1. NAME OF THE MEDICINAL PRODUCT

Ferinject 50 mg iron/mL solution for injection/infusion.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

One mL of solution contains 50 mg of iron as ferric carboxymaltose.

Each 10 mL vial contains 500 mg of iron as ferric carboxymaltose.

Excipient(s) with known effect
One mL of solution contains up to 5.5 mg (0.24 mmol) sodium, see section 4.4.
For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Solution for injection/infusion. Dark brown, non-transparent, aqueous solution.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Ferinject is indicated for the treatment of iron deficiency anemia in adult patients with Hb 7-<13 g/dL and hematocrit <39% (man) or Hb 7-<12 g/dL and hematocrit <36% (Non-pregnant women) and Serum ferritin <15 µg/L (man or women with depleted iron stores). or adult patients who have CKD with TSAT <25%.

The diagnosis must be based on laboratory tests.

4.2 Posology and method of administration

Monitor carefully patients for signs and symptoms of hypersensitivity reactions during and following each administration of Ferinject.

Ferinject should only be administered when staff trained to evaluate and manage anaphylactic reactions is immediately available, in an environment where full resuscitation facilities can be assured. The patient should be closely observed for signs and symptoms of hypersensitivity reactions during and for at least 30 minutes following each Ferinject injection.

Posology

Determination of the cumulative iron dose
The cumulative dose for repletion of iron using Ferinject is determined based on the patient's body weight and haemoglobin (Hb) level and must not be exceeded. The following table should be used to determine the cumulative iron dose:

Hb (g/dL)	**Patients with Body Weight 35 kg to <70 kg**	**Patients with Body Weight ≥ 70 kg**
< 10	1,500 mg	2,000 mg
≥ 10	1,000 mg	1,500 mg

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

For overweight patients, a normal body weight/blood volume relationship should be assumed when determining the iron requirement.

For patients with an Hb value ≥14 g/dL, an initial dose of 500 mg iron should be given and iron parameters should be checked prior to repeat dosing.

Post repletion, regular assessments should be completed to ensure that iron levels are corrected and maintained.

Method of administration

Ferinject must only be administered by the intravenous route: by bolus injection, or during a haemodialysis session undiluted directly into the venous limb of the dialyser, or by infusion.

Intravenous injection
Ferinject may be administered by intravenous injection using undiluted solution up to 1,000 mg iron. For doses up to 200 mg iron, there is no prescribed administration time. For doses greater than 200 and up to 500 mg iron, Ferinject should be administered at a rate of up to 100 mg iron/min. For doses greater than 500 and up to 1,000 mg iron, Ferinject should be administered over 15 minutes.

Intravenous infusion
Ferinject may be administered by intravenous infusion up to a maximum single dose of 1,000 mg of iron (20 mL).

In case of infusion Ferinject must be diluted only in sterile 0.9% m/V sodium chloride solution as follows:

Dilution plan of Ferinject for intravenous infusion

Ferinject			**Iron**			**Amount of Sterile 0.9% m/V Sodium Chloride Solution**	**Minimum Administration Time**
2	to	4 mL	100	to	200 mg	50 mL	No minimum administration time
>4	to	10 mL	>200	to	500 mg	100 mL	6 minutes
>10	to	20 mL	>500	to	1,000 mg	250 mL	15 minutes

Note:
1. For stability reasons, dilutions to concentrations less than 2 mg iron/mL (not including the volume of the ferric carboxymaltose solution) are not permissible.

Ferinject must not be administered by the subcutaneous or intramuscular route.

Special Dosage Instructions

Maximum tolerated single dose
A single dose of Ferinject should not exceed 1,000 mg of iron (20 ml) per day or 20 mg of iron (0.4 ml) per kg body weight. Do not administer 1,000 mg of iron (20 ml) more than once a week.

Paediatric population
The use of Ferinject has not been studied in children, and therefore is not recommended in children under 14 years.

Haemodialysis-dependent chronic kidney disease
A single maximum daily dose of 200 mg iron should not be exceeded in haemodialysis-dependent chronic kidney disease patients, because no safety data on haemodialysis-dependent chronic kidney disease patients receiving single doses of more than 200 mg iron are available.

4.3 Contraindications

The use of Ferinject is contraindicated in cases of:

- hypersensitivity to the active substance, to Ferinject or any of its excipients listed in section 6.1.
- 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.

