

Folinic acid

Newborn use only

2019

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	<u>Concurrent therapy with dihydrofolate reductase inhibitors [1, 2]</u> 10 mg three times per week <u>Folinic acid responsive seizures [3, 5]</u> 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: ¹⁵⁻¹⁷ 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 – folinic acid may counteract the antiepileptic effect of phenobarbital (phenobarbitone), phenytoin, primidone and succinimides and increase the frequency of seizures. Fluorouracil – folinic acid may enhance the toxicity of fluorouracil. Folic acid antagonists – when folinic 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	
Evidence summary	Refer to full version.
References	Refer to full version.

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Authors Contribution

Original author/s	Srinivas Bolisetty
Evidence Review	David Osborn
Expert review	Bridget Wilcken, Brendan McMullan
Nursing Review	Eszter Jozsa
Pharmacy Review	Jing Xiao, Michelle Jenkins, Carmen Burman
ANMF Group contributors	Nilkant Phad, Himanshu Popat, James Marceau
Final editing and review of the original	Ian Whyte
Electronic version	Cindy Chen, Ian Callander
Facilitator	Srinivas Bolisetty