1.5 Product Information: RENEDOL TABLETS

1.5.1 Prescribing information (Summary of products characteristics):

1. Name of the Medicinal Product: RENEDOL TABLETS

Strength: Each tablet contains Paracetamol BP 500mg

Pharmaceutical form: Oral Tablets

2. Qualitative and Quantitative composition:
Qualitative composition:

Sr. No.	Ingredient	Specification	Uses
1.	Paracetamol	BP	Active
2.	Maize starch (Mixing)	BP	Diluent
3.	Maize starch (Paste)	BP	Binder
4.	Sodium methyl paraben	BP	Preservative
5.	Sodium propyl paraben	BP	Preservative
6.	Sodium starch glycollate	BP	Disintegrant
7.	Magnesium stearate	IH	Lubricant

Quantitative composition:

Component and quality standard (and grade, if applicable)	**Function**	**Strength (label claim)** Each tablet contains Paracetamol BP 500mg			
		Quantity in mg per tablet	**%**	**Quantity in Kg Per 800,000 Tablets**	**%**
Contents of **RENEDOL TABLETS**					
Paracetamol	Active	500.00	88.18	400.000	88.18
Maize starch (Mixing)	Diluent	21.25	3.75	17.000	3.75
Maize starch (Paste)	Binder	40.00	7.06	32.000	7.06
Sodium methyl paraben	Preservative	0.42	0.07	0.336	0.07
Sodium propyl paraben	Preservative	0.19	0.03	0.152	0.03
Sodium starch glycollate	Disintegrant	3.750	0.66	3.000	0.66
Magnesium stearate	Lubricant	1.39	0.25	1.112	0.25
Total	NA	567.00	100.00	453.6	100.00

3. Pharmaceutical form: Oral Tablets

4. Clinical particular's:

4.1 Therapeutic indication:

Paracetamol is a mild analgesic and antipyretic, and is recommended for the treatment of most painful and febrile conditions, for example, headache including migraine, toothache, neuralgia, colds and influenza, sore throat, backache, rheumatic pain and dysmenorrhoea.

4.2 Posology and method of administration:

Posology

Adults, Elderly and Children over 16 years:

Two tablets every four hours as required. Not more than eight tablets in 24 hours. Do not take for more than 3 days without consulting your doctor.

These doses should not be repeated more frequently than every four hours nor should more than four doses be given in any 24 hour period.

Paediatric population

Children under 10 years:

Not recommended for children under 10 years of age.

Children aged 10 to 15 years:

One tablet every four to six hours when necessary to a maximum of four doses in 24 hours. Do not take for more than 3 days without consulting your doctor.

These doses should not be repeated more frequently than every four to six hours nor should more than four doses be given in any 24 hour period.

Method of administration

For oral administration.

4.3 Contraindication:

Hypersensitivity to the active substance or to any of the excipients listed.

4.4 Special warning and precaution for use:

Paediatric population

Not recommended for children under 10 years of age.

Care is advised in the administration of Paracetamol to patients with severe renal or severe hepatic impairment. The hazard of overdose is greater in those with non-cirrhotic alcoholic liver disease.

Do not exceed the recommended dose.

Do not take Paracetamol for more than 3 days without consulting a doctor.

Do not take with any other Paracetamol-containing products.

If symptoms persist, consult your doctor.

Keep out of the reach of children.

Immediate medical advice should be sought in the event of an overdose even if you feel well, because of the risk of delayed, serious liver damage.

4.5 Interactions with other medicinal products and other forms of interactions:

The speed of absorption of Paracetamol may be increased by metoclopramide or domperidone and absorption reduced by cholestyramine. 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.

Additional information on special populations:

Not Applicable

Pediatric population:

Not Applicable

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. A large amount of data on pregnant women indicates neither malformative, nor feto/neonatal toxicity. Paracetamol can be used during pregnancy if clinically needed however it should be used at the lowest effective dose for the shortest possible time and at the lowest possible frequency.

Breastfeeding

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:

Paracetamol has no influence on the ability to drive and use machines.

4.8 Undesirable effects:

The information below lists reported adverse reactions, ranked using the following frequency classification:

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).

Immune system disorders

Hypersensitivity including skin rash may occur.

Not known: anaphylactic shock, angioedema.