4.4 Special warnings and precautions for use

Hypersensitivity reactions
Parenterally administered iron preparations can cause hypersensitivity reactions including serious and potentially fatal anaphylactic/anaphylactoid reactions. Hypersensitivity reactions have also been reported after previously uneventful doses of parenteral iron complexes. There have been reports of hypersensitivity reactions which progressed to Kounis syndrome (acute allergic coronary arteriospasm that can result in myocardial infarction, see section 4.8).

The risk is enhanced for patients with known allergies including drug allergies, including patients with a history of severe asthma, eczema or other atopic allergy.
There is also an increased risk of hypersensitivity reactions to parenteral iron complexes in patients with immune or inflammatory conditions (e.g. systemic lupus erythematosus, rheumatoid arthritis).

Ferinject should only be administered when staff trained to evaluate and manage anaphylactic reactions are immediately available, in an environment where full resuscitation facilities can be assured. Each patient should be observed for adverse effects for at least 30 minutes following each Ferinject administration. If hypersensitivity reactions or signs of intolerance occur during administration, the treatment must be stopped immediately. Facilities for cardio respiratory resuscitation and equipment for handling acute anaphylactic/anaphylactoid reactions should be available, including an injectable 1:1000 adrenaline solution. Additional treatment with antihistamines and/or corticosteroids should be given as appropriate.

Hypophosphataemic osteomalacia
Symptomatic hypophosphataemia leading to osteomalacia and fractures requiring clinical intervention including surgery has been reported in the post marketing setting. Patients should be asked to seek medical advice if they experience worsening fatigue with myalgias or bone pain.Serum phosphate should be monitored in patients who receive multiple administrations at higher doses or long-term treatment, and those with existing risk factors for hypophosphataemia. In case of persisting hypophosphataemia, treatment with ferric carboxymaltose should be re-evaluated

Hepatic or renal impairment
In patients with liver dysfunction, parenteral iron should only be administered after careful benefit/risk assessment. Parenteral iron administration should be avoided in patients with hepatic dysfunction where iron overload is a precipitating factor, in particular Porphyria Cutanea Tarda (PCT). Careful monitoring of iron status is recommended to avoid iron overload.

No safety data on haemodialysis-dependent chronic kidney disease patients receiving single doses of more than 200 mg iron are available.

Infection
Parenteral iron must be used with caution in case of acute or chronic infection, asthma, eczema or atopic allergies. It is recommended that the treatment with Ferinject is stopped in patients with ongoing bacteraemia. Therefore, in patients with chronic infection a benefit/risk evaluation has to be performed, taking into account the suppression of erythropoiesis.

Extravasation

Caution should be exercised to avoid paravenous leakage when administering Ferinject. Paravenous leakage of Ferinject at the administration site may lead to irritation of the skin and potentially long lasting brown discolouration at the site of administration. In case of paravenous leakage, the administration of Ferinject must be stopped immediately.

Excipients
One mL of undiluted Ferinject contains up to 5.5 mg (0.24 mmol) of sodium. This has to be taken into account in patients on a sodium-controlled diet.

Paediatric population
The use of Ferinject has not been studied in children.

4.5 Interaction with other medicinal products and other forms of interaction

The absorption of oral iron is reduced when administered concomitantly with parenteral iron preparations. Therefore, if required, oral iron therapy should not be started for at least 5 days after the last administration of Ferinject.

4.6 Fertility, pregnancy and lactation

Pregnancy
There are limited data from the use of Ferinject in pregnant women (see section 5.1). A careful benefit/risk evaluation is required before use during pregnancy and Ferinject should not be used during pregnancy unless clearly necessary.

Iron deficiency occurring in the first trimester of pregnancy can in many cases be treated with oral iron. Treatment with Ferinject should be confined to the second and third trimester if the benefit is judged to outweigh the potential risk for both the mother and the foetus.

Foetal bradycardia may occur following administration of parenteral irons. It is usually transient and a consequence of a hypersensitivity reaction in the mother. The unborn baby should be carefully monitored during intravenous administration of parenteral irons to pregnant women.

Animal data suggest that iron released from Ferinject can cross the placental barrier and that its use during pregnancy may influence skeletal development in the fetus (see section 5.3).

Breast-feeding
Clinical studies showed that transfer of iron from Ferinject to human milk was negligible (≤1%). Based on limited data on breast-feeding women it is unlikely that Ferinject represents a risk to the breast-fed child.

Fertility
There are no data on the effect of Ferinject on human fertility. Fertility was unaffected following Ferinject treatment in animal studies (see section 5.3).

