PROFESSIONAL INFORMATION

SCHEDULING STATUS:

S2

1. NAME OF THE MEDICINE

CORENZA COLD AND FLU SYRUP

2. QUALITATIVE AND QUANTITATIVE COMPOSITION:

Each 5 ml contains:	
Pseudoephedrine hydrochloride	15 mg
Chlorpheniramine maleate	2 mg
Paracetamol	120 mg

Preservative: Methylparaben 0,12 % $^{m}/_{v}$

Excipients with known effect:

Contains sweetener: 70 % Sorbitol solution 400 mg and Saccharin sodium 5,5 mg

Alcohol free

Tartrazine free

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Syrup

A clear, dark red syrup with an odour and taste of raspberry.

4. CLINICAL PARTICULARS:

4.1 Therapeutic Indications

CORENZA COLD AND FLU SYRUP is indicated for the symptomatic treatment and relief of colds and influenza.

4.2 Posology and method of administration

Posology:

Adults: Three to four medicine measures (15 ml to 20 ml) three times daily.

Children 6 to 12 years: One to two medicine measures (5 ml to 10 ml) three times daily.

Children 2 to 5 years: Half to one medicine measure (2,5 ml to 5 ml) three times daily.

Shake Well Before Use.

DO NOT EXCEED THE RECOMMENDED DOSE.

Not recommended for children under 2 years of age.

Do not use continuously for more than seven days. If symptoms persist or get worse, or if new symptoms occur, irrespective of therapy used, patients should stop use and consult your doctor.

Special Populations:

Hepatic/Renal Impairment: Caution should be exercised when administering CORENZA COLD AND FLU SYRUP to patients with severe hepatic/renal impairment.

Method of administration:

For oral use only.

4.3 Contraindications

- Hypersensitivity to any of the active ingredients, pseudoephedrine hydrochloride, chlorpheniramine maleate, paracetamol, or any of the excipients listed under section 6.1
- In patients with hereditary fructose intolerance (HFI) due to the sorbitol content.
- Hyperthyroidism or pheochromocytoma.
- Pregnant or is breastfeeding (see section 4.6)
- Cardiovascular disease such as ischaemic heart disease and coronary insufficiency, dysrhythmias, or tachycardia

- Diabetes mellitus or closed angle glaucoma, urinary retention, and prostatic hypertrophy.
- If the patient is under 2 years of age.
- During asthma attacks.
- Severe liver function impairment.
- In patients being treated with monoamine oxidase inhibitors (MAOIs) or within 14 days of stopping such treatment.
- In patients receiving halothane or other halogenated anaesthetics due to the pseudoephedrine hydrochloride content.
- Severe hypertension or uncontrolled hypertension
- Severe acute or chronic kidney disease/ renal failure
- Do not take concurrently with any other paracetamol or sympathomimetic-containing medicines.

4.4 Special warnings and precautions for use

CORENZA COLD AND FLU SYRUP contains paracetamol which may be fatal in overdose. In the event of overdosage or suspected overdose and notwithstanding the fact that the person may be asymptomatic, the nearest doctor, hospital, or Poison Centre must be contacted immediately.

- Dosages in excess of those recommended may cause severe liver damage.
- Consult your doctor if no relief is obtained with the recommended dosage.
- Patients with emphysema, chronic bronchitis, bronchial asthma, or where cough is accompanied by excessive secretions should only take CORENZA COLD AND FLU SYRUP after consultation with a doctor.
- Pseudoephedrine hydrochloride should be used with caution in patients receiving tricyclic antidepressants.
- Do not use with any other medicines containing paracetamol.
- Patients suffering from mild liver and kidney disease should take CORENZA COLD AND FLU SYRUP under medical supervision.
- Caution is advised in patients with epilepsy.

