NEW ZEALAND DATA SHEET

1 PHENERGAN TABLETS AND PHENERGAN ELIXIR

Phenergan Tablets 10 mg and 25 mg

Phenergan Elixir 5 mg/5 mL

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Promethazine hydrochloride

Phenergan Elixir contains promethazine hydrochloride 5 mg/5 mL.

Excipients of known effect: maltitol solution, sodium benzoate, sodium sulfite, sodium metabisulfite

Phenergan tablets contain 10 mg or 25 mg of promethazine hydrochloride.

Excipients with known effect: lactose monohydrate.

For the full list of excipients, see Section 6.1 List of excipients.

3 PHARMACEUTICAL FORM

ELIXIR

5 mg/5 mL. Sugar free, alcohol free, orange flavoured.

TABLETS

10 mg: Circular, film-coated biconvex tablets with bevelled edges, pale blue in colour, one face impressed 'PN' above '10', the reverse face plain.

25 mg: Circular, film-coated biconvex tablets with bevelled edges, pale blue in colour, one face impressed 'PN' above '25', the reverse face plain.

4 CLINICAL PARTICULARS

4.1 THERAPEUTIC INDICATIONS

<u>Allergies</u>: Treatment of allergic conditions including some allergic reactions to drugs, urticaria and allergic contact dermatitis, and allergic reactions to insect bites and stings.

<u>Upper respiratory tract</u>: Relief of excessive secretion in the upper respiratory tract as a result of hayfever and allergic rhinitis.

<u>Nausea and vomiting</u>: Antiemetic for vomiting from various causes, including postoperative vomiting, irradiation sickness, drug induced nausea and motion sickness.

<u>Sedation</u>: For short term use in adults under the advice of a doctor or pharmacist. Do not use for more than 7 to 10 consecutive days.

Other: Promethazine can be used as a preanaesthetic medication for the prevention and control of post operative vomiting.

4.2 DOSE AND METHOD OF ADMINISTRATION

Dose

This product should not be used in children under 2 years of age (see Section 4.4 Special warnings and precautions for use).

Dosage varies according to the condition being treated and the individual's response.

Allergic disorders

Children: 2-5 years: 5 to 15 mg (5 to 15 mL) as a single dose at night, or 5 mg two to three times daily.

Children: 6 - 12 years: 10 to 25 mg (10 to 25 mL) as a single dose at night, or 10 mg two to three times daily.

Adults: 25 to 75 mg as a single dose at night, or 10 to 20 mg two to three times daily.

<u>Sedation</u>

Adults: 25 to 75 mg as a single dose at night.

Travel sickness

Children 2-5 years: 5 mg (5 mL). Children: 6-12 years: 10 mg (10 mL).

Adults: 25 mg.

To be taken the night before travel and repeated after 6 to 8 hours on the following day if required.

Nausea and vomiting

Children: 2-5 years: 5 mg (or 5 mL) every 4 to 6 hours to a maximum daily dose of 15 mg (or 15 mL).

Children: 6-12 years: 10 mg (or 10 mL) every 4 to 6 hours to a maximum daily dose of

25 mg (or 25 mL).

Adults: 25 mg every 4 to 6 hours to a maximum daily dose of 100 mg.

4.3 CONTRAINDICATIONS

Promethazine is contraindicated for use in patients with a history of hypersensitivity to the drug substance (promethazine hydrochloride), substances of similar chemical structure, for example other phenothiazines, or hypersensitivity to the other ingredients in the formulation of Phenergan. Phenergan Elixir should not be given to patients with allergies to sodium metabisulfite, sodium sulfite or sodium benzoate.

Promethazine is contraindicated for use in:

- newborns or premature infants
- children less than 2 years of age (see Section 4.4 Special warnings and precautions for use)
- lactating women
- patients taking monoamine oxidase inhibitors (MAOIs) up to 14 days previously (see Section 4.5 Interaction with other medicines and other forms of interaction)
- jaundice induced by other phenothiazine derivatives
- patients in coma or suffering from CNS depression of any cause or who have received high doses of other CNS depressants.

Refer to 'Section 4.5 Interaction with other medicines and other forms of interaction for additional information.