4.7 Effects on ability to drive and use machines

Ferinject is unlikely to impair the ability to drive and use machines.

4.8 Undesirable effects

Table 4 presents the adverse drug reactions (ADRs) reported during clinical studies in which >8,000 subjects received Ferinject, as well as those reported from the post-marketing experience (see table footnotes for details).

The most commonly reported ADR is nausea (occurring in 2.9% of the subjects), followed by injection/infusion site reactions, hypophosphataemia, headache, flushing, dizziness and hypertension.

Injection/infusion site reactions comprise several ADRs which individually are either uncommon or rare.

For subjects in clinical trials that showed a decrease in serum phosphorous, subsequent to a dose up to 1,000 mg iron as Ferinject the minimum values were obtained after approximately 2 weeks, and in most cases returned to baseline values by 12 weeks following Ferinject treatment. The most serious ADR is anaphylactoid/anaphylactic reactions (rare); fatalities have been reported. See section 4.4 for further details.

Table 4: Adverse drug reactions observed during clinical trials and post-marketing experience

System Organ Class	Common (≥1/100 to <1/10)	Uncommon (≥1/1,000 to <1/100)	Rare (≥1/10,000 to <1/1,000)	Frequency not known[1]
Immune system disorders		Hypersensitivity	Anaphylactoid/ anaphylactic reactions	
Metabolism and nutritional disorders	Hypophosphataemia			
Nervous system disorders	Headache, dizziness	Paraesthesia, dysgeusia		Loss of consciousness[1]
Psychiatric disorders			Anxiety[2]	
Cardiac disorders		Tachycardia		Kounis syndrome[1]
Vascular disorders	Flushing, hypertension	Hypotension	Phlebitis, syncope[2], presyncope[2]	
Respiratory, thoracic and mediastinal disorders		Dyspnoea	Bronchospasm[2]	
Gastrointestinal disorders	Nausea	Vomiting, dyspepsia, abdominal pain, constipation, diarrhoea	Flatulence	
Skin and subcutaneous tissue disorders		Pruritus, urticaria, erythema, rash[2]	Angioedema[2], pallor[2], distant skin discolouration	Face oedema[1], dermatitis

System Organ Class	Common (≥1/100 to <1/10)	Uncommon (≥1/1,000 to <1/100)	Rare (≥1/10,000 to <1/1,000)	Frequency not known[1]
Musculoskeletal and connective tissue disorders		Myalgia, back pain, arthralgia, pain in extremity, muscle spasms		Hypophosphataemic osteomalacia[1]
General disorders and administration site conditions	Injection/infusion site reactions[4]	Pyrexia, fatigue, chest pain, oedema peripheral, chills	Malaise, influenza like illness (whose onset may vary from a few hours to several days) [2]	
Investigations		Alanine aminotransferase increased, aspartate aminotransferase increased, gamma-glutamyltransferase increased, blood lactate dehydrogenase increased, blood alkaline phosphatase increased		

1 ADRs exclusively reported in the post-marketing setting; estimated as rare.
2 ADRs reported in the post-marketing setting which are also observed in the clinical setting.
3 Includes the following preferred terms: rash (individual ADR determined to be uncommon) and rash erythematous, -generalised, -macular, -maculo-papular, -pruritic (all individual ADRs determined to be rare).
4 Includes, but is not limited to, the following preferred terms: injection/infusion site -pain, -haematoma, -discolouration, -extravasation, -irritation, -reaction, (all individual ADRs determined to be uncommon) and -paraesthesia (individual ADR determined to be rare).
Note: ADR = Adverse drug reaction.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product.

4.9 Overdose

Administration of Ferinject in quantities exceeding the amount needed to correct iron deficit at the time of administration may lead to accumulation of iron in storage sites eventually leading to haemosiderosis. Monitoring of iron parameters such as serum ferritin and transferrin saturation may assist in recognising iron accumulation. If iron accumulation has occurred, treat according to standard medical practice, e.g. consider the use of an iron chelator.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Iron trivalent, parenteral preparation, ATC code: B03AC

Ferinject solution for injection/infusion is a colloidal solution of the iron complex ferric carboxymaltose.
The complex is designed to provide, in a controlled way, utilisable iron for the iron transport and storage proteins in the body (transferrin and ferritin, respectively).
Red cell utilisation of ^{59}Fe from radio-labelled Ferinject ranged from 91% to 99% in subjects with iron deficiency (ID) and 61% to 84% in subjects with renal anaemia at 24 days post-dose.
Ferinject treatment results in an increase in reticulocyte count, serum ferritin levels and TSAT levels to within normal ranges.