- CORENZA COLD AND FLU SYRUP should be discontinued, and medical advice sought if sudden abdominal pain, rectal bleeding, or other symptoms of ischaemic colitis develops.
- Caution is advised in patients with pyloroduodenal obstruction.
- Severe cutaneous adverse reactions (SCARs) such as toxic epidermal necrolysis (TEN), Stevens-Johnson syndrome (SJS), acute generalised exanthematous pustulosis (AGEP), eosinophilia and systemic symptoms (DRESS)/Drug-induced hypersensitivity syndrome (DIHS) and fixed drug eruptions (FDE) have been reported in patients treated with paracetamol-containing medicines. If a patient develops SCARs, treatment with CORENZA COLD AND FLU SYRUP must immediately be discontinued and appropriate treatment instituted (see Section 4.8).
- Posterior reversible encephalopathy syndrome (PRES) and reversible cerebral vasoconstriction syndrome (RCVS). Cases of PRES and RCVS have been reported with the use of pseudoephedrine-containing products (see section 4.8). The risk is increased in patients with severe or uncontrolled hypertension, or with severe acute or chronic kidney disease/renal failure (see section 4.3). Pseudoephedrine should be discontinued and immediate medical assistance sought if the following symptoms occur: sudden severe headache or thunderclap headache, nausea, vomiting, confusion, seizures and/or visual disturbances. Most reported cases of PRES and RCVS resolved following discontinuation and appropriate treatment.
- Alcohol may increase the hepatotoxicity of paracetamol and may contribute to acute pancreatitis. Chronic alcohol users should ask their doctor whether they should take paracetamol or other pain relievers or fever reducers.
- Caution is advised if paracetamol, as contained in CORENZA COLD AND FLU SYRUP is administered concomitantly with flucloxacillin due to increased risk of high anion gap metabolic acidosis (HAGMA), particularly in patients with severe renal impairment, sepsis, malnutrition and other sources of glutathione deficiency (e.g. chronic alcoholism), as well as those using maximum daily doses of paracetamol. Close monitoring, including measurement of urinary 5-oxoproline, is recommended (see section 4.5).
- Long term use of antihistamines may decrease salivary flow and contribute to development of caries, periodontal disease, oral candidiasis and discomfort.
- This medicine contains 400 mg 70 % sorbitol solution in each 5 ml.

- If your child is less than 5 years old, talk to your doctor or pharmacist before giving them this medicine, in particular if they use other medicines that contain propylene glycol or alcohol.
- If you are pregnant or breast-feeding, do not take this medicine unless recommended by your doctor. Your doctor may carry out extra checks while you are taking this medicine.
- If you suffer from a liver or kidney disease, do not take this medicine unless recommended by your doctor. Your doctor may carry out extra checks while you are taking this medicine.
- May cause allergic reactions (possibly delayed).

4.5 Interaction with other medicines and other forms of interaction

- The sedative effect of central nervous system depressants including *alcohol*, b*arbiturates, hypnotics, narcotic analgesics, sedatives*, and *tranquillisers* may be enhanced.
- CORENZA COLD AND FLU SYRUP may mask the warning signs of damage caused by *ototoxic medicines* such as *aminoglycoside antibiotics*.
- The effects of anticholinergic medicines such as *atropine* and *tricyclic antidepressants* may also be enhanced.
- Pseudoephedrine hydrochloride should be avoided or used with caution in patients receiving *tricyclic antidepressants.*
- *Central nervous system (CNS) stimulants* used concurrently with pseudoephedrine may result in additive CNS stimulation to excessive levels, which may cause unwanted effects, such as nervousness, irritability, insomnia, or possibly convulsions, or cardiac dysrhythmias.
- The risk of hepatotoxicity with toxic levels of paracetamol may be increased in *alcoholics*, or in patients regularly taking other *hepatotoxic medicines or hepatic enzyme inducers.*
- Prolonged concurrent use of paracetamol with other *NSAIDs* may also increase the risk of adverse renal effects.
- Paracetamol may competitively inhibit the hepatic glucuronidation and decrease the clearance of *zidovudine*; zidovudine may also inhibit the hepatic glucuronidation of paracetamol.
- *Aluminium-hydroxide containing preparations* may increase the absorption rate of pseudoephedrine hydrochloride.

