Summary of Product Characteristics

1 NAME OF THE MEDICINAL PRODUCT

Panadol Cold and Flu Relief Orange Effervescent TabletsParacetamol 500 mgCaffeine 65 mg

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains paracetamol 500 mg and caffeine 65 mg

Excipients:
Sodium content 427 mg per tablet. Each tablet also contains 26.38 mg of aspartame, 58.6 mg of sorbitol and sulphites.

For full list of excipient see Section 6.1.

3 PHARMACEUTICAL FORM

Effervescent tablet.

Round, flat, off-white to yellow tablets (25mm in diameter) with speckles. The tablets have a faultless surface and a break line mark on one side. The score line is not for dividing into equal doses.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

An analgesic for the relief of mild to moderate pain. The product is recommended for the relief of symptoms associated with influenza and colds such as sore throat, headache, aches and pains, drowsiness and fever.

4.2 Posology and method of administration

For oral administration.

Panadol Cold & Flu Relief Orange Tablets should be dissolved in at least half a tumbler full of water.

Adults (including the elderly) and children aged 16 years and over: 2 tablets up to four times daily. Do not exceed 8 tablets in 24 hours.

Children aged 12 – 15 years:
1 tablet up to four times daily. Do not exceed 4 tablets in 24 hours.

Not recommended for children under 12 years of age.

Minimum dosing interval: 4 hours. Do not exceed the stated dose
Should not be used with other paracetamol-containing products.
The lowest dose necessary to achieve efficacy should be used.

Renal Impairment
Patients who have been diagnosed with liver or kidney impairment must seek medical advice before taking this medication. The restrictions related to the use of paracetamol and caffeine products in patients with renal impairment are primarily a consequence of the paracetamol content of the drug.

Hepatic Impairment
Patients who have been diagnosed with liver or kidney impairment must seek medical advice before taking this medication. The restrictions related to the use of paracetamol and caffeine products in patients with hepatic impairment are primarily a consequence of the paracetamol content of the drugs.

The maximum daily dose of paracetamol should not exceed 60mg/kg/day (up to a maximum of 2g per day) in the following situations, unless directed by a physician:
- Weight less than 50kg
- Chronic alcoholism
- Dehydration
- Chronic malnutrition

4.3 Contraindications

Hypersensitivity to paracetamol, caffeine or any of the other excipients.

4.4 Special warnings and precautions for use

Contains paracetamol. Do not use with any other paracetamol containing products. The concomitant use with other products containing paracetamol may lead to an overdose. Paracetamol overdose may cause liver failure which may require liver transplant or lead to death.

Cases of paracetamol induced hepatotoxicity, including fatal cases, have been reported in patients taking paracetamol at doses within the therapeutic range. These cases were reported in patients with one or more risk factors for hepatotoxicity including low body weight (<50 Kg), renal and hepatic impairment, chronic alcoholism, concomitant intake of hepatotoxic drugs, sepsis and in acute and chronic malnutrition (low reserves of hepatic glutathione). Paracetamol should be administered with caution to patients with these risk factors.

Caution is also advised in patient on concomitant treatment with drugs that induce hepatic enzymes and in conditions which may predispose to glutathione deficiency (see sections 4.2 and 4.9).

Cases of high anion gap metabolic acidosis (HAGMA) due to pyroglutamic acidosis have been reported in patients with severe illness such as severe renal impairment and sepsis, or in patients with malnutrition or other sources of glutathione deficiency (e.g. chronic alcoholism) who were treated with paracetamol at therapeutic dose for a prolonged period or a combination of paracetamol and flucloxacillin. If HAGMA due to pyroglutamic acidosis is suspected, prompt discontinuation of paracetamol and close monitoring is recommended. The measurement of urinary 5-oxoproline may be useful to identify pyroglutamic acidosis as underlying cause of HAGMA in patients with multiple risk factors.

Doses of paracetamol should be reviewed at clinically appropriate intervals and patients should be monitored for emergence of new risk factors for hepatoxicity which may warrant dosage adjustment.

Patients who have been diagnosed with liver or kidney impairment must seek medical advice before taking this medication. Underlying liver disease increases the risk of paracetamol related liver damage.

Excessive intake of caffeine (e.g. coffee, tea and some canned drinks) should be avoided while taking this product.
Prolonged use except under medical supervision may be harmful. In general, medicinal products containing paracetamol should be taken for only a few days without the advice of a doctor or dentist and not at high doses.

