Folinic acid (calcium folinate, calcium leucovorin) Intravenous for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- The unlicensed powder form will only be used where supply restrictions are in place for the other formulations. It must be **stored at ROOM TEMPERATURE**. For large doses in methotrexate rescue reconstitute with **benzyl alcohol FREE diluent.** May dilute with sodium chloride 0.9% or glucose 5% (ref 1)

Available preparations

Folinic acid (as Calcium folinate) 50mg per 5ml vial (Teva)

Folinic acid (as Calcium folinate)100mg per 10ml vial (Teva)

Folinic acid (as Calcium folinate) 300mg per 30ml vial (Teva)

Folinic acid (as Calcium folinate) 350mg per 35ml vial (Kabi)

Folinic acid (as Calcium folinate) 350mg powder (US-Teva, unlicensed) - for emergency use where supply of other products compromised

Reconstitution

Most formulations already in solution

The 350mg **powder** must be reconstituted with 17.5ml sterile water for injection to produce a **final concentration of leucovorin of 20mg/ml** (ref 1)

Infusion fluids

Sodium chloride 0.9% or Glucose 5%

Methods of intravenous administration

Intermittent intravenous infusion

- If part of chemotherapy protocol - administer as per protocol guidelines

- Dilute the dose to a convenient volume with infusion fluid
- Administer at a rate not exceeding 160mg/minute (due to calcium content)

Slow intravenous injection

- If part of chemotherapy protocol - administer as per protocol guidelines
- If not part of chemotherapy protocol, administer at a **rate not exceeding 160mg/minute**
- May be administered undiluted if necessary (as per protocol)[ref 4]

Dose in adults

Prevention and treatment of toxicity associated with chemotherapy

- Doses and administration as per chemotherapy protocols

Prevention and treatment of toxicity associated with folic acid antagonists

- Trimethoprim toxicity (including co-trimoxazole): Stop trimethoprim, give folinic acid 3 to 10mg/day, until recovery of normal blood count
- Others (e.g. pyrimethamine): consult pharmacy/SPC

Megaloblastic anaemia[ref 1,3]

- In the treatment of folate-deficient megaloblastic anemia **(which are resistant to folic acid)**, up to 1mg of folinic acid may be given by injection daily [ref 2]
- The manufacturers state that there is no evidence for doses greater than 1mg (intramuscularly) [ref 3] although ORAL doses of up to 15mg daily have been suggested [ref 3]

Monitoring

- Monitor blood counts

Further information

- The maximum rate of administration of 160mg per minute is due to the calcium content
- Ideal concentration when diluted, unless otherwise stipulated in protocol is 1mg/ml.

Storage

- Store all formulations between 2 and 8^{0}C

References

SPC Teva "10mg/ml" (Strengths not listed). Revised June 2023

SPC Kabi - "Folinic acid (as calcium folinate) 10mg/ml solution for injection or infusion". Updated December 2023. Accessed 8 Jan 2025.

1: "LEUCOVORIN CALCIUM- leucovorin calcium injection, powder, lyophilized, for solution". Drug Label Information. revised 10/2020 downloaded 11 Nov 2021.

2: Uptodate, accessed 16 Jan 2025.

3: Martindale, accessed 16 Jan 2025.

4. Medusa NHS Injectable Medicines Guide. Version 5.

Therapeutic classification

Drug for cytotoxic-induced adverse reactions