Clinical efficacy and safety

The efficacy and safety of Ferinject has been studied in different therapeutic areas necessitating intravenous iron to correct iron deficiency. The main studies are described in more detail below.

Nephrology

Haemodialysis-dependent chronic kidney disease
Study VIT-IV-CL-015 was an open-label, randomised parallel group study comparing Ferinject (n=97) to iron sucrose (n=86) in subjects with ID anaemia undergoing haemodialysis. Subjects received Ferinject or iron sucrose 2-3 times per week in single doses of 200 mg iron directly into the dialyser until the individually calculated cumulative iron dose was reached (mean cumulative dose of iron as Ferinject: 1,700 mg). The primary efficacy endpoint was the percentage of subjects reaching an increase in Hb of ≥1.0 g/dL at 4 weeks after baseline. At 4 weeks after baseline, 44.1% responded to treatment with Ferinject (i.e. Hb increase of ≥1.0 g/dL) compared to 35.3% for iron sucrose (p=0.2254).

Non-dialysis-dependent chronic kidney disease
Study 1VIT04004 was an open-label, randomised active-control study, evaluating the safety and efficacy of Ferinject (n=147) vs. oral iron (n=103). Subjects in the Ferinject group received 1,000 mg of iron at baseline and 500 mg of iron at days 14 and 28, if TSAT was <30% and serum ferritin was <500 ng/mL at the respective visit. Subjects in the oral iron arm received 65 mg iron TID as ferrous sulphate from baseline to day 56. Subjects were followed-up until day 56. The primary efficacy endpoint was the percentage of subjects achieving an increase in Hb of ≥1.0 g/dL anytime between baseline and end of study or time of intervention. This was achieved by 60.54% of subjects receiving Ferinject vs. 34.7% of subjects in the oral iron group (p<0.001). Mean haemoglobin change to day 56/end of study was 1.0 g/dL in the Ferinject group and 0.7 g/dL in the oral iron group (p=0.034, 95% CI: 0.0, 0.7).

Gastroenterology

Inflammatory bowel disease
Study VIT-IV-CL-008 was a randomised, open-label study which compared the efficacy of Ferinject vs. oral ferrous sulphate in reducing ID anaemia in subjects with inflammatory bowel disease (IBD). Subjects received either Ferinject (n=111) in single doses of up to 1,000 mg iron once per week until the individually calculated iron dose (per Ganzoni formula) was reached (mean cumulative iron dose: 1,490 mg), or 100 mg iron BID as ferrous sulphate (n=49) for 12 weeks. Subjects receiving Ferinject showed a mean increase in Hb from baseline to Week 12 of 3.83 g/dL, which was non-inferior to 12 weeks of twice daily therapy with ferrous sulphate (3.75 g/dL, p=0.8016).
Study FER-IBD-07-COR was a randomised, open-label study comparing the efficacy of Ferinject vs. iron sucrose in subjects with remitting or mild IBD. Subjects receiving Ferinject were dosed according to a simplified dosing grid using baseline Hb and body weight (see section 4.2) in single doses up to 1,000 mg iron, whereas subjects receiving iron sucrose were dosed according to individually calculated iron doses using the Ganzoni formula in doses of 200 mg iron until the cumulative iron dose was reached. Subjects were followed-up for 12 weeks. 65.8% of subjects receiving Ferinject (n=240; mean cumulative iron dose: 1,414 mg) vs. 53.6% receiving iron sucrose (n=235; mean cumulative dose 1,207 mg; p=0.004) had responded at Week 12 (defined as Hb increase ≥2 g/dL). 83.8% of Ferinject-treated subjects vs. 75.9% of iron sucrose-treated subjects achieved a Hb increase ≥2 g/dL or had Hb within normal limits at Week 12 (p=0.019).

Women's health

Post partum
Study VIT-IV-CL-009 was a randomised open-label non-inferiority study comparing the efficacy of Ferinject (n=227) vs. ferrous sulphate (n=117) in women suffering from post-partum anaemia.

Subjects received either Ferinject in single doses of up to 1,000 mg iron until their individually calculated cumulative iron dose (per Ganzoni formula) was reached, or 100 mg of iron as oral ferrous sulphate BID for 12 weeks. Subjects were followed-up for 12 weeks. The mean change in Hb from baseline to Week 12 was 3.37 g/dL in the Ferinject group (n=179; mean cumulative iron dose: 1,347 mg) vs. 3.29 g/dL in the ferrous sulphate group (n=89), showing non-inferiority between the treatments.