Do not exceed the stated dose.

Take only when necessary.

If high fever or signs of secondary infection occur or if symptoms persist for longer than 3 days, consult a doctor.

Each tablet contains 427mg of sodium. This is equivalent to 21% of the WHO recommended maximum daily intake for sodium. The maximum daily dose of this product is 171% of the WHO recommended maximum daily intake for sodium. This medicine is considered high in sodium. This should be taken into consideration by patients on a controlled sodium diet.

Contains a source of phenylalanine. May be harmful for people with phenylketomuia

Each tablet contains sorbitol powder (E 420) at 50 mg per tablet. Patients with rare hereditary problems of fructose intolerance should not take this medicine Keep out of sight and reach of children.
Contains sulphites-may rarely cause severe hypersensitivity reactions and bronchospasm.

4.5 Interaction with other medicinal products and other forms of interaction

Paracetamol
Paracetamol may increase the elimination half-life of chloramphenicol. The absorption of paracetamol may be increased by metoclopramide and decreased by cholestyrarnine. Oral contraceptives may increase the rate of clearance of paracetamol.

The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular daily use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

Caution should be taken when paracetamol is used concomitantly with flucloxacillin as concurrent intake has been associated with high anion gap metabolic acidosis due to pyroglutamic acidosis, especially in patients with risks factors (see section 4.4)

Caffeine
Caffeine can increase the elimination of lithium from the body. Concomitant use is therefore not recommended.

4.6 Fertility, pregnancy and lactation

Pregnancy
Paracetamol
A large amount of data on pregnant women indicate neither malformative, nor feto/neonatal toxicity. Epidemiological studies on neurodevelopment in children exposed to paracetamol in utero show inconclusive results.

Caffeine
Paracetamol-caffeine is not recommended for use during pregnancy due to the possible increased risk of spontaneous abortion associated with caffeine consumption

Lactation
Paracetamol and caffeine are excreted in breast milk.

Not recommended for use during breastfeeding.

4.7 Effects on ability to drive and use machines

None

4.8 Undesirable effects

Events reported from extensive post-marketing experience at therapeutic/labelled dose and considered attributable are tabulated below by System Organ Class and frequency.

The following convention has been utilised for the classification of undesirable effects: very common (≥ 1/10), common (> 1/100, < 1/10), uncomnon (≥ 1/1,000, < 1/100), rare (≥ 1/10,000, < 1/1000), very rare (< 1/10,000), not known (cannot be estimated from available data). Adverse event frequencies have been estimated from spontaneous reports received through post marketing data.

Body System	**Undesirable Effect**	**Frequency**
Paracetamol		
Blood and lymphatic system disorders	Thrombocytopaenia	Very rare
Immune System disorders	Anaphylaxis Cutaneous hypersensitivity reactions including skin rashes, angiodema, and Stevens Johnson syndrome and toxic epidermal necrolysis. Very rare cases of serious skin reactions have	Very rare

	been reported.	
Metabolism andnutrition disorders	High anion gapmetabolic acidosis*	Not known
Respiratory, thoracic and mediastinal disorders	Bronchospasm in patients sensitive to aspirin and other NSAIDs	Very rare
Hepatobiliary disorders	Hepatic dysfunction	Very rare
Caffeine		
Central Nervous System	Nervousness	Not known
	Dizziness	Not known
Cardiac disorders	Palpitation	Not known
Psychiatric disorders	Insomnia, restlessness, anxiety and irritability	Not known
Gastrointestinal disorders	Gastrointestinal disturbances	Not known
When the recommended paracetamol-caffeine dosing regimen is combined with dietary caffeine intake, the resulting higher dose of caffeine may increase the potential for caffeine-related adverse effects such as insomnia, restlessness, anxiety, irritability, headaches, gastrointestinal disturbances and palpitations.		

*Cases of high anion gap metabolic acidosis due to pyroglutamic acidosis have been observed in patients with risk factors using paracetamol (see section 4.4). Pyroglutamic acidosis may occur as a consequence of low glutathione levels in these patients.

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 HPRA Pharmacovigilance website: www.hpra.ie.

4.9 Overdose

Paracetamol
Paracetamol overdose may cause liver failure. Some patients may be at increased risk of liver damage from paracetamol toxicity. Acute pancreatitis has been observed, usually with hepatic dysfunction and liver toxicity.