4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Caution is advised in patients with:

- cardiovascular disease
- acute or chronic respiratory impairment (including asthma, bronchitis and bronchiectasis) as promethazine may thicken or dry lung secretions and impair expectoration
- epilepsy
- hypertensive crisis
- stenosing peptic ulcer
- symptomatic prostatic hypertrophy

- bladder neck obstruction
- pyloroduodenal obstruction

Hypersensitivity reactions including anaphylaxis, urticaria and angioedema have been reported with promethazine use. In case of allergic reaction, treatment with promethazine must be discontinued and appropriate symptomatic treatment initiated.

Promethazine should be avoided in patients with Parkinson's disease, hypothyroidism, cardiac failure, pheochromocytoma, myasthenia gravis, or prostate hypertrophy, or in patients with a history of narrow angle glaucoma or agranulocytosis.

Caution must be exercised when using H₁-antihistamines such as promethazine due to the risk of sedation. Combined use with other sedative medicinal products is not recommended (see section 4.5 Interactions with other medicines).

Prolonged administration of any phenothiazine may result in tardive dyskinesia, particularly in the elderly and children.

As agranulocytosis has been reported, regular monitoring of the complete blood count is recommended. The occurrence of unexplained infections or fever may be evidence of blood dyscrasia and requires immediate hematological investigation.

All patients should be advised that, if they experience fever, sore throat or any other infection, they should inform their physician immediately and undergo a complete blood count. Treatment should be discontinued if any marked changes (hyperleucocytosis, granulocytopenia) are observed in the blood count.

Promethazine may delay the early diagnosis of intestinal obstruction or increased intracranial pressure through the suppression of vomiting.

Promethazine may mask the warning signs of ototoxicity caused by ototoxic drugs e.g. salicylates.

Promethazine may increase the effects of alcohol. Alcohol and alcohol-containing medicines should be avoided during treatment.

Phenothiazines may be additive with, or may potentiate the action of, other CNS depressants such as opiates or other analgesics, barbiturates or other sedatives, general anesthetics, or alcohol.

QT interval prolongation has been reported with phenothiazines.

Phenothiazine derivatives may potentiate QT interval prolongation which increases the risk of onset of serious ventricular arrhythmias of the torsade de pointes type, which is potentially fatal (sudden death). QT prolongation is exacerbated, in particular, in the presence of bradycardia, hypokalaemia, and acquired (i.e. drug induced) QT prolongation. If the clinical situation permits, medical and laboratory evaluations should be performed to rule out possible risk factors before initiating treatment with a phenothiazine derivative and as deemed necessary during treatment (see Section 4.8 Undesirable effects).

Refer to 'Interactions with Other Medicines' for additional information.

There have been case reports of drug abuse with promethazine. The risk of abuse is greater in patients with a history of drug abuse.

As with neuroleptics, Neuroleptic Malignant Syndrome (NMS) characterized by hyperthermia, extrapyramidal disorders, muscle rigidity, altered mental status, autonomic nervous instability and elevated CPK, may occur. As this syndrome is potentially fatal, promethazine must be discontinued immediately and intensive clinical monitoring and symptomatic treatment should be initiated.

Hypertensive crisis: Promethazine should be used with caution, if at all, in these patients.

Solar dermatitis has been reported following oral doses of Phenergan in patients with eczema or a tendency to rheumatism.

Due to the risk of photosensitivity, exposure to the sun or ultraviolet light should be avoided during or shortly after treatment.

Epilepsy: Epileptic patients may experience increased severity of convulsions.

Use in hepatic impairment

Promethazine should be avoided in patients with liver dysfunction.

Use in renal impairment

Promethazine should be avoided in patients with renal dysfunction.

Paediatric Use

Children may experience paradoxical excitation with promethazine.

The use of promethazine should be avoided in children and adolescents with signs and symptoms suggestive of Reye's Syndrome.

This product must not be used in children under 2 years of age, due to the potential for fatal respiratory depression (see Section 4.3 Contraindications).

Caution should be exercised when administering promethazine to children as there is potential for central and obstructive apnoea and reduced arousal. Excessive dosages of antihistamines in children may cause hallucinations, convulsions and sudden death.