- Paracetamol may possibly potentiate the anticoagulant effects of *warfarin* and other *coumarin derivatives* affecting the International Normalised Ratio (INR) of patients on chronic warfarin therapy.
- Concurrent use with CORENZA COLD AND FLU SYRUP may also potentiate the cardiovascular effects of *sympathomimetic amines*. Pseudoephedrine may reverse the action of cardiovascular medicines and therefore special care is advisable in patients receiving such therapy. *Antihypertensive effects* may be reduced when these medicines are used concurrently with sympathomimetic amines. Concurrent use of *beta-adrenergic blocking agents* with sympathomimetic amines may result in significant hypertension and excessive bradycardia with possible heart block.
- *Doxapram* used concurrently with CORENZA COLD AND FLU SYRUP may increase the pressor effects of either doxapram or sympathomimetic amines.
- *Moclobemide:* Risk of hypertensive crisis.
- An increased risk of arrhythmias may also occur if pseudoephedrine is given to patients receiving *cardiac glycosides, quinidine* or *tricyclic antidepressants.*
- Chronic ingestion of *anticonvulsants* and *oral steroid contraceptives* induces liver enzymes and may prevent attainment of therapeutic paracetamol levels by increasing first pass metabolism and clearance.
- Caution should be taken when paracetamol is used concomitantly with *flucloxacillin* as concurrent intake has been associated with high anion gap metabolic acidosis, especially in patients with risks factors (see section 4.4).
- *Metoclopramide* and *domperidone* may accelerate the absorption of paracetamol.
- *Probenecid* may decrease the clearance and increase the plasma half-life of paracetamol.
- *Colestyramine reduces the absorption of paracetamol if given within one hour of CORENZA COLD AND FLU SYRUP.*
- Prolonged concurrent use of CORENZA COLD AND FLU SYRUP with *salicylates* increases the risk of adverse renal effects.

Interactions with laboratory tests

- Positive skin tests may be suppressed by antihistamines; therefore, treatment with antihistamines should be stopped several days before the test.

4.6 Fertility, Pregnancy and lactation

Pregnancy

Safety in pregnancy has not been established.

A large amount of data on pregnant women indicates neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results. If clinically needed, paracetamol can be used during pregnancy however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

Breastfeeding

Safety in breastfeeding has not been established.

Pseudoephedrine is excreted in breast milk in small amounts but the effect of this on breastfed infants is not known.

Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breastfeeding. May inhibit lactation due to anticholinergic effects. Small amounts of antihistamines entering breast milk may cause drowsiness or excitement and / or irritability in infants.

Fertility

No studies have been conducted in animals to determine whether pseudoephedrine has the potential to impair fertility. There is no information on the effect of CORENZA COLD AND FLU SYRUP on fertility.

4.7 Effects on ability to drive and use of machines

CORENZA COLD AND FLU SYRUP may cause drowsiness and impaired concentration which may be aggravated by the simultaneous intake of alcohol or other central nervous system depressant agents. Patients should be warned not to drive a motor vehicle, operate dangerous machinery, or climb dangerous heights, as impaired decision making could lead to accidents.

4.8 Undesirable effects

a. Summary of the safety profile

The adverse reactions listed below are classified according to their frequency and system organ class. The frequency categories are defined by the following convention: very common (≥ 1/10); common (≥ 1/100 to < 1/10); uncommon (≥ 1/1,000 to < 1/100); rare (≥ 1/10,000 to < 1/1,000); very rare (< 1/10,000); not known (cannot be estimated from the available data).