Risk factors include:
If the patient
a. Is on long term treatment with carbamazepine, phenobarbitone, phenytoin, prirnidone, rifarnpicin, St John's Wort or other drugs that induce liver enzymes.

Or

b. Regularly consumes ethanol in excess of recommended amounts.

Or

c. Is likely to be glutathione deplete e.g. eating disorders, cystic fibrosis, HIV infection, starvation, cachexia.

Symptoms
Symptoms of paracetamol overdose in the first 24 hour s are pallor, nausea, vomiting, anorexia and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. Abnormalities of glucose metabolism and metabolic acidosis may occur. In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema, and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

Management

Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate medical attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of overdose or the risk of organ damage. Management should be in accordance with established treatment guidelines.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentration should be measured at 4 hours or later after ingestion (earlier concentrations are unreliable). Treatment with N-acetylcysteine may be used up to 24 hours after ingestion of paracetamol, however, the maximum protective effect is obtained up to 8 hours post-ingestion. The effectiveness of the antidote declines sharply after this time. If required the patient should be given intravenous N-acetylcysteine, in line with the established dosage schedule. If vomiting is not a problem, oral methionine may be a suitable alternative for remote areas, outside hospital.

Management of patients who present with serious hepatic dysfunction beyond 24h from ingestion should be discussed with the National Poisons Information Service or a liver unit.

Caffeine
Symptoms and Signs
Overdose of caffeine may result in epigastric pain, vomiting, diuresis, tachycardia or cardiac arrhythmia, CNS stimulation (insomnia, restlessness, excitement, agitation, jitteriness, tremors and convulsions).It must be noted that for clinically significant symptoms of caffeine overdose to occur with this product, the amount ingested would be associated with serious paracetamol-related liver toxicity.

Treatment
No specific antidote is available, but supportive measures such as beta adrenceptor antagonists to reverse the cardiotoxic effects may be used.

Sodium bicarbonate
High doses of sodium bicarbonate would be expected to induce gastrointestinal symptoms including belching and nausea. In addition, high doses of sodium bicarbonate may cause hypematraemia, electrolytes should be monitored and patients managed accordingly.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

The combination of paracetamol and caffeine is a well established analgesic combination

5.2 Pharmacokinetic properties

Paracetamol is well absorbed from the gastrointestinal tract, peak plasma concentrations occurring 0.5 – 2 hours after ingestion. It is metabolised in the liver and excreted in the urine mainly as glucuronide and sulphate conjugates – less than 5% is excreted as unmodified paracetamol. The half-life is 1 to 4 hours. Binding to the plasma proteins is minimal at therapeutic concentrations.

Caffeine is absorbed readily after oral administration, maximal plasma concentrations are achieved after approximately 20-60 minutes and the plasma half-life is about 4 hours. Over 48 hours, 45% of a dose is excreted in the urine as l-methyluric acid and l-methylxanthine.

5.3 Preclinical safety data

Preclinical safety data on paracetamol in the literature have not revealed any pertinent and conclusive findings which are of relevance to the recommended dosage and use of the product and which have not been mentioned elsewhere in this Summary. Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium hydrogen carbonate
Sorbitol (E420)
Ascorbic acid
Sodium laurilsulfate
Citric acid (anhydrous)
Sodium carbonate (anhydrous)
Povidone
Dimethicone
Acesulfame Potassium (E 950)
Orange Flavour (contains sodium and sulphites)
Aspartame (E 951)
Carmine (E120)
Riboflavin sodium phosphate (E101a)

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

36 months.

6.4 Special precautions for storage

Store below 30°C. Store in the original package in order to protect from moisture

6.5 Nature and contents of container

Aluminium foil/paper laminated strips packed in to an outer cardboard carton. Packs of 12, 16 and 24 tablets. There are either 2 or 4 tablets per blister strip.

Not all pack sizes may be marketed.

6.6 Special precautions for disposal

No special requirements

7 MARKETING AUTHORISATION HOLDER

Haleon Ireland Limited
Clocherane
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X35 Y983
Co. Waterford
Ireland

8 MARKETING AUTHORISATION NUMBER

PA0678/105/002

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 13th February 2015

10 DATE OF REVISION OF THE TEXT

July 2025