Use in the Elderly

The elderly may experience paradoxical excitation with promethazine. The elderly are more likely to have CNS depressive side effects, including confusion and are more susceptible to the antimuscarinic effects of antihistamines, including hypotension (see Section 4.3 Contraindications).

4.5 INTERACTION WITH OTHER MEDICINES AND OTHER FORMS OF INTERACTION

Promethazine will enhance the action of any anticholinergic agent, tricyclic antidepressant, sedative or hypnotic. Promethazine may cause drowsiness and will enhance the sedative effects of CNS depressants (including alcohol, barbiturates, hypnotics, opioid analgesics, anxiolytic sedatives and neuroleptics), and have additive antimuscarinic actions with other antimuscarinic drugs (atropine, tricyclic antidepressants). Interactions between promethazine and monoamine oxidase inhibitors and tricyclic antidepressants (TCAs) may prolong and intensify the anticholinergic and CNS depressive effects. Alcohol should be avoided during treatment. Combination with alcohol enhances the sedative effects of H₁ antihistamines. Promethazine may interfere with immunological urine pregnancy tests to produce false-positive or false-negative results.

Drugs known to cause QT Prolongation: Special caution is required when promethazine is used concurrently with drugs known to cause QT prolongation (such as antiarrhythmics, antimicrobials, antidepressants, antipsychotics) to avoid exacerbation of risk of QT prolongation.

Promethazine should be discontinued at least 3 days before the start of skin tests as it may inhibit the cutaneous histamine response thus producing false-negative results.

Cytochrome P450 2D6 Metabolism: Some phenothiazines are moderate inhibitors of CYP2D6. There is a possible pharmacokinetic interaction between inhibitors of CYP2D6, such as phenothiazines, and CYP2D6 substrates. Co administration of promethazine with amitriptyline/ amitriptylinoxide, a CYP2D6 substrate, may lead to an increase in the plasma levels of amitriptyline/ amitriptylinoxide. Monitor patients for dose-dependent adverse reactions associated with amitriptyline/amitriptylinoxide.

Promethazine is contraindicated in patients taking monoamine oxidase inhibitors within the previous 14 days. Monoamine oxidase inhibitors should be avoided while using promethazine.

Seizure threshold-lowering drugs: Concomitant use of seizure-inducing drugs or seizure threshold-lowering drugs should be carefully considered due to the severity of the risk for the patient.

Gastrointestinal agents that are not absorbed: Reduced gastrointestinal absorption of phenothiazines may occur. Such gastrointestinal agents should not be taken at the same time as phenothiazines (at least 2 hours apart, if possible).

Drugs with anticholinergic properties: Concomitant use of promethazine with drugs with anticholinergic properties enhances the anticholinergic effect.

4.6 FERTILITY, PREGNANCY AND LACTATION

Pregnancy (Category C)

The use of promethazine is not recommended during pregnancy and in women of childbearing potential not using contraception, unless the potential benefits outweigh the potential risks.

Promethazine, owing to its pharmacological effects, has caused or may be suspected of causing, harmful effects on the human foetus or neonate without causing malformations. These effects may be reversible. When promethazine has been given in high doses during late pregnancy, promethazine has caused prolonged neurological disturbances in the infant.

Breast-feeding

Promethazine is excreted in breast milk. There are risks of neonatal irritability and excitement. Therefore it should not be used for breastfeeding women.

Fertility

No data available.

4.7 EFFECTS ON ABILITY TO DRIVE AND USE MACHINES

Promethazine considerably affect the ability to drive a vehicle and operate machines. Promethazine may cause drowsiness, dizziness and blurred vision.

Ambulant patients receiving Phenergan for the first time should not be in control of vehicles or machinery for the first few days until it is established that they are not hypersensitive to the central nervous effects of the medicine and do not suffer from disorientation, confusion or dizziness.

4.8 UNDESIRABLE EFFECTS

CNS Effects

CNS depressive effects of promethazine include sedation and impaired performance (impaired driving performance, poor work performance, incoordination, reduced motor skills, and impaired information processing). Performance may be impaired in the absence of sedation and may persist the morning after a night-time dose.

The CNS stimulatory effects of promethazine may include anxiety, hallucinations, appetite stimulation, muscle dyskinesias and activation of epileptogenic foci.

High doses of promethazine may cause nervousness, tremor, insomnia, agitation, and irritability.