b. Tabulated list of adverse reactions

System Organ Class	*Frequency*	*Undesirable effect*
Blood and lymphatic system disorders	Less frequent	Agranulocytosis, thrombocytopaenia, neutropaenia, pancytopaenia, leukopaenia, anaemia.
	Unknown	Blood dyscriasis
Immune system disorders	Less frequent	Skin rashes and other hypersensitivity reactions including laryngeal oedema, angioedema, and anaphylaxis. The rash is usually erythematous or urticarial but sometimes more serious and may be accompanied by drug fever and mucosal lesions.
	Unknown	Drug-induced hypersensitivity syndrome (DIHS), hypersensitivity reactions characterized by urticaria, dyspnoea, and hypotension (see Section 4.4).
Metabolism and nutrition disorders	Less frequent	Decreased appetite, hypokalaemia, altered metabolism
	Unknown	anorexia
Psychiatric disorders	Frequent	Nervousness, restlessness, hallucinations (particularly in children), fear, anxiety, irritability, psychotic states, euphoria, nightmares, sedation, varying from slight drowsiness to deep sleep, lassitude, incoordination.
	Unknown	Depression
Nervous system disorders	Frequent	Insomnia, convulsions, tremor, dizziness, somnolence, disturbance in attention, abnormal coordination

	Less Frequent	Headache, trembling, ~~and~~ cerebral haemorrhage, extrapyramidal effects.
	Unknown	Psychomotor impairment, Posterior reversible encephalopathy syndrome (PRES) (see section 4.4), Reversible cerebral vasoconstriction syndrome (RCVS) (see section 4.4)
Eye disorders	Less Frequent	Blurred vision, diplopia
Ear and labyrinth disorders	Less frequent	Tinnitus
Cardiac disorders	Frequent	Irregular or slow heartbeat, shortness of breath, or troubled breathing.
	Less frequent	Tachycardia, dizziness, or light headedness, pulmonary oedema, cardiac dysrhythmias, anginal pain, palpitations, cardiac arrest, extrasystoles
Vascular disorders	Less frequent	Impaired circulation to the extremities, unusual paleness, hypertension, reflex bradycardia, hypotension, and fainting, paraesthesia
Respiratory, thoracic and mediastinal disorders	Less frequent	Dyspnoea, thickened respiratory tract secretions, tightness of the chest.
	Unknown	Cough, wheezing, nasal stuffiness
Gastrointestinal disorders	Frequent	Dry mouth, nausea
	Less frequent	Mucosal lesions, pancreatitis, vomiting, hypersalivation, constipation, diarrhoea, gastric reflux, epigastric pain.
Skin and subcutaneous tissue disorders	Less frequent	Increased sweating
	Unknown	Fixed drug eruptions (FDE) (see Section 4.4), skin rashes, exfoliative dermatitis
Musculoskeletal and connective tissue disorders	Unknown	Muscle twitching, Muscle Weakness
Hepatobiliary disorders	Less frequent	Cholestasis, hepatitis, or other hepatic function abnormalities.
Renal and urinary disorders	Less frequent	Renal colic, renal failure, sterile pyuria, difficult or painful urination, urinary retention, papillary necrosis
Reproductive system and breast disorders	Less frequent	Early menses

General disorders and administration site conditions	Frequent	Tolerance with dependence, asthenia
	Less frequent	Fever, oedema, hair loss.
Investigations	Less frequent	Changes in blood sugar levels

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. Health care providers are requested to report any suspected adverse drug reactions to SAHPRA via the Med Safety APP (Medsafety X SAHPRA) and eReporting platform (who- umc.org) found on SAHPRA website.

You may also report to Adcock Ingram Limited using the following e-mail address: Adcock.AEReports@adcock.com

4.9 Overdose

Overdosage symptoms – (see section 4.8)

Paracetamol: Prompt treatment is essential. In the event of an overdosage, consult a doctor immediately, or take the person directly to a hospital. A delay in starting treatment may mean that the antidote is given too late to be effective. Evidence of liver damage is often delayed until after the time for effective treatment has lapsed.

Susceptibility to paracetamol toxicity is increased in patients who have taken repeated high doses (greater than 5 to 10 g/day) of paracetamol for several days, in chronic alcoholism, chronic liver disease, AIDS, malnutrition, and with the use of medicines that induce liver microsomal oxidation such as barbiturates, isoniazid, rifampicin, phenytoin and carbamazepine.

