caused by the organisms Escherichia coli, Haemophilus influenzae, Staphylococcus aureus, Streptococcus haemolyticus, Morax-Axenfeld and others in both adults and children over 2 years of age.

* 1. Posology and method of administration

**Posology**

**Adults (and the elderly) and children**

The recommended dosage for adults (including the elderly) and children is two drops to be applied to the affected eye every three hours. Treatment should be continued for at least 48 hours after the eye appears normal.

**Method of administration**

For topical ocular use.

* 1. Contraindications

• Hypersensitivity to the active substance or to any of the other excipients listed in section 6.1.

• Known personal or family history of blood dyscrasias including aplastic anaemia.

• Myelosuppression during previous exposure to chloramphenicol.

* 1. Special warnings and precautions for use

Chloramphenicol is absorbed systemically from the eye and toxicity has been reported following chronic exposure. Bone marrow hypoplasia, including aplastic anaemia and death, has been reported following topical use of chloramphenicol. Whilst the hazard is a rare one, it should be borne in mind when assessing the benefits expected from the use of the compound. Where chloramphenicol eye drops are used on a long-term or intermittent basis, it may be advisable to perform a routine blood profile before therapy and at appropriate intervals thereafter to detect any haemopoietic abnormalities.

In severe infections the topical use of chloramphenicol should be supplemented with appropriate systemic treatment.

Prolonged use of chloramphenicol eye drops should be avoided as it may increase the likelihood of sensitisation and emergence of resistant organisms. If any new infection appears during treatment, the antibiotic should be discontinued and appropriate measures taken. Chloramphenicol should be reserved for use only in infections for which it is specifically indicated.

Chloramphenicol eye drops does not provide adequate coverage against Pseudomonas aeruginosa and Serratia marcescens.

Do not use for more than 5 days without consulting a doctor.

Medical advice should be sought if there is no improvement in the condition after 2 days or if symptoms worsen at any time.

Patients should be referred to their doctor if any of the following apply:

• Disturbed vision

• Severe pain within the eye

• Photophobia

• Eye inflammation associated with a rash on the scalp or face

• The eye looks cloudy

• The pupil looks unusual

• Suspected foreign body in the eye

Patients should also be referred to their doctor if any of the following in his/her medical history apply:

• Previous conjunctivitis in the recent past

• Glaucoma

• Dry eye syndrome

• Eye surgery or laser treatment in the last 6 months

• Eye injury

• Current use of other eye drops or eye ointment

• Contact lens use

Soft contact lenses should not be worn during treatment with chloramphenicol eye drops due to absorption of the preservative onto the lens which may cause damage to the lens. It is recommended that all types of contact lenses be avoided during ocular infections.

The packaging will convey the following information:

• If symptoms do not improve within 48 hours talk to your doctor

• Seek further immediate medical advice at any time if symptoms worsen

• Do not use if you are allergic to chloramphenicol or any of the ingredients.

**Excipient information**

<REGARDING THE APPROVAL>

* 1. Interaction with other medicinal products and other forms of interaction

The concomitant administration of chloramphenicol with other drugs liable to depress bone marrow function should be avoided.

Chymotrypsin will be inhibited if given simultaneously with chloramphenicol.

* 1. Fertility, pregnancy and lactation

Safety for use in pregnancy and lactation has not been established.

Chloramphenicol is known to penetrate well into foetal circulation and is found in breast milk at low concentrations. The reduced ability of the foetus and neonate to metabolise chloramphenicol may lead to the drug concentrating in the foetal or neonatal circulation. Therefore, this product is not recommended for use during pregnancy and lactation.

Topical ocular chloramphenicol must be used only if considered essential and not prophylactically or to treat minor infections.

* 1. Effects on ability to drive and use machines

The use of eye drops may cause transient blurring of vision. Patients should not drive or operate hazardous machinery unless vision is clear.

* 1. Undesirable effects

**Eye** **Disorders**:

Transient irritation, burning, stinging and sensitivity reactions such as itching and dermatitis.

**Immune System Disorders**:

Hypersensitivity reactions including angioedema, anaphylaxis, urticaria, fever, vesicular and maculopapular dermatitis.

**Blood and Lymphatic System Disorders**:

Bone marrow depression and rarely aplastic anaemia has been reported following topical use of chloramphenicol. Whilst the hazard is a rare one, it should be borne in mind when assessing the benefits expected form the use of this compound.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via Health Product Vigilance Center; HPVC.