Anticholinergic Effects

Side effects of promethazine associated with cholinergic blockage include dryness of the eyes, mouth and nose, blurred vision, urinary hesitancy and retention, constipation and tachycardia.

More common reactions

Gastrointestinal disorders: Dry mouth, epigastric distress, loss of appetite, nausea,

vomiting, constipation, diarrhoea

Nervous system disorders: Sedation, restlessness, dizziness, lassitude,

incoordination, fatigue, somnolence

Eye disorders: Blurred vision

Less common reactions

Cardiovascular: Tachycardia, bradycardia, faintness

Skin and subcutaneous tissue

disorders:

Contact dermatitis (topical), urticaria, angioneurotic

oedema, pruritus

Haematological: Leucopenia, agranulocytosis, aplastic anaemia,

thrombocytopenic purpura.

Nervous system disorders: Tinnitus, euphoria, nervousness, insomnia, convulsive

seizures, oculogyric crises, excitation, catatonic-like

states, hysteria, tardive dyskinesia,

Respiratory: Marked irregular respiration

Reactions with frequency unknown

Skin and subcutaneous tissue

disorders:

Rash, photosensitivity reaction

Hepatobiliary disorders: Jaundice

Renal and urinary disorders: Urinary retention

Nervous system disorders: Neuroleptic malignant syndrome, headaches, tic-like

movements of the head and face, extrapyramidal

effects including muscle spasm

Dystonia, including oculogyric crisis, usually

transitory are commoner in children and young adults, and usually occur within the first 4 days of treatment

or after dosage increases.

Anticholinergic effects such as ileus paralytic, risk of

> urinary retention, accommodation disorder The elderly are particularly susceptible to the anticholinergic effects and confusion due to

promethazine.

Allergic reactions, including anaphylactic reaction, *Immune system disorders:*

urticaria, angioedema

Metabolism and nutrition

disorders:

Anorexia, decreased appetite

Blood and lymphatic system

disorders:

Blood dyscrasias including haemolytic anaemia,

eosinophilia, thrombocytopenia

Psychiatric disorders: Agitation, confusional state

> Infants, newborns and premature are susceptible to the anticholinergic effects of promethazine, while other children may display paradoxical hyperexcitability,

restlessness, nightmares, disorientation

Cardiac disorders: Palpitations, arrhythmias, QT Prolongation, torsade de

pointes

Vascular disorders: Hypotension

General disorders and

administration site conditions:

Tiredness

Respiratory, thoracic and

mediastinal disorders

Respiratory depression, nasal congestion

Gastrointestinal disorders Epigastric discomfort

Severe or life-threatening reactions

Agranulocytosis, anaphylaxis.

The preservatives used in Phenergan Elixir have been reported to cause hypersensitivity reactions (sodium metabisulphite, sodium sulphite, or sodium benzoate).

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Healthcare professionals are asked to report any suspected adverse reactions https://nzphvc.otago.ac.nz/reporting/.

4.9 OVERDOSE

Symptoms of severe overdosage are variable. They are characterized in children by various combinations of excitation, ataxia, incoordination, athetosis and hallucinations, while adults may become drowsy and lapse into coma. Convulsions may occur in both adults and children: coma or excitement may precede their occurrence. Tachycardia may develop. Cardiorespiratory depression is uncommon. The chief sign of acute poisoning from ingestion of an overdose of Phenergan is unconsciousness, which is commonly delayed. In addition, convulsions, hallucinations, delirium, acute anxiety, psychotic reactions, extreme hyperaesthesia and hyperalgesia with extensor plantar responses may occur. Anticholinergic action may cause tachycardia, flushed skin, dry mouth and sometimes mydriasis and urinary retention.

In adults, CNS depression is more common, with drowsiness, coma, convulsions, progressing to respiratory failure or cardiovascular collapse.

High doses can cause ventricular arrhythmias including QT prolongation and torsade de pointes (see Section 4.8 Undesirable effects).

In infants and children, CNS stimulation predominates over CNS depression causing ataxia, excitement, tremors, psychoses, hallucinations, convulsions and possibly hyperpyrexia, which may be followed by deepening coma and cardiorespiratory collapse.