Blood and lymphatic system disorders

Not known: blood dyscrasias including thrombocytopenia and agranulocytosis.
Skin and subcutaneous disorders
Very rare cases of serious skin reactions such as Toxic Epidermal Necrolysis (TEN), Stevens-Johnson syndrome (SJS), acute generalised exanthematous pustulosis, and fixed drug eruption have been reported.
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 Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose and Treatment:
Liver damage is possible in adults who have taken 10g or more of Paracetamol. Ingestion of 5g or more of Paracetamol may lead to liver damage if the patient has risk factors (see below).
Risk factors
If the patient:
• is on long term treatment with carbamazepine, phenobarbitone, phenytoin, primidone, rifampicin, St. John's Wort or other drugs that induce liver enzymes, or
• Regularly consumes ethanol in excess of recommended amounts, or
• is likely to be glutathione deplete e.g. eating disorders, cystic fibrosis, HIV infection, starvation, cachexia.
Symptoms
Symptoms of Paracetamol over dosage 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, gastrointestinal bleeding 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:

Paracetamol is an effective analgesic and antipyretic agent, but has only weak anti-inflammatory properties. Its mechanism of action is not fully understood. It has been suggested that it may act predominantly by inhibiting prostaglandin synthesis in the CNS and to a lesser extent through a peripheral action by blocking pain-impulse generation. The peripheral action may also be due to inhibition of prostaglandin synthesis or to inhibition of the synthesis or actions of other substances that sensitize pain receptors to mechanical or chemical stimulation. Paracetamol probably produces an antipyretic action by a central effect on the hypothalamic heat-regulating centre to produce peripheral vasodilatation resulting in increased blood flow through the skin, sweating and heat loss. The central action probably involves inhibition of prostaglandin synthesis in the hypothalamus. The drug has no effect on the cardiovascular and respiratory systems, and unlike salicylates it does not cause gastric irritation or bleeding.

5.2 Pharmacokinetic properties:

Paracetamol is readily absorbed from the gastrointestinal tract with peak plasma concentrations occurring about 30 minutes to 2 hours after ingestion. It is metabolized in the liver (90-95%) and excreted in the urine mainly as the glucuronide and sulphate conjugates. Less than 5% is excreted as unchanged Paracetamol. The elimination half-life varies from about 1 to 4 hours. Plasma protein binding is negligible at usual therapeutic concentrations but increases with increasing concentrations.

A minor hydroxylated metabolite (N-acetyl-p-benzoquinoneimine) which is usually produced in very small amounts by mixed-function oxidases in the liver and which is usually detoxified by conjugation with liver glutathione may accumulate following Paracetamol over dosage and cause liver damage. The time to peak plasma concentration of Paracetamol is 0.5 to 2 hours, the time to peak effect 1 to 3 hours and the duration of action 3 to 4 hours.

5.3 Preclinical safety data:

Not available

6. Pharmaceutical Particulars:

6.1 List of excipients

Renedol Tablets contains the following excipients:

Maize starch, Sodium methyl paraben, Sodium propyl paraben, Sodium starch glycollate, Magnesium stearate.

6.2 Incompatibilities

None known

6.3 Shelf life

24 Months

6.4 Special precaution for storage

Store in a cool, dry place below 30°C. Protect from light. Keep out of reach of children.

6.5 Nature and contents of container

Aluminium/ transparent PVC blister strip of 10 tablets and 10 of such blister strips are packed in a unit box with pack insert.

1000 tablets packed in polythene bag and contained in HDPE container with coded label.

6.6 Special precautions for disposal

No special precaution

7. MARKETING AUTHORISATION HOLDER AND MANUFACTURING SITE ADDRESSES:

Marketing Authorization Holder:
Rene Industries Ltd
Address: PO Box 6034, Plot No.680, Kamuli, Kireka, Kampala, Uganda.

Manufactured by:
Rene Industries Ltd
Address: PO Box 6034, Plot No.680, Kamuli, Kireka, Kampala, Uganda.

8. MARKETING AUTHORISATION NUMBER:

Not Applicable

9. DATE OF FIRST REGISTRATION/RENEWAL OF THE REGISTRATION:

Not Applicable

10. DATE OF REVISION OF THE TEXT:

Not Applicable

11. DOSIMETRY (IF APPLICABLE):

Not Applicable

12. INSTRUCTIONS FOR PREPARATION OF RADIOPHARMACEUTICALS (IF APPLICABLE):

Not Applicable