SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

Folic Acid 5mg Tablets

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Folic Acid BP 5 mg

3 PHARMACEUTICAL FORM

Tablet.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

For the treatment and prophylaxis of megaloblastic anaemia or pernicious anaemia administered with adequate amounts of hydroxocobalamin.
For the treatment of folic acid deficiency e.g. caused by administration of phenytoin.

4.2 Posology and method of administration

Adults
In folate deficient megaloblastic anaemia:
5mg daily for 4 months
Up to 15mg daily may be necessary for malabsorption states
For prophylaxis in chronic haemolytic states or in renal dialysis:
5mg every 1-7 days depending on diet and underlying disease.
In drug induced folate deficiency:
5mg daily
Prevention of recurrence of neural tube defects
5mg daily starting before conception and continuing throughout the first trimester of pregnancy is recommended.
Children
Over 1 year: As adult dose
Up to 1 year: 500µg/kg daily

4.3 Contraindications

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

- Long-term folate therapy is contraindicated in any patient with untreated cobalamin deficiency. This can be untreated pernicious anaemia or other cause of cobalamin deficiency, including lifelong vegetarians. In elderly people, a cobalamin absorption test should be done before long-term folate therapy. Folate given to such patients for 3 months or longer has precipitated cobalamin neuropathy. No harm results from short courses of folate.
- Folic acid should never be given alone in Addisonian pernicious anaemia or other Vitamin B_{12} deficiency states because it may precipitate the onset of subacute combined degeneration of the spinal cord.
- Folic acid should not be used in malignant disease unless megaloblastic anaemia owing to folate deficiency is an important complication.

4.4 Special warnings and precautions for use

Patients with vitamin B_{12} deficiency should not be treated with folic acid unless administered with adequate amounts of hydroxocobalamin, as it can mask the condition but the subacute irreversible damage to the nervous system will continue. The deficiency can be due to undiagnosed megaloblastic anaemia including in infancy, pernicious anaemia or macrocytic anaemia of unknown aethiology or other cause of cobalamin deficiency, including lifelong vegetarians.
Caution should be exercised when administering folic acid to patients who may have folate dependent tumours.
This product is not intended for healthy pregnant women where lower doses are recommended, but for pregnant women with folic acid deficiency or women at risk for the reoccurrence of neural tube defects.

4.5 Interaction with other medicinal products and other forms of interaction

There is a specific interaction between phenytoin and folate such that chronic phenytoin use produces folate deficiency. Correction of the folate deficiency reduces plasma phenytoin with potential loss of seizure control. Similar but less marked relationship exists with all anti-convulsant treatments including sodium valproate, primidone, carbamazepine and the barbiturates.

Sulfasalazine and triamterene also inhibit absorption.

Antibacterials – chloramphenicol and co-trimoxazole may interface with folate metabolism.

Folic acid may interfere with the toxic and therapeutic effects of methotrexate. Methotrexate and trimethoprim are specific anti-folates, and the folate deficiency caused by their prolonged use cannot be treated by Folic Acid 5mg Tablets.

Folate supplements enhance the efficacy of lithium therapy.

Folinic acid should be used.
Nitrous oxide anaesthesia may cause an acute folic acid deficiency.

Both ethanol and aspirin increase folic elimination.

4.6 Fertility, pregnancy and lactation

Pregnancy
There are no known hazards to the use of folic acid in pregnancy, supplements of folic acid are often beneficial.
Non-drug induced folic acid deficiency, or abnormal folate metabolism, is related to the occurrence of birth defects and some neural tube defects. Interference with folic acid metabolism or folate deficiency induced by drugs such as anticonvulsants and some antineoplastics early in pregnancy results in congenital anomalies. Lack of the vitamin or its metabolites may also be responsible for some cases of spontaneous abortion and intrauterine growth retardation.

Breast-feeding
Folic acid is actively excreted in human breast milk. Accumulation of folate in milk takes precedence over maternal folate needs. Levels of folic acid are relatively low in colostrum but as lactation proceeds, concentrations of the vitamins rise. No adverse effects have been observed in breastfed infants whose mothers were receiving folic acid.

4.7 Effects on ability to drive and use machines

No effect on concentration or co-ordination.

4.8 Undesirable effects

Folic acid is generally well tolerated although the following side effects have been reported:

Gastrointestinal disorders: **Rare (≥1/10,000 to <1/1,000)**	Anorexia, nausea, abdominal distension and flatulence

Immune system disorders: **Rare (≥1/10,000 to <1/1,000)**	Allergic reactions, comprising erythema, rash, pruritus, urticaria, dyspnoea
Not known	Anaphylactic reactions (including shock)

Blood and lymphatic system disorders:
Folic acid may worsen the symptoms of co-existing vitamin B12 deficiency and should never be used to treat anaemia without a full investigation of the same.

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 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

No special procedures or antidotes are likely to be needed.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

ATC Code: BO3B B01 – Folic Acid and Derivatives
Folic acid is a member of Vitamin B group, used in the treatment and prevention of folate deficiency states. Folic acid is reduced in the body to tetrahydrofolate, a co-enzyme active in several metabolic processes, and produces a haemopoietic response in nutritional megaloblastic anaemias (but see warning in section 4.4 regarding the need for concomitant use of hydroxocobalamin). Folic acid is rapidly absorbed and widely distributed in body tissues.
It is used in the treatment and prevention of folate deficiency states.

5.2 Pharmacokinetic properties

Absorption
Folic acid is rapidly absorbed from the gastrointestinal tract, mainly from the proximal part of the small intestine. Dietary folates are stated to have about half the bioavailability of crystalline folic acid. The naturally occurring folate polyglutamates are largely deconjugated and reduced by dihydrofolate

reductase in the intestine to form 5-methyltetrahydrofolate (5MTHF). Folic acid given therapeutically enters the portal circulation largely unchanged, since it is a poor substrate for reduction by dihydrofolate reductases.

Distribution
Via portal circulation. 5MTHF from naturally occurring folate is extensively plasma bound. The principal storage site of folate is in the liver; it is also actively concentrated in the CSF. Folate is distributed into breast milk.

Biotransformation
Therapeutically given folic acid is converted into the metabolically active form 5MTHF in the plasma and liver. There is an enterohepatic circulation for folate.

Elimination
Folate metabolites are eliminated in the urine and folate in excess of body requirements is excreted unchanged in the urine. Folic acid is removed by haemodialysis.

5.3 Preclinical safety data

Not applicable.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Calcium hydrogen phosphate
Starch
Sodium lauryl sulphate
Magnesium stearate.

6.2 Incompatibilities

None known.

6.3 Shelf life

3 years for Securitainer

3 years for Blister pack

6.4 Special precautions for storage

Store in a cool dry place protected from light below 25°C.

6.5 Nature and contents of container

Securitainers containing 50, 100, 250, 1000 or 5000 tablets. Blister packs containing 28 tablets.

Not all pack sizes may be marketed.

6.6 Special precautions for disposal

Not applicable

7 MARKETING AUTHORISATION HOLDER

Relonchem Limited
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Gorsey Lane
Widnes
WA8 0RP

8 MARKETING AUTHORISATION NUMBER(S)

PL 20395/0133

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

22/07/1999

10 DATE OF REVISION OF THE TEXT

19/01/2023