Pregnancy
Intravenous iron medicines should not be used during pregnancy unless clearly necessary. Treatment with Ferinject should be confined to the second and third trimester if the benefit is judged to outweigh the potential risk for both the mother and the foetus, see section 4.6.

Ferritin monitoring after replacement therapy
There is limited data from study VIT-IV-CL-008 which demonstrates that ferritin levels decrease rapidly 2-4 weeks following replacement and more slowly thereafter. The mean ferritin levels did not drop to levels where retreatment might be considered during the 12 weeks of study follow up. Thus, the available data does not clearly indicate an optimal time for ferritin retesting although assessing ferritin levels earlier than 4 weeks after replacement therapy appears premature. Thus, it is recommended that further re-assessment of ferritin should be made by the clinician based on the individual patient's condition.

5.2 Pharmacokinetic properties

Distribution
Positron emission tomography demonstrated that ^{59}Fe and ^{52}Fe from Ferinject was rapidly eliminated from the blood, transferred to the bone marrow, and deposited in the liver and spleen.
After administration of a single dose of Ferinject of 100 to 1,000 mg of iron in ID subjects, maximum total serum iron levels of 37 µg/mL up to 333 µg/mL are obtained after 15 minutes to 1.21 hours respectively. The volume of the central compartment corresponds well to the volume of the plasma (approximately 3 litres).

Elimination
The iron injected or infused was rapidly cleared from the plasma, the terminal half-life ranged from 7 to 12 hours, the mean residence time (MRT) from 11 to 18 hours. Renal elimination of iron was negligible.

5.3 Preclinical safety data

Preclinical data revealed no special hazard for humans based on conventional studies of safety pharmacology, repeat dose toxicity and genotoxicity. Preclinical studies indicate that iron released from Ferinject does cross the placental barrier and is excreted in milk in limited, controlled amounts. In reproductive toxicology studies using iron replete rabbits Ferinject was associated with minor skeletal abnormalities in the fetus. In a fertility study in rats, there were no effects on fertility for either male or female animals. No long-term studies in animals have been performed to evaluate the carcinogenic potential of Ferinject. Ferinject was not genotoxic in assays for gene mutation (in vitro bacterial and mouse lymphoma cell assays) and chromosomal damage (human lymphocytes in vitro and mouse micronucleus test in vivo).
No evidence of allergic or immunotoxic potential has been observed. A controlled in-vivo test demonstrated no cross-reactivity of Ferinject with anti-dextran antibodies. No local irritation or intolerance was observed after intravenous administration.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium hydroxide (for pH adjustment)

Hydrochloric acid (for pH adjustment)
Water for injections

6.2 Incompatibilities

This medicinal product must not be mixed with other medicinal products except those mentioned in section 6.6.
The compatibility with containers other than polyethylene and glass is not known.

6.3 Shelf life

Shelf life of the product as packaged for sale:
3 years.

Shelf life after first opening of the container:
From a microbiological point of view, preparations for parenteral administration should be used immediately.

Shelf life after dilution with sterile 0.9% m/V sodium chloride solution:
From a microbiological point of view, preparations for parenteral administration should be used immediately after dilution with sterile 0.9% m/V sodium chloride solution.

6.4 Special precautions for storage

Store in the original package in order to protect from light. Do not store above 30 °C. Do not freeze.

6.5 Nature and contents of container

Ferinject is supplied in a vial (type I glass) with a stopper (bromobutyl rubber) and an aluminium cap as:
- 10 mL solution containing 500 mg iron. Available in pack sizes of 1 vial

6.6 Special precautions for disposal and other handling

Inspect vials visually for sediment and damage before use. Use only those containing sediment-free, homogeneous solution.

Each vial of Ferinject is intended for single use only. Any unused product or waste material should be disposed of in accordance with local requirements.

Ferinject must only be mixed with sterile 0.9% m/V sodium chloride solution. No other intravenous dilution solutions and therapeutic agents should be used, as there is the potential for precipitation and/or interaction. For dilution instructions, see section 4.2.

7. TYPE AND SIZE OF PACKAGING

Box, 1 vial @ 10 mL

8. MARKETING AUTHORISATION NUMBER

Registration number: DKI1755200243A1

9. REGISTERED BY

PT. PYRIDAM FARMA Tbk.

