### Folinic acid

Newborn use only

**Alert**
Folinic acid is a 5-formyl derivative of tetrahydrofolic acid. It is not the same as folic acid, but does have an equivalent vitamin activity. Also known as calcium folinate or Leucovorin.

**Indication**
Concurrent therapy with dihydrofolate reductase inhibitors such as pyrimethamine to reduce bone marrow suppression [1, 2].
Folinic acid dependent seizures and secondary causes of cerebral folate deficiency including other inborn errors of metabolism [3, 4].

**Action**
Folinic acid is the active metabolite of folate that bypasses dihydrofolate reductase.

**Drug Type**
Metabolically active reduced form of folate (vitamin B9)

**Trade Name**
Leucovorin

**Presentation**
DBL Leucovorin Calcium tablets (calcium folinate) – 15 mg. Contains excipients including lactose monohydrate, microcrystalline cellulose, magnesium stearate.
DBL Leucovorin Injection (calcium folinate) – 15 mg/2 mL, 50 mg/5 mL, 100 mg/10 mL, 300 mg/30 mL strengths available.

**Dosage/Interval**
Concurrent therapy with dihydrofolate reductase inhibitors [1, 2]
- 10 mg three times per week
- Folinic acid responsive seizures [3, 5]
  - 2.5 mg twice a day (doses up to 8 mg/kg/day have been used)

**Route**
Oral

**Maximum Daily Dose**
Not established.

**Preparation/Dilution**
**Using the injection:**
Measure the dose and give undiluted orally.

**Using the tablet:**
Add sterile water to 15 mg tablet to make it up to 15 mL suspension (1 mg/mL). Shake well before administration. Discard any unused liquid after administration.

**Administration**
Administer on an empty stomach (i.e. at least one hour before food or two hours after food).[^13]

**Monitoring**
No specific monitoring required.

**Contraindications**
Little information. Not effective in methylenetetrahydrofolate reductase deficiency.

**Precautions**
Avoid use with folic acid antagonists unless under a specialist’s advice. [6]

**Drug Interactions**
- Antiepileptics – folic acid may counteract the antiepileptic effect of phenobarbital (phenobarbitone), phenytoin, primidone and succinimides and increase the frequency of seizures.
- Fluorouracil – folic acid may enhance the toxicity of fluorouracil.
- Folic acid antagonists – when folic acid is given in conjunction with a folic acid antagonist (e.g. cotrimoxazole, pyrimethamine) the efficacy of the folic acid antagonist may either be reduced or completely neutralised. [6]

**Adverse Reactions**
Allergic sensitisation, including anaphylactic reactions and urticarial rash. [6]
Nausea and vomiting with high doses.

**Compatibility**
Not applicable.

**Incompatibility**
Not applicable.

**Stability**
Oral dispersion made using tablets should be used as soon as possible and remaining liquid should be discarded.

**Storage**
Store below 25°C.

**Special Comments**
Refer to full version.

**Evidence summary**
Refer to full version.

**References**
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