# Ferric Carboxymaltose (Ferinject®) for Medical Day Case - Summary Clinical Guideline

Reference No:CG-Pharm/2023/002

**Contraindications to using Ferinject®:**

- Hypersensitivity to the active substance (Ferinject) or any of its excipients
- Known serious hypersensitivity to other parenteral iron products
- Anaemia not attributed to iron deficiency e.g. other microcytic anaemia
- Evidence of iron overload or disturbances in the utilisation of iron
- First trimester of pregnancy

## Determining the Cumulative Iron Dose

| **Hb** | **Patient Weight** | | |
|---|---|---|---|
| **(g/L)** | **below 35 kg** | **35 kg to <70 kg** | **70 kg and over** |
| <100 | 500 mg | 1,500 mg | 2,000 mg |
| 100 to <140 | 500 mg | 1,000 mg | 1,500 mg |
| >140 | 500 mg | 500 mg | 500 mg |

A single ferinject administration should not exceed **20mg/kg** body weight for IV infusion

A cumulative iron dose of 500mg should not be exceeded for patients with a body weight <35kg.

Do NOT administer more than 1000mg of iron in one week.

### Dilution and Rate of Infusion

Ferinject® must be diluted in sterile sodium chloride 0.9% solution only. The line should only be flushed with sodium chloride 0.9%. Each 500mg vial of Ferinject® can be reconstituted with a 100ml sodium chloride 0.9% ecoflac. A dose of 500mg or 1000mg should be infused over a minimum period of 15 minutes.

## Infusion fluid volume

| Dose of Ferinject | Volume of sodium chloride 0.9% |
|---|---|
| 500mg | 100 mL Ecoflac |
| 1000mg | 250 mL Ecoflac |

**Monitoring**

- Check blood pressure (BP) and pulse prior to the start of the infusion.
- Patients should be closely monitored for signs of hypersensitivity during and for at least 30 minutes after every administration of an IV iron product
- Hypersensitivity reactions can be delayed with total dose iron infusions. Respiratory difficulty and/or cardiovascular collapse and fatalities have been reported, and so infusions should only be administered when staff trained to evaluate hypersensitivity reactions as well as resuscitation facilities are immediately available. If there are any signs of hypersensitivity (e.g. urticaria, rashes, itching, nausea and shivering) or intolerance at any stage of the infusion, administration must be stopped immediately.
- Caution should be exercised to avoid paravenous leakage when administering Ferinject. This may lead to irritation of the skin and long-lasting brown discolouration at the site of injection. If paravenous leakage does occur, the administration of Ferinject must be stopped immediately.
- ***Where extravasation is detected or suspected;***
    - Stop the infusion
    - Inspect and assess the intravenous access device. DO NOT remove the device as it may be necessary to administer an antidote before removing.
    - Attempt to aspirate as much of the extravasated substance from the cannula as possible. Escalate to medical, senior nurse and pharmacy if required.
- Ferric carboxymaltose (Ferinject) is known to be commonly associated with hypophosphatemia. Cases have been reported of symptomatic hypophosphataemia leading to infrequent reports of hypophosphataemic osteomalacia and fractures in patients with existing risk factors and following prolonged exposure to high doses – some cases required clinical intervention, including surgery.
    - Monitor serum phosphate levels in patients:
        - requiring multiple administrations of ferric carboxymaltose at higher doses
        - on long-term treatment with ferric carboxymaltose
        - with pre-existing risk factors for hypophosphataemia such as vitamin D deficiency, calcium and phosphate malabsorption, secondary hyperparathyroidism, inflammatory bowel disease, and osteoporosis