Kabupaten Cianjur, Jawa Barat, Indonesia

10. MANUFACTURER

IDT BIOLOGIKA GMBH
Am Pharmapark VIII no. 16, Jakarta, Indonesia

11. RELEASED BY
VIFOR (INTERNATIONAL) INC.
Rechenstrasse 37, 9014 St. Gallen, Switzerland

12. DATE OF FIRST APPROVAL
Not applicable

13. DATE OF MODIFICATION
Not applicable

14. DRUG CATEGORY
Ethical

15. SPECIAL WARNING
With physician prescription only

Informasi Produk untuk Pasien

Ferinject 50 mg iron/mL cairan untuk injeksi/infus

Ferric carboxymaltose

Baca isi *leaflet* ini dengan seksama sebelum Anda diberikan obat ini karena *leaflet* ini mengandung informasi yang penting bagi Anda.
- Simpan *leaflet* ini. Anda mungkin perlu membacanya lagi.
- Jika Anda memiliki pertanyaan lebih lanjut, tanyakan kepada dokter Anda.
- Jika Anda mengalami efek samping, hubungi dokter Anda. Termasuk efek samping yang mungkin tidak tercantum dalam *leaflet* ini. Lihat bagian 4.

Informasi apa yang ada dalam *leaflet* ini

1. Apa itu Ferinject dan apa kegunaannya

Ferinject adalah suatu sediaan anti anemia, yaitu obat yang digunakan untuk mengobati anemia. Obat ini mengandung zat besi dalam bentuk karbohidrat besi. Zat besi adalah unsur penting yang dibutuhkan hemoglobin dalam sel darah merah dan mioglobin dalam jaringan otot untuk dapat membawa oksigen. Selain itu, zat besi berperan dalam banyak fungsi lain yang diperlukan untuk pemeliharaan kehidupan dalam tubuh manusia.
Ferinject diindikasikan untuk pengobatan anemia karena defisiensi zat besi pada pasien dewasa dengan Hb 7- <13 g/dL dan hematokrit <39% (pria) atau Hb 7- <12 g/dL dan hematokrit <36% (wanita yang tidak hamil) dan serum feritin <15 µg/L (pria atau wanita dengan persediaan zat besi berkurang) atau pasien dewasa yang menderita penyakit ginjal kronis *(CKD)* dengan saturasi transferin *(TSAT)* <25%. Tujuan dari terapi ini adalah untuk mengisi kembali cadangan zat besi dalam tubuh dan untuk memperbaiki anemia, yaitu kekurangan sel darah merah karena kekurangan zat besi.

Sebelum pemberian, dokter akan melakukan pemeriksaan darah untuk menentukan dosis Ferinject yang Anda butuhkan.

2. Apa yang perlu Anda ketahui sebelum Anda menerima Ferinject

Jangan menggunakan Ferinject
- Jika Anda alergi terhadap *ferric carboxymaltose* atau salah satu bahan lain dalam obat ini (tercantum pada bagian 6).
- Jika Anda pernah mengalami reaksi alergi (hipersensitivitas) serius terhadap sediaan zat besi injeksi lainnya.
- Jika Anda menderita anemia yang **bukan** disebabkan karena kekurangan zat besi.
- Jika Anda memiliki kelebihan zat besi (terlalu banyak zat besi dalam tubuh) atau gangguan dalam penggunaan zat besi.

Peringatan dan Perhatian
Bicaralah dengan dokter atau perawat sebelum menggunakan Ferinject:
- Jika Anda mempunyai riwayat alergi obat-obatan
- Jika Anda menderita penyakit lupus *(systemic lupus erythematosus)*
- Jika Anda menderita radang sendi rematik *(rheumatoid arthritis)*
- Jika Anda menderita asma berat, eksim, atau alergi lainnya
- Jika Anda menderita infeksi
- Jika Anda menderita gangguan hati
- Jika Anda sedang atau pernah memiliki kadar fosfat yang rendah dalam darah
- Ferinject sebaiknya tidak diberikan untuk anak-anak dibawah 14 tahun
- Kesalahan dalam pemberian Ferinject dapat menyebabkan kebocoran produk di tempat suntikan, yang dapat menyebabkan iritasi pada kulit dan berpotensi menyebabkan perubahan warna coklat untuk waktu yang lama di tempat suntikan. Pemberian harus dihentikan segera ketika hal ini terjadi.

Obat-obatan lain dan Ferinject
Beritahu dokter Anda jika Anda sedang menggunakan, baru-baru ini menggunakan atau mungkin menggunakan obat-obatan lain termasuk obat-obatan yang diperoleh tanpa resep.
Jika Ferinject diberikan bersama-sama dengan sediaan zat besi oral, maka sediaan oral ini bisa menjadi kurang efisien.