Symptoms of paracetamol overdosage in the first 24 hours include pallor, nausea, vomiting, anorexia, and possibly abdominal pain. Mild symptoms during the first two days of acute poisoning, do not reflect the potential seriousness of the overdosage. Liver damage may become apparent 12 to 48 hours, or later after ingestion, initially by elevation of the serum transaminase and lactic dehydrogenase activity, increased serum bilirubin concentration and prolongation of the prothrombin time/International Normalised Ratio (INR). Liver damage may lead to encephalopathy, coma, and death.

Acute renal failure with acute tubular necrosis may develop even in the absence of severe liver damage. Abnormalities of glucose metabolism and metabolic acidosis may occur. Cardiac arrhythmias have been reported.

Treatment of paracetamol overdosage:

N-acetylcysteine should be administered to all cases of suspected overdose as soon as possible, preferably within eight hours of overdosage, although treatment up to 36 hours after ingestion may still be of benefit, especially if more than 150 mg/kg of paracetamol was taken. An initial dose of 150 mg/kg N-acetylcysteine in 200 ml dextrose injection given **intravenously** over 15 minutes, followed by an infusion of 50 mg/kg in 500 ml dextrose injection over the next four hours, and then 100 mg/kg in 1 000 ml dextrose injection over the next 16 hours. **The volume of intravenous fluid should be modified for children.**

Although the oral formulation is not the treatment of choice, 140 mg/kg dissolved in water may be administered initially, followed by 70 mg/kg every four hours for 17 doses. A plasma paracetamol level should be determined four hours after ingestion in all cases of suspected overdosage. Levels done before four hours may be misleading. Patients at risk of liver damage, and hence requiring continued treatment with N-acetylcysteine, can be identified according to their 4-hour plasma paracetamol level. The plasma paracetamol level can be plotted against time since ingestion in the nomogram below.

The nomogram should be used only in relation to a single acute ingestion. A linear plot of plasma paracetamol concentration against hours after ingestion.

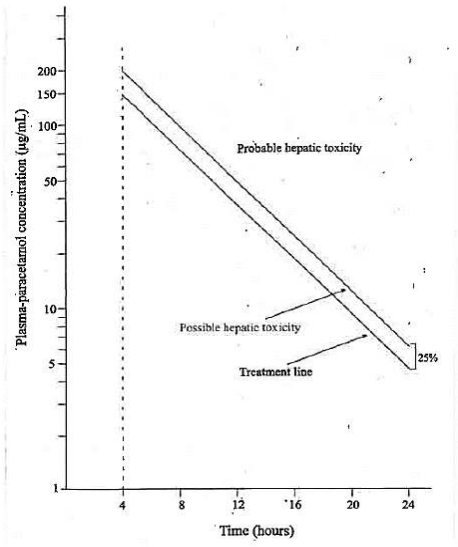

Figure 1: *A semi-logarithmic plot of plasma-paracetamol concentration against hours after ingestion*

Those whose plasma paracetamol levels are above the “normal treatment line”, should continue N-acetylcysteine treatment with 100 mg/kg IV over 16 hours repeatedly until recovery. Patients with increased susceptibility to liver damage as identified above, should continue treatment if concentrations are above the “high risk treatment line”. Prothrombin index correlates best with survival.

Monitor all patients with significant ingestion for at least 96 hours.

Pseudoephedrine:

Symptoms usually appear within 4 to 8 hours of the overdose.

Convulsions and hyperpyrexia in children due to cerebral stimulation. In adults, symptoms of stimulation include insomnia, nervousness, tachycardia, tremors, muscle twitching, and convulsions. Severe cardiovascular repercussions include hypertension, angina, dysrhythmias, myocardial infarction, and cerebral haemorrhage.

To decrease absorption: Because pseudoephedrine is rapidly absorbed from the gut, emetics should be instituted within 4 hours of overdosage in order to be effective. Charcoal is useful only if administered within 1 hour.