Treatment

Similar to that of other phenothiazines. Symptomatic supportive therapy is indicated and maintenance of adequate ventilation should be instituted if necessary.

In the event of overdose of promethazine, take all appropriate measures immediately.

For advice on the management of overdose please contact the National Poisons Centre on 0800 POISON (0800 764766).

5 PHARMACOLOGICAL PROPERTIES

5.1 PHARMACODYNAMIC PROPERTIES

Pharmacotherapeutic group: Antihistamines for systemic use; ATC code: R06AD02

Promethazine hydrochloride is a white or faintly yellow, practically odourless, crystalline powder. It is very soluble in water, freely soluble in alcohol and in chloroform, and practically insoluble in ether.

Chemical Structure

Promethazine hydrochloride has the following structural formula:

CAS Number

58-33-3

Mechanism of Action

Promethazine, a phenothiazine derivative, is a long acting antihistamine with mild atropine-like anticholinergic effects and some antiserotonin effects, and because of its marked effect on the central nervous system (CNS), it acts as an antiemetic, hypnotic, tranquilliser, and a potentiator of anaesthetics, hypnotics, sedatives and analgesics.

5.2 PHARMACOKINETIC PROPERTIES

Absorption

Promethazine is well absorbed after oral administration. Peak plasma concentrations are reached 2 to 3 hours after administration by this route, although there is low systemic bioavailability after oral administration, due to high first-pass metabolism in the liver.

Distribution

Promethazine crosses the blood-brain barrier and the placenta, and is distributed into breast milk. It is highly bound to plasma proteins (76-93%).

Elimination

Promethazine undergoes extensive metabolism, predominantly to promethazine sulfoxide, and also to N-desmethylpromethazine. It is excreted slowly via the urine and bile, mainly as metabolites. Elimination half-lives of 5 to 14 hours have been reported.

Pharmacokinetic/pharmacodynamic relationship

The antihistamine action has been reported to be between 4 and 12 hours.

5.3 PRECLINICAL SAFETY DATA

No data available

6 PHARMACEUTICAL PARTICULARS

6.1 LIST OF EXCIPIENTS

Elixir

Phenergan Elixir contains maltitol solution, acesulfame potassium, sodium benzoate, sodium citrate dihydrate, citric acid monohydrate, sodium sulfite, sodium metabisulfite, ascorbic acid, caramel, purified water and orange juice flavour 510844E.

Tablets

Phenergan Tablets contain lactose, maize starch, povidone, magnesium stearate, hypromellose, macrogol 200 and opaspray blue M-1-4210A.

6.2 INCOMPATIBILITIES

Not applicable.

6.3 SHELF LIFE

Elixir

18 months from date of manufacture

3 months opened

Tablets

60 months from date of manufacture

6.4 SPECIAL PRECAUTIONS FOR STORAGE

Elixir

Store below 25°C. Protect from light.

Tablets

Store below 30°C.

6.5 NATURE AND CONTENTS OF CONTAINER

Phenergan elixir is available in 100 mL bottles.

Phenergan 10 mg and 25 mg tablets are available in packs of 25 and 50.

6.6 SPECIAL PRECAUTIONS FOR DISPOSAL

No special requirements for disposal.

7 MEDICINE SCHEDULE

Pharmacist Only Medicine

8 SPONSOR

Pharmacy Retailing (NZ) Limited trading as Healthcare Logistics 58 Richard Pearse Drive Airport Oaks AUCKLAND

Phone: (09) 918 5100

9 DATE OF FIRST APPROVAL

Tablets: 31 December 1969

Elixir: 5 May 1998

10 DATE OF REVISION OF THE TEXT

28 July 2022

Summary table of changes

Section changed	Summary of new information
4.3	Addition of hypersensitivity information
4.4	Addition of information relating to hypersensitivity reactions, patient groups to be avoided, sedation, blood count, liver and renal dysfunction
4.5	Addition of interactions with skin tests, CYP2D6 substrates, seizure drugs, non-absorbed gastrointestinal agents and drugs with anticholinergic properties

Section changed	Summary of new information
4.6	Upgrade from should only be used if, to not recommended
4.7	Addition of drowsiness, dizziness and blurred vision
4.8	Addition or upgrading of undesirable effects
4.9	Addition of symptoms of overdose