Kehamilan
Data penggunaan Ferinject pada wanita hamil terbatas. Penting untuk memberitahu dokter Anda jika Anda sedang hamil dan, menduga diri Anda hamil, atau berencana untuk memiliki keturunan.
Jika Anda hamil selama perawatan, Anda harus meminta saran dari dokter Anda. Dokter Anda akan memutuskan apakah Anda sebaiknya diberikan obat ini atau tidak.

Menyusui
Jika Anda menyusui, mintalah saran kepada dokter Anda sebelum Anda diberikan Ferinject.
Tidak ada kemungkinan bahwa Ferinject menimbulkan risiko untuk anak yang disusui.

Mengemudi dan menjalankan mesin
Tidak ada kemungkinan Ferinject mengurangi kemampuan untuk mengemudi atau mengoperasikan mesin.

Informasi penting mengenai beberapa komposisi dari Ferinject
Obat ini mengandung 5,5 mg (atau 0, 24 mmol) natrium per mililiter larutan encer dan harus menjadi pertimbangan untuk pasien dengan diet natrium terkontrol.

3. Bagaimana Ferinject diberikan

Dokter Anda akan memutuskan berapa banyak Ferinject yang akan diberikan kepada Anda, seberapa sering Anda membutuhkannya dan untuk berapa lama.
Dokter Anda akan melakukan tes darah untuk menentukan dosis yang Anda butuhkan. Dokter Anda akan memberikan Ferinject melalui pemberian langsung dengan injeksi, selama proses dialisis, atau diencerkan dengan infus.
- Melalui injeksi, Anda dapat menerima hingga 20 mL Ferinject, setara dengan 1.000 mg zat besi, seminggu sekali secara langsung ke dalam pembuluh darah.
- Jika Anda sedang melakukan dialisis, Anda mungkin menerima Ferinject selama sesi hemodialisis melalui mesin dialisis.

- Melalui infus, Anda dapat menerima hingga 20 mL Ferinject, setara dengan 1.000 mg zat besi, seminggu sekali secara langsung ke dalam vena. Karena Ferinject diencerkan dengan larutan natrium klorida untuk infus, maka volumenya bisa mencapai 250 mL dan tampak sebagai larutan berwarna coklat.

Jika Anda menerima Ferinject lebih dari yang seharusnya
Karena obat ini akan diberikan kepada Anda oleh staf medis terlatih, kemungkinan Anda tidak akan diberikan terlalu banyak obat ini.
Overdosis dapat menyebabkan penimbunan zat besi di dalam tubuh. Dokter akan memantau parameter zat besi untuk menghindari penimbunan zat besi.

4. Efek samping yang mungkin terjadi

Seperti semua obat-obatan, obat ini dapat menyebabkan efek samping, meskipun tidak semua orang mengalaminya.

Efek samping serius:
Segera beritahu dokter Anda jika Anda mengalami salah satu dari tanda-tanda dan gejala-gejala berikut yang mungkin mengindikasikan reaksi alergi yang serius: ruam, gatal-gatal, kesulitan bernafas, mengi dan/atau pembengkakan pada bibir, lidah, tenggorokan atau tubuh dan nyeri dada yang dapat menjadi tanda dari kemungkinan reaksi alergi yang serius yang disebut dengan *Kounis syndrome*.

Pada beberapa pasien reaksi alergi tersebut (terjadi pada kurang dari 1 dari 1.000 orang) dapat menjadi parah atau mengancam jiwa (dikenal sebagai reaksi anafilaksis) dan dapat dikaitkan dengan masalah jantung dan sirkulasi dan kehilangan kesadaran.

Beri tahu dokter Anda jika Anda mengalami kelelahan, nyeri otot atau tulang yang memburuk (nyeri pada lengan atau kaki, sendi atau punggung). Itu mungkin tanda penurunan fosfor darah yang bisa menyebabkan tulang menjadi lunak (*osteomalacia*). Kondisi ini terkadang dapat menyebabkan patah tulang. Dokter Anda mungkin juga memeriksa kadar fosfat dalam darah Anda, terutama jika Anda memerlukan sejumlah perawatan dengan zat besi dari waktu ke waktu.
Dokter Anda menyadari efek samping yang mungkin terjadi ini dan akan memantau Anda selama dan setelah pemberian Ferinject.