* 1. Overdose

Accidental ingestion of the drops is unlikely to cause systemic toxicity due to the low contents of the antibiotic in the product. If the irritation, pain, swelling, lacrimation or photophobia occur after undesired eye contact, the exposed eye(s) should be irrigated for at least 15 minutes. If the symptoms persist after this, an ophthalmological examination should be considered.

1. PHARMACOLOGICAL PROPERTIES
   1. Pharmacodynamic properties

Pharmacotherapeutic group: Antibiotics, ATC code: S01AA01.

Chloramphenicol is a broad-spectrum antibiotic with bacteriostatic activity, and is effective against a wide range of gram-negative and gram-positive organisms including Haemophilus influenzae, Streptococcus pneumoniae, Staphylococcus aureus, Streptococcus viridans, Moraxella species and Enterobacteriaceae, the main pathogens responsible for acute bacterial conjunctivitis. Chloramphenicol exerts its antibacterial effect by reversibly binding to bacterial ribosomes thereby inhibiting bacterial protein synthesis.

* 1. Pharmacokinetic properties

Following topical application to the eye, chloramphenicol may be absorbed into the aqueous humour. Sufficient chloramphenicol may be absorbed from the eye to appear in the systemic circulation.

Specific data on systemic absorption from this dosage presentation is not available.

Chloramphenicol is readily absorbed when given by mouth. Blood concentrations of 10µg per ml or more may be reached about 1 or 2 hours after a single dose of 1g by mouth, and blood concentrations of about 18.5µg per ml have been reported after multiple 1g doses. Choramphenicol palmitate is hydrolysed to chloramphenicol in the gastrointestinal tract prior to absorption, and the sodium succinate, which is given parenterally is probably hydrolysed to free drug mainly in the liver, lungs, and kidneys; such hydrolysis may be incomplete in infants and neonates, contributing to the variable pharmacokinetics in this age group. Chloramphenicol sodium succinate is, even in adults, only partially and variably hydrolysed, so that blood concentrations of chloramphenicol obtained after parenteral administration of the sodium succinate are often lower than those obtained after administration of chloramphenicol by mouth, with up to 30% of a dose excreted unchanged in the urine before hydrolysis can take place.

Chloramphenicol is widely distributed in body tissues and fluids; it enters the cerebrospinal fluid, giving concentrations of about 50% of those existing in the blood even in the absence of inflamed meninges; it diffuses across the placenta into the foetal circulation, into breast milk, and into the aqueous and vitreous humours of the eye. Up to about 60% in the circulation is bound to plasma protein. The half-life of chloramphenicol has been reported to range from 1.5 to 4 hours; the half-life is prolonged in patients with severe hepatic impairment and is also much longer in neonates. Renal impairment has relatively little effect on the half-life of the active drug, due to its extensive metabolism, but may lead to accumulation of the inactive metabolites.

Chloramphenicol is excreted mainly in the urine but only 5 to 10% of an oral dose appears unchanged; the remainder is inactivated in the liver, mostly by conjugation with glucorinic acid. About 3% is excreted in the bile. However, most is reabsorbed and only about 1%, mainly in the inactive form, is excreted in the faeces.

The absorption, metabolism, and excretion of chloramphenicol are subject to considerable interindividual variation, especially in infants and children, making monitoring of plasma concentrations necessary to determine pharmacokinetics in a given patient.

* 1. Preclinical safety data

There are no pre-clinical data of relevance to the prescriber which are additional to that already included in other sections of the SPC.

1. PHARMACEUTICAL PARTICULARS
   1. List of excipients

<REGARDING THE APPROVAL>

* 1. Incompatibilities

Not applicable.

* 1. Shelf life

<REGARDING THE APPROVAL>

* 1. Special precautions for storage

<REGARDING THE APPROVAL>

* 1. Nature and contents of container

<REGARDING THE APPROVAL>

* 1. Special precautions for disposal

<REGARDING THE APPROVAL>

1. MARKETING AUTHORISATION HOLDER

<REGARDING THE APPROVAL>

1. MARKETING AUTHORISATION NUMBER(S)

<REGARDING THE APPROVAL>

1. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

<REGARDING THE APPROVAL>

1. DATE OF REVISION OF THE TEXT1

<REGARDING THE APPROVAL>