To enhance elimination: Forced diuresis will increase elimination of pseudoephedrine provided renal function is adequate; however, diuresis is not recommended for severe overdosage.

Specific treatment: For delirium or convulsions, intravenous diazepam may be administered. The cardiac state should be monitored and serum electrolytes measured. If there are signs of cardiac toxicity, intravenous propranolol may be indicated. Hypokalaemia may be treated, if necessary, with a slow infusion of a dilute potassium chloride solution; serum potassium concentration should be monitored during and for several hours after administration of potassium chloride.

Consult a doctor or take the patient to the nearest hospital immediately.

Specialised treatment is essential as soon as possible.

The latest information regarding the treatment of overdosage can be obtained from the nearest poison centre.

Chlorpheniramine maleate:

Antimuscarinic, extrapyramidal, gastrointestinal, and central nervous system effects may occur. In children and infants, central nervous system stimulation predominates over depression. This may cause: ataxia, tremors, excitement, hallucinations, convulsions, hyperpyrexia, flushed face, dilated pupils, and dry mouth. Deepening coma and cardiorespiratory collapse may occur.

In adults, central nervous system depression is more common, which may result in hypotension, drowsiness, coma, and convulsions which may progress to respiratory failure or cardiovascular collapse. The convulsions may be controlled with diazepam, otherwise treatment is symptomatic and supportive. In the event of overdosage consult a doctor or take the patient to the nearest hospital immediately. Specialized treatment is essential as soon as possible. The latest information regarding the treatment of overdosage can be obtained from the nearest poison information centre. Treatment is supportive and symptomatic.

5. PHARMACOLOGICAL PROPERTIES

A 5.8 Medicines affecting autonomic functions. Preparations for common cold including nasal decongestants and antihistaminics.

ATCC code: R01BA52 pseudoephedrine, combinations

5.1 Pharmacodynamics properties

CORENZA COLD AND FLU SYRUP has analgesic, antipyretic, antihistaminic and sympathomimetic actions with both direct and indirect effects on adrenergic receptors. It has alpha- and beta-adrenergic activity.

Pseudoephedrine hydrochloride has direct and indirect sympathomimetic activity and is an effective decongestant in the upper respiratory tract. It is a stereoisomer of ephedrine and has a similar action but has been found to have less pressor activity and fewer central nervous system (CNS) effects.

Sympathomimetic agents are used as nasal decongestants to provide symptomatic relief. They act by causing vasoconstriction resulting in redistribution of local blood flow to reduce oedema of the nasal mucosa, thus improving ventilation, drainage, and nasal stuffiness.

Chlorpheniramine maleate competes with histamine at central and peripheral histamine-1 receptor sites, preventing the histamine-receptor interaction and subsequent mediator release. Chlorpheniramine maleate is a highly lipophilic molecule that readily crosses the blood-brain barrier.

Chlorpheniramine maleate is highly selective for histamine-1 receptors but has little effect on histamine-2 or histamine-3 receptors. Chlorpheniramine maleate also activates 5-hydroxytryptamine (serotonin) and α-adrenergic receptors and blocks cholinergic receptors.

Paracetamol is a p-aminophenol derivative that exhibits analgesic and antipyretic activity. It does not possess anti-inflammatory activity. Paracetamol is thought to produce analgesia through a central inhibition of prostaglandin synthesis.

5.2 Pharmacokinetic properties

Pseudoephedrine hydrochloride is readily absorbed from the gastrointestinal tract, and the oral bioavailability of pseudoephedrine is high. In adults, only a minor fraction of pseudoephedrine is metabolised in the liver. It is largely excreted unchanged in the urine together with small amounts of its hepatic metabolite. It has a half-life of about 5-8 hours; elimination is enhanced, and half-life reduced accordingly in acid urine. Urinary pH affects the elimination t½ and clearance of pseudoephedrine due to extensive reabsorption in the renal tubules at alkaline pH; renal reabsorption is negligible at acidic pH. Small amounts are distributed into breast milk.