Efek samping lainnya yang harus Anda beritahukan kepada dokter Anda apabila menjadi serius:
Umum terjadi (dapat terjadi pada hingga 1 dari 10 orang): sakit kepala, pusing, merasa panas (*flushing*), tekanan darah tinggi, mual dan reaksi pada tempat injeksi/infus (lihat juga bagian 2).

Tidak umum terjadi (dapat terjadi pada hingga 1 dalam 100 orang): mati rasa, kesemutan atau rasa tertusuk-tusuk pada kulit, perubahan sensasi pengecapan Anda, jantung berdebar-debar, tekanan darah rendah, kesulitan bernafas, muntah, gangguan pencernaan, sakit perut, sembelit, diare, gatal-gatal, kemerahan pada kulit, ruam, nyeri otot, sendi dan/atau punggung, nyeri pada lengan atau tungkai, kejang otot, demam, kelelahan, nyeri dada, pembengkakan tangan dan/atau kaki, dan panas dingin.

Jarang terjadi (mungkin terjadi pada hingga 1 dari 1.000 orang): peradangan pembuluh darah, perasaan tidak nyaman, kecemasan, pingsan, mengi, perut kembung, pembengkakan cepat pada wajah, mulut, lidah atau tenggorokan yang dapat menyebabkan kesulitan bernafas, pucat, dan perubahan warna kulit di area lain dari tubuh selain tempat pemberian suntikan.

Tidak diketahui (frekuensi tidak dapat diperkirakan dari data yang ada): kehilangan kesadaran dan bengkak pada wajah.

Penyakit seperti flu (dapat terjadi pada hingga 1 dari 1.000 orang) dapat terjadi beberapa jam hingga beberapa hari setelah injeksi dan biasanya ditandai dengan gejala seperti suhu tinggi, dan sakit dan nyeri pada otot dan persendian.

Beberapa parameter darah dapat berubah sementara, yang dapat dideteksi melalui pemeriksaan laboratorium.
Berikut perubahan parameter darah yang umum terjadi: penurunan fosfor darah.
Berikut perubahan parameter darah yang jarang terjadi: peningkatan enzim hati tertentu yang disebutalanine aminotransferase, aspartate aminotransferase, *)*, *gamma-glutamyltransferase*dan ALP *(alkaline phosphatase)*, dan peningkatan enzim yang disebut *lactate dehydrogenase*.

Tanyakan kepada dokter Anda untuk informasi lebih lanjut.

Pelaporan efek samping
Jika Anda merasakan efek samping apapun, beritahu dokter atau perawat Anda. Termasuk efek samping yang mungkin tidak tercantum dalam *leaflet* ini.

5. Bagaimana cara menyimpan Ferinject

Jauhkan obat ini dari pandangan dan jangkauan anak-anak.

Jangan menggunakan Ferinject setelah tanggal kadaluarsa yang tercantum pada kemasan. Tanggal kadaluarsa mengacu pada hari terakhir pada bulan tersebut.

Simpan dalam kemasan asli untuk melindungi dari cahaya.
Jangan disimpan diatas 30°C. Jangan dibekukan.
Apabila vial Ferinject telah dibuka maka obat harus segera digunakan. Setelah pengenceran dengan larutan natrium klorida maka larutan harus segera digunakan.

Ferinject biasanya akan disimpan untuk Anda oleh dokter atau rumah sakit.

6. Isi kemasan dan informasi lainnya

Apa kandungan Ferinject
Zat aktifnya adalah zat besi (sebagai *ferric carboxymaltose*, senyawa *iron carbohydrate*). Konsentrasi zat besi dalam produk adalah 50 mg per mL. Komposisi lainnya adalah *sodium hydroxide* (sebagai pengatur pH), *hydrochloric acid* (sebagai pengatur pH) dan *water for injections*.

Bagaimana wujud Ferinject dan isi kemasan

Ferinject merupakan cairan berwarna coklat gelap, tidak transparan untuk injeksi/infus.

Ferinject dikemas dalam botol (vial) kaca yang mengandung:
10 mL larutan setara dengan 500 mg zat besi. Tersedia dalam ukuran kemasan 1 vial.

DIDAFTARKAN OLEH

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Kabupaten Cianjur, Indonesia

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7. DIPRODUKSI OLEH:

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9014 St.Gallen
Switzerland

***Leaflet* ini telah disetujui pada** <tanggal>

Untuk informasi apapun mengenai produk obat ini, silahkan menghubungi pemilik ijin edar.