Canterbury District Health Board
Te Poari Hauora ō Waitaha
CHRISTCHURCH WOMEN'S HOSPITAL
MATERNITY SERVICES

SURNAME ..... NHI .....

FIRST NAME ..... DOB .....

ADDRESS .....

..... POSTCODE .....

(or affix patient label)

OBSTETRIC IV IRON INFUSION

Obstetric Intravenous Iron Infusion Prescription (Antenatal & Postnatal)

(derived from the CDHB Adult Intravenous Iron: Outpatient Protocol C260123)

Criteria for intravenous iron infusion using Ferric Carboxymaltose (Ferinject™):

ANTENATAL

◯ **Iron deficiency anaemia, Hb < 100 g/L,** and ferritin < 20 micrograms/L (or ferritin < 50 micrograms/L if CRP > 5 mg/L) with other deficiencies excluded or corrected (vitamin B12 and folate)

AND one or more of the following:

- ○ Fetal compromise, eg. intrauterine growth restriction
- ○ Failure of a trial of oral iron therapy due to side effects, high iron requirements, or persistent anaemia after 6-8 weeks (< 10 g/L rise in Hb and ferritin remains low)
- ○ ≥ 36 weeks gestation

◯ **Severe iron deficiency anaemia, Hb < 85 g/L** ferritin < 20micrograms/L (or ferritin < 50 micrograms/L if CRP > 5 mg/L) with other deficiencies excluded or corrected (vitamin B12 and folate) **in the second or third trimester.**

POSTNATAL

◯ **Following postpartum haemorrhage and hemodynamically stable, Hb < 85 g/L +/- blood transfusion**

Warning

- Iron infusion can cause hypophosphatemia (low phosphate), and repeated infusions may lead to symptomatic bone disease.
- Check phosphate (PO_4) if:
  - the woman has had two or more iron infusions in the preceding 6 months
  - the woman is at risk of hypophosphatemia (BMI < 18, poor nutrition, chronic diarrhoea)
- Contact medical team for advice if PO_4 < 0.8 mmol/L

Contra-indications

- **First trimester of pregnancy**
- Hypersensitivity to ferric carboxymaltose
- Evidence of iron overload, eg. haemochromatosis or thalassaemia
- Disturbances in utilisation of iron, eg. Osler-Rendu-Weber syndrome
- Acute infection or ongoing bacteraemia
- Anaemia not attributed to iron deficiency, eg. other microcytic anaemia

Precautions (discuss with consultant before prescribing)

- **Avoid in pregnant women with pre-eclampsia. Delay until postpartum and condition stable.**
- Severe hepatic dysfunction
- Severe asthma/eczema/atopy
- Known hypersensitivity to any iron preparation

C260133

SURNAME ..... NHI .....

FIRST NAME..... DOB .....

ADDRESS .....

..... POSTCODE .....

(or affix patient label)

Obstetric Intravenous Iron Infusion Prescription (Antenatal & Postnatal)

Management of anaphylactic reaction

Severe reactions are RARE with modern low molecular weight iron preparations.

Presents within the first few minutes of infusion, with some or all of: respiratory difficulty, hypotension, tachycardia, rash, oedema, collapse, cardiorespiratory arrest. STOP infusion immediately and contact medical team. Activate clinical emergency (777) if severe.

Assess: Airway (oedema, feeling of tightness, voice change), breathing, circulation.
Manage: With rapid administration of intramuscular adrenaline (0.5 mg) and intravenous fluids

(Refer to Adult Anaphylaxis Management card, located on the resuscitation trolley)

Infusion reaction

If a rash develops, or there are concerns about extravasation (pain and swelling at injection site), STOP infusion immediately, and contact medical team. To minimise risk of extravasation use a large vein and flush with 10-20 mLs 0.9% normal saline before the transfusion to ensure patency and then again after the infusion.

Adverse effects

- Headache is the most commonly reported adverse effect (3.3%).
- Other common adverse effects (1-3%) include dizziness, nausea, abdominal pain, constipation, diarrhoea, rash, injection site reactions, transient decrease in serum phosphate, transient increase in ALT and AST.
- Extravasation can cause permanent skin staining. Refer to Datasheet for more detailed information.

Observations

Record observations on the Modified Early Obstetric Warning Score Chart C280012:

- Before commencement: Baseline recordings (including total MEOWS)
- 5 minutes after commencing infusion: Full set of recordings (including EWS)
- Observe leur site closely throughout the infusion for signs of extravasation that may lead to skin staining.
- On completion: Full set of recording (including EWS)
- Fetal monitoring – baseline CTG is recommended. Continuous fetal monitoring is not required unless there is a maternal complication such as hypotension or tachycardia.

The nurse/midwife must stay with the woman for the full 15 minutes of the transfusion to watch for staining or local stinging reaction.

The woman must remain in a staffed area for 30 minutes after completing the infusion.

Prescribing

- Ferric carboxymaltose may be prescribed by any registered medical practitioner.
- Do not prescribe oral iron post infusion as there is a risk of iron overload

Follow-up

- **Repeat haemoglobin and ferritin SIX WEEKS after iron infusion**: arrange repeat infusion if required (see criteria on page 1).

  (*The requirement for follow-up blood tests has been added to help determine the best long-term dosing and testing strategy, and will be reviewed by end of 2015.)*

Canterbury District Health Board
Te Poari Hauora ō Waitaha
CHRISTCHURCH WOMEN'S HOSPITAL
MATERNITY SERVICES

SURNAME ..... NHI .....
FIRST NAME ..... DOB .....
ADDRESS .....
..... POSTCODE .....
(or affix patient label)

OBSTETRIC IV IRON INFUSION

Obstetric Intravenous Iron Infusion Prescription (Antenatal & Postnatal)

Date: ..... Indication: .....

Adverse drug reactions:	☐ No ☐ Yes
	If yes, details:
* If previous reaction to ferric carboxymaltose, request medical review before proceeding.	
Previous iron infusion:	☐ No ☐ Yes If yes, Date: .....
	Preparation name: .....
If the woman has received an iron infusion within the last 3 months, ensure indication remains valid and criteria for infusion on page 1 is met. Ensure a minimum six week period between doses.	

Baseline blood results	**Date:**
Hb:	..... g/dL
Ferritin (if antenatal):	..... micrograms/L
CRP:	..... mg/L (if measured)

Weight (kg)

Prescribing / Preparation Guide	
Women weighing > 35 kg	Dose is 1000 mg
Women weighing < 35 kg	Use following calculation: (120 - current Hb (g/L)) x (weight x 0.25) + 500 mg = iron dose _____ mg (to nearest 100 mg) For these women, the maximum dose that can be given at one time is 20 mg/kg. Chart the calculated dose OR 20 mg/kg, whichever is LOWEST.

Dilution plan of Ferinject™ according to dose required:

Iron Dose	Volume of Ferinject™	Sodium chloride 0.9%	Administration time
100 - 200 mg	2 – 4 mL	50 mL	3 minutes
> 200 – 500 mg	> 4 – 10 mL	100 mL	6 minutes
> 500 – 1000 mg	> 10 – 20 mL	100 mL	15 minutes

For women with very severe heart failure or fluid restriction, ferric carboxymaltose can be given undiluted as a slow intravenous push over 15 minutes.

Prescription	Prescriber's sign off	Date	Time given	Nurse/MW check 1	Nurse/MW check 2
Iron: _____ mg (As ferric carboxymaltose) Add to _____ mL sodium chloride 0.9% (see dilution above)	_____ Prescriber's signature _____ Surname (print)				

☐ Important: Do not prescribe oral iron post infusion due to the risk of iron overload

☐ Patient has read and understood the information leaflet (Ref.6521) and the risks of extravasation

C26013 3