Pseudoephedrine concentrations in milk are from 2 to 3-fold higher than those in plasma. This milk/plasma drug concentration profile suggests low protein binding, although no protein plasma binding data in humans are available. When pseudoephedrine is taken after a high-fat meal, the absorption rate is decreased, resulting in about an hour delay in attaining maximum concentrations.

Chlorpheniramine maleate is absorbed relatively slowly from the gastrointestinal tract, with peak plasma concentrations occurring about 2.5 to 6 hours after oral administration. Chlorpheniramine appears to undergo considerable first-pass metabolism. Bioavailability is low, values of 25 to 50% having been reported. About 70% of chlorpheniramine in the circulation is bound to plasma proteins. There is wide inter-individual variation in the pharmacokinetics of chlorpheniramine; half-life values ranging from 2 to 43 hours have been reported. Chlorpheniramine is widely distributed in the body and enters the central nervous system (CNS). Chlorpheniramine maleate is metabolised extensively. Metabolites include desmethyl chlorpheniramine and didesmethyl chlorpheniramine. Metabolism of

chlorpheniramine has been shown to be mediated by the cytochrome P450 isozyme CYP2D6. Unchanged drug and metabolites are excreted primarily in the urine; excretion is dependent on urinary pH and flow rate. Only trace amounts have been found in the faeces. A duration of action of 4 to 6 hours has been reported; this is shorter than may be predicted from pharmacokinetic parameters. More rapid and extensive absorption, faster clearance, and a shorter half-life have been reported in children compared to adults.

Paracetamol is readily absorbed from the gastrointestinal tract with peak plasma concentrations occurring about 10 to 60 minutes after oral administration. Paracetamol is distributed into most body tissues. Plasma protein binding is negligible at usual therapeutic doses but increases with increasing doses. The elimination half-life varies from about 1 to 3 hours. Paracetamol is metabolised extensively in the liver and excreted in the urine mainly as inactive glucuronide and sulphate conjugates. Less than 5% is excreted unchanged. The metabolites of paracetamol include a minor hydroxylated intermediate which has hepatotoxic activity. This intermediate metabolite is detoxified by conjugation with glutathione; however, it can accumulate following paracetamol overdosage (more than 150 mg/kg or 10 g total paracetamol ingested) and if left untreated can cause irreversible liver damage. The principal cytochrome P450 isoenzyme involved *in vivo* appears to be CYP2E1. Paracetamol is metabolised differently by premature infants, newborns, infants, and young children compared to adults, the sulphate conjugate being predominant.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

- Glycerol [E422]
- Polyvinylpyrrolidone K25 [E1201]
- Propylene Glycol [E405]
- Purified Water
- Methylparaben [E218]
- Flavour Raspberry
- Raspberry Red Colour [E30b5d]

- Saccharin Sodium [E954]
- Sorbitol [E420]
- Xanthan Gum [E415]

6.2 Incompatibilities

None known

6.3 Shelf life

24 Months

6.4 Special precautions for storage

Store in airtight containers at or below 25 °C. Protect from light.

6.5 Nature and contents of container

A clear, dark red syrup with an odour and taste of raspberry contained in:.

50 ml, 100 ml, and 200 ml packed in amber glass and bottles with white polypropylene screw-on closure with EXPE Liner.

50 ml, 100 ml, and 200 ml amber PVC bottles with white snap-on pilfer proof closure.

6.6 Special precautions for disposal

This medicine requires no special precautions for disposal.

7. HOLDER OF THE CERTIFICATE OF REGISTRATION

Adcock Ingram Limited

1 New Road,

Erand Gardens,

Midrand, 1685

Customer Care: 0860 ADCOCK/232625

8. REGISTRATION NUMBERS:

37/5.8/0552

9. DATE OF FIRST AUTHORISATION

10 September 2009

10. DATE OF REVISION OF THE TEXT

21 November 2025.

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