SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE FINISHED PHARMACEUTICAL PRODUCT

Remedol 120 mg/5 ml oral suspension

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 5 ml of oral suspension contains 120 mg paracetamol.

Excipient(s) with known effect
This product contains 100 mg sodium methyl hydroxybenzoate E219, 10 mg sodium propyl hydroxybenzoate E217, 25 ml sorbitol E420 [liquid sorbitol (non-crystallising) E420], 1.9 mg sucrose (main constituent of Syrup BP) and 2 mg carmoisine E122.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Oral suspension.

Pink, flavoured suspension.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Remedol is indicated for the treatment of mild to moderate pain and as an antipyretic. It can be used in many conditions including headache, toothache, earache, teething, sore throat, colds & influenza, aches and pains and post-immunisation fever.

4.2 Posology and method of administration

Posology

Age: 2-3 months	**Dose**
1. Post-vaccination fever	2.5 ml If necessary, after 4-6 hours, give a second 2.5 ml dose
2. Other causes of Pain and Fever - if your baby weighs over 4 kg and was born after 37 weeks	
• Do not give to babies less than 2 months of age. • Do not give more than 2 doses. • Leave at least 4 hours between doses. • If further doses are needed, talk to your doctor or pharmacist.	

Children aged 3 months-6 years:

Child's Age	How Much	How often (in 24 hours)
3-6 months	2.5 ml	4 times
6-24 months	5 ml	4 times
2-4 years	7.5 ml	4 times
4-6 years	10 ml	4 times
• Do not give more than 4 doses in any 24 hour period. • Leave at least 4 hours between doses. • Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist.		

It is important to **shake the bottle** well before use.

The Elderly
In the elderly, the rate and extent of paracetamol absorption is normal but plasma half-life is longer and paracetamol clearance is lower than in young adults.

Method of administration

Oral administration.

4.3 Contraindications

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

4.4 Special warnings and precautions for use

Care is advised in the administration of paracetamol to patients with severe renal or hepatic impairment.
The hazards of overdose are greater in those with non-cirrhotic alcoholic liver disease.
Patients should be informed about the signs of serious skin reactions, and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

The label contains the following statements:
Contains paracetamol.
Do not give any other paracetamol-containing products while giving this medicine.
Do not give more medicine than the label tells you to. If your child does not get better, talk to your doctor.
For oral use.
Do not give to babies less than 2 months of age.
For infants 2-3 months no more than 2 doses should be given.
Do not give more than 4 doses in any 24 hour period.
Leave at least 4 hours between doses.
Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist.

As with all medicines, if your child is currently taking any other medicine consult your doctor or pharmacist before using this product.
Keep out of the sight and reach of children.
Store below 25°C. Store in the original package.
Shake well before use.
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well.

The leaflet contains the following statements:
Talk to a doctor at once if your child takes too much of this medicine, even if they seem well. This is because too much paracetamol can cause delayed, serious liver damage.
Talk to your doctor: If your child has an inherited intolerance to fructose or been diagnosed with an intolerance to some other sugars.

Very rare cases of serious skin reactions have been reported. Symptoms may include:
- Skin reddening.
- Blisters.
- Rash.

If skin reactions occur or existing skin symptoms worsen, stop use and seek medical help right away.

Remedol contains sorbitol E420
If you have been told by your doctor that you have an intolerance to some sugars, contact your doctor before taking this medicinal product.
Patients with rare hereditary problems of fructose intolerance should not take this medicine.

Remedol contains sucrose
If you have been told by your doctor that you have an intolerance to some sugars, contact your doctor before taking this medicinal product.
Patients with rare hereditary problems of fructose intolerance, glucose- galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine. In addition, it may be harmful to the teeth when the medicinal product is intended for chronic use, e.g. for two weeks or more.

4.5 Interaction with other medicinal products and other forms of interaction

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by colestyramine.

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

Chronic alcohol intake can increase the hepatotoxicity of paracetamol overdose and may have contributed to the acute pancreatitis reported in one patient who had taken an overdose of paracetamol. Acute alcohol intake may diminish an individual's ability to metabolise large doses of paracetamol, the plasma half-life of which can be prolonged.

The use of drugs that induce hepatic microsomal enzymes, such as anticonvulsants and oral contraceptives, may increase the extent of metabolism of paracetamol, resulting in reduced plasma concentrations of the drug and a faster elimination rate.

4.6 Fertility, pregnancy and lactation

Pregnancy
Epidemiological studies in human pregnancy have shown no ill effects due to paracetamol used in the recommended dosage, but patients should follow the advice of their doctor regarding its use.

Lactation
Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast-feeding.

4.7 Effects on ability to drive and use machines

None known.

4.8 Undesirable effects

Adverse effects of paracetamol are rare. Very rarely hypersensitivity and anaphylatic reactions including skin rash may occur. Very rare cases of serious skin reactions have been reported. There have been reports of blood dyscrasias including thrombocytopenia and agranulocystosis but these were not necessarily causality related to paracetamol.

Most reports of adverse reactions to paracetamol relate to overdosage with the drug.

Chronic hepatic necrosis has been reported in a patient who took daily therapeutic doses of paracetamol for about a year and liver damage has been reported after daily ingestion of excessive amounts for shorter periods. A review of a group of patients with chronic active hepatitis failed to reveal differences in the abnormalities of liver function in those who were long-term users of paracetamol nor was the control of the disease improved after paracetamol withdrawal.

Nephrotoxicity following therapeutic doses of paracetamol is uncommon, but apillary necrosis has been reported after prolonged administration.

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 the national reporting system.

4.9 Overdose

Liver damage is possible in adults who have taken 10 g or more of paracetamol. Ingestion of 5 g or more of paracetamol may lead to liver damage if the patient has risk factors (see below).

Risk Factors
If the patient
a) Is on long term treatment with carbamazepine, phenobarbital, phenytoin, primidone, rifampicin, 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 overdosage in the first 24 hours 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, see BNF overdose section.

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 NPIS or a liver unit.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Analgesics, Other Analgesics and Antipyretics, Anti-Inflammatory, ATC code: N02BE01

Paracetamol has analgesic and antipyretic effects that do not differ significantly from those of aspirin. However it has only weak anti-inflammatory effects. It is only a weak inhibitor of prostaglandin biosynthesis although there is some evidence to suggest it may be more

effective against enzymes in the central nervous system than in the periphery. This may in part account for its activity profile.

5.2 Pharmacokinetic properties

Paracetamol is rapidly and almost completely absorbed from the gastro-intestinal tract with peak plasma concentrations occurring 0.5-2 hours after dosing. The plasma half-life is approximately 2 hours after therapeutic doses in adults but is increased in neonates to about 5 hours. It is widely distributed through the body. Metabolism is principally by the hepatic microsomal enzymes and urinary excretion accounts for over 90 % of the dose within 1 day. Virtually no paracetamol is excreted unchanged, the bulk being conjugated with glucoronic acid (60 %), sulphuric acid (35 %) or cysteine (3 %). Children have less capacity for glucuronidation of the drug than adults.

5.3 Preclinical safety data

Mutagenicity
There are no studies relating to the mutagenic potential of paracetamol Suspension.

In vivo mutagenicity tests of paracetamol in mammals are limited and show conflicting results. Therefore, there is insufficient information to determine whether paracetamol poses a mutagenic risk to man.

Paracetamol has been found to be non-mutagenic in bacterial mutagenicity assays, although a clear clastogenic effect has been observed in mammalian cells in vitro following exposure to paracetamol (3 and 10 mM for 2h).

Carcinogenicity
There are no studies to the carcinogenic potential of paracetamol suspension.

There is inadequate evidence to determine the carcinogenic potential of paracetamol in humans. A positive association between the use of paracetamol and cancer of the ureter (but not of other sites in the urinary tract) was observed in a case-control study in which approximate lifetime consumption of paracetamol (whether acute or chronic) was estimated. However, other similar studies have failed to demonstrate a statistically significant association between paracetamol and cancer of the urinary tract, or paracetamol and renal cell carcinoma.

There is limited evidence for the carcinogenicity of paracetamol in experimental animals. Liver cell tumours can be detected in rats following chronic feeding of 500 mg/kg/day paracetamol.

Teratogenicity
There is no information relating to the teratogenic potential of paracetamol Suspension. In humans, paracetamol crosses the placenta and attains concentrations in the foetal circulation similar to those in the maternal circulation. Intermittent maternal ingestion of therapeutic doses of paracetamol are not associated with teratogenic effects in humans.

Paracetamol has been found to be foetotoxic to cultured rat embryo.

Fertility
There is no information relating to the effects of paracetamol Suspension. A significant decrease in testicular weight was observed when male Sprague-Dawley rats were given daily high doses of paracetamol (500 mg/kg/body weight/day) orally for 70 days.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium methyl hydroxybenzoate E219
Sodium propyl hydroxybenzoate E217
Xanthan gum
Liquid sorbitol (non-crystallising) E420
Anhydrous citric acid
Carmoisine E122
Raspberry flavour
Syrup BP
Glycerol
Purified water

Note: Syrup BP contains sucrose and water.

6.2 Incompatibilities

None known.

6.3 Shelf life

3 years.

6.4 Special precautions for storage

Store below 25 °C. Protect from light.

6.5 Nature and contents of container

Amber glass bottle with a child resistant closure. A measuring spoon of 5 ml (graduated every 2.5 ml) is supplied with this pack. Pack-size of 100 ml oral suspension.

6.6 Special precautions for disposal and other handling

No special requirements.

7. MARKETING AUTHORISATION HOLDER

Remedica Ltd.
Aharnon Str., Limassol Industrial Estate

3056 Limassol, Cyprus

8. MARKETING AUTHORISATION NUMBER(S)

06760/08171/REN/2021

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of latest renewal: 04-11-2021

10. DATE OF REVISION OF THE TEXT